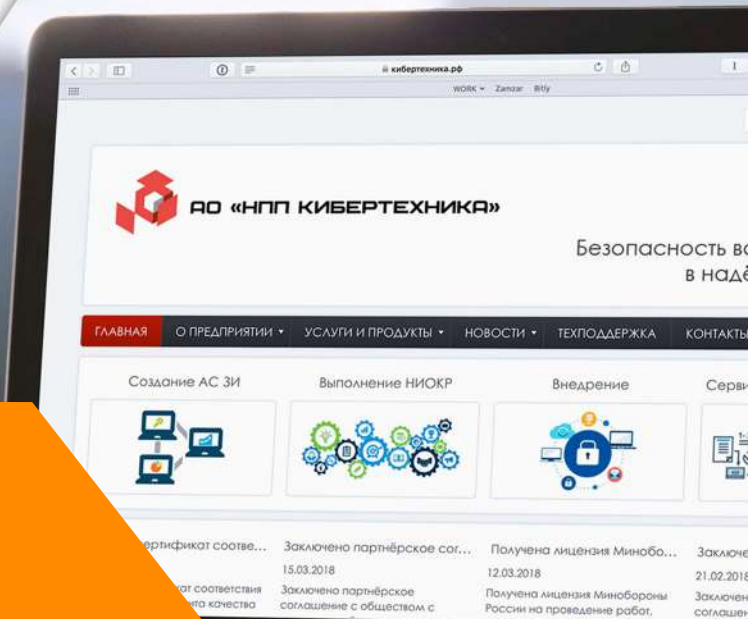


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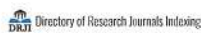
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112. **Mannopov Hamidjon Mutalovich** Karimov nomidagi Toshkent davlat texnika universiteti "Fakultetlararo umumta'lim kafedralari" fakulteti falsafa fanlari nomzodi, dotsent, professor vazifasini bajaruvchi.
113. **Nurmatova Munisxon Mashrabovna** Filologiya fanlari bo'yicha falsafa doktori (PhD)

114. **Majidova Shahnoza Komilovna**, Termiz davlat pedagogika instituti O'zbek tili va adabiyoti kafedrası katta o'qituvchisi, filologiya fanlari bo'yicha falsafa doktori (PhD)
115. **Xamzaeva Difuza Samarovna** iqtisod fanlari fanlari doktori (PhD), Termiz davlat universiteti Turizm kafedrası katta o'qituvchisi
116. **Aliyeva Navruza Xabibullayevna**, Farqona davlat universiteti, Ingliz filologiyasi kafedrası, filologiya fanlari bo'yicha falsafa doktori
117. **Xoliqov Dilshod Shukurullayevich**, Sharof Rashidov nomidagi Samarqand davlat universiteti, Muhandislik fizikasi instituti "Nazariy va amaliy mexanika" kafedrası dosenti
118. **Tashpulatova Shirina Ziyoviddin qizi**, Mirzo Ulug'bek nomidagi O'zbekiston Milliy universiteti, filologiya fanlari fanlari doktori (PhD).
119. **Faxrutdinova Mashkura Fazliddinovna**, Mirzo Ulug'bek nomidagi O'zbekiston Milliy universiteti Biologiya fakulteti Biologiya fanlari nomzodi dotsent
120. **Abdulxaeva Gulshan Maxmudova** Termiz davlat universiteti Iqtisodiyot fakulteti Turizm kafedrası mudiri. Iqtisodiyot fanlari bo'yicha falsafa doktori(PhD) dotsent.
121. **Jumayev Xushboq Soatmumin o'g'li**, Termiz davlat pedagogika instituti Boshlang'ich ta'limda matematika va ona tili kafedrası, pedagogika fanlari bo'yicha falsafa doktori (PhD), katta o'qituvchi
122. **Kabulova Zebiniso Muratovna**, Andijon davlat chet tillari instituti Umumiy va qiyosiy tilshunoslik kafedrası mudiri filologiya fanlari nomzodi dotsent
123. **Xaydarov IlhomTo'xtayevich** Filologiya fanlari bo'yicha falsafa doktori (PhD) O'zbekiston davlat jahon tillari universiteti Ingliz tili nazariy fanlar kafedrası dotsenti
124. **Jumaniyazov Atabay**, Urganch davlat universiteti, Roman-german filologiyasi kafedrası, filologiya fanlari nomzodi, professor
125. **Xakimova Zulxumor Karimovna** O'zbekiston Respublikasi Sog'liqni saqlash vazirligini Tibbiyot xodimlarining kasbiy malakasini rivojlantirish markazi, Oftalmologiya kafedrası, tibbiyot fanlari doktori, dotsent.
126. **Jumatov Rashid Yangibayevich** Filologiya fanlari bo'yicha falsafa doktori (PhD) Urganch davlat universiteti, "Ingliz tili va adabiyoti" kafedrası v.b, dotsenti
127. **Atajanova Nilufar Fayzullayevna** Urganch davlat universiteti Filologiya va san'at fakulteti O'zbek tili va adabiyoti kafedrası katta o'qituvchisi, PhD.
128. **Matkarimov Inomjon Baxtiyorovich**, Ma'mun universiteti, Iqtisodiyot fakulteti, Iqtisodiyot kafedrası dotsenti, i.f.f.d. (PhD), Iqtisodiyot yo'nalishi

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MARK TVENNING “GEKLBERRI FINNING BOSHIDAN KECHIRGANLARI” ROMANIDA BOLALAR OBRAZI VA XARAKTERINING IFODASI

Sattarov Farrux Nuridinovich

“Ipak yo‘li” turizm va madaniy meros xalqaro universiteti katta o‘qituvchisi,
Samarqand

E-mail : Farrukh-uz@mail.ru

Annotatsiya. Ushbu maqolada jahon bolalar adabiyotining yirik vakili Mark Tvenning mashhur “Geklberrri Finning boshidan kechirganlari” romani va undagi bola-qahramonlarning obrazlari, xarakterlari va ularning ko‘rsatgan jasoratliklari haqida so‘z yuritilgan. Shu bilan birgalikda asliyatdan qilingan tarjimalarning o‘zbek tilida qanday berilganligi, tarjimonning vositali til orqali bo‘lsada, amalga oshirgan tarjimalarining tahlili haqida to‘xtalib o‘tilgan.

Kalit so‘zlar: bolalik davri, erk, ozodlik va cheksiz o‘yin-kulgi, o‘yin va sarguzashtlar, yetim bolalar, qahramonning xayoliy olami, topib olingan xazina, tartib-qoidalar, erksevarlik, orol, daryo, o‘rmon – butun tabiat.

Аннотация. В данной статье рассказывается о знаменитом романе «Приключения Гекльберри Финна» Марка Твена, крупного представителя мировой детской литературы, и характерах, характерах и храбрости детских персонажей в нем. При этом обсуждалось, как были даны оригинальные переводы на узбекский язык, и анализ переводов, выполненных переводчиком через язык-носитель.

Ключевые слова: детство, свобода, свобода и бесконечное веселье, игры и приключения, сироты, фантастический мир героя, найденный клад, правила, тирания, остров, река, лес – вся природа.

Abstract. This article talks about the famous novel "Adventure of Huckleberry Finn" by Mark Twain, a major representative of world children's literature, and the characters, characters and bravery of the child characters in it. At the same time, it was discussed how the original translations were given in the Uzbek language, and the analysis of the translations made by the translator through the indirect language.

Key words: childhood, freedom, freedom and endless fun, games and adventures, orphans, fantastic world of the hero, founded treasure, rules, tyranny, island, river, forest – entire nature.

M.Tvenning “Tom Soyerning boshidan kechirganlari” va uning mantiqiy davomi hisoblanmish “Geklberri Finning boshidan kechirganlari” romanlari sayohatnoma janrida yozilgan sarguzasht bolalar adabiyoti namunalaridir.

Ushbu asar Amerika adabiyotidagi eng muhim asarlardan biri hisoblanadi. Bu asarda yozuvchi yosh qahramon Geklberri Finnning sarguzashtlari orqali bolalik davrini yoritib beradi. Gek o‘z do‘sti Tom Soyer bilan birgalikda sodda va samimiy bolalik davrini boshdan kechiradi, ularning maqsadi – erk, ozodlik va cheksiz o‘yin-kulgi. Romanda Gekning dunyoqarashi, mardligi, qiyinchiliklarga qarshi kurashish mahorati va do‘stlikga sadoqat kabi qadriyatlar obrazi ta’sirli tasvirlangan.

Satira orqali Tven AQSH janubida (fuqarolar urushidan oldingi) jamiyatdagi turli tushunchalarning biroz g‘ayrioddiy ta’riflarini buzadi va boshqa narsalar qatori, qul qochib ketganida qilish kerak bo‘lgan “to‘g‘ri” ish uning qochishiga yordam berish emas, balki uni qaytarish ekanligini ta’kidlaydi. Tven, shuningdek, Amerika adabiyotida tengi yo‘q qahramon qul Jimning portretini ayyor, isyonkor, chinakam xurofotchi, samimiy va bir vaqtning o‘zida aqlli personaj sifatida tasvirlaydi.

Tven romanning birinchi yarmini yozib tugatganidan so‘ng, u kitobning potensial muvaffaqiyatiga shubha bilan qaraydi. 1877-yilda do‘sti Uilyam Din Xouellsga yozgan maktubida Tven shunday deydi: “Menga bu asar juda yoqadi, qo‘limdan kelganicha qo‘lyozmani tezroq tugatganimdan so‘ng, hech kimning qo‘li yetmaydigan joyga qo‘yaman yoki yoqib yuborishim ham mumkin” [9, 42]. Yaxshiyamki, Tven qo‘lyozmani yoqib yubormadi. Kitob 1884-yilda Angliyada nashr etilganida (AQSHdagi nashri 1885-yil), u tezda Tven yozgan eng muvaffaqiyatli kitoblardan biriga aylandi.

Muallif, ushbu asarda bolalar obrazini tasvirlar ekan, romandagi asosiy mavzulardan biri – bolalik davrining o‘ziga xos rang-barangligi va erkinligidir. Geklberri Finn o‘zi istaganicha dunyoni kashf etadi, kattalarning ta’limotlari va ijtimoiy meyorlar unga to‘sqinlik qilmaydi. Yozuvchi bolalik davrining beg‘uborligi, soddaligi va erkinligini Gekning o‘ziga xos fe‘l-atvori orqali ifodalaydi. U o‘ziga xos o‘yin va sarguzashtlar orqali hayotga va kelajakka ma’noli qaraydi.

Asarning bosh qahramanlaridan yana biri Tom Soyerdir. Uning xarakteri bo'lsa ancha murakkab: unda biz qarama-qarshi xislatlarni kuzatishimiz mumkin. Bolalarcha xudbinlik va oliyjanoblik, romantik xayolparastlik va ziyrak amaliyotchilik, mardlik va do'stlariga vafodorlik, maqtanchoqlik, u hech qachon sardorlikni qo'ldan berishni istamaydi. Shu bilan birga, Tom har doim samimiy.

M.Tven romanni qayta qurish davrida, 1865-yilda fuqarolar urushi tugashi va AQSHda qullik bekor qilinganidan keyin yozishni boshladi. Ammo qullik bekor qilingan bo'lsa ham, oq tanlilar qora tanli ozchilikni 1876-yilgi Jim Krou qonunlarida bo'lgani kabi, irqiy kamsitishlar muntazam ravishda sodir bo'lardi. Qattiq abolitsionist va emansipatsiya tarafdori bo'lgan Mark Tven “Geklberri Finning boshidan kechirganlari” asarida qullik mavzusini ko'tarib, o'z davrining irqiy bo'linishi va zulmini keskin tanqid qiladi.

Ba'zi zamonaviy tanqidchilarning ta'kidlashicha, kitob Jimni tasvirlashda va “nigr” atamasini tez-tez ishlatishda irqchilikka asoslangan. Boshqa tanqidchilar kitobni qo'llab-quvvatlab, kitobda qo'llanilgan atamalar hikoyaning mazmuniga to'g'ri kelishini ta'kidlaydilar, shuningdek, ular Jimning romandagi eng samimiy qahramon ekanligini, hech ikkilanmasdan mehribonlik va fidoyilikni namoyish etadigan yagona asosiy qahramonlardan biri ekanligini ta'kidlaydi.

Geklberri va uning do'sti Jim bilan bo'lgan safar – bolalik davrining kashfiyotlarga to'la dunyosini ochib beradi. Romanda Jim va Gekning o'rmon, daryo, qishloqlar bo'ylab sayohatlari bolalarcha o'yinqaroqlik va sarguzasht izlashga ishtiyoqni aks ettiradi. Shu tariqa, asar orqali Tven bolalik davrini hayotning eng o'ziga xos, qiziqarli va unutilmas davri sifatida ko'rsatadi.

Adib “Geklberri Finning boshidan kechirganlari”da voqealarni bosh qahramon Geklberri (Gek) Finning nuqtai nazaridan birinchi shaxs sifatida hikoya qiladi. Gek asar davomida o'quvchiga bevosita murojaat qiladi va vaqti-vaqti bilan Tvenning avvalgi asarlaridan biri “Tom Soyerning boshidan kechirganlari”da sodir bo'lgan voqealarga ham ishora qiladi.

Muallif voqeaylikni o'yinqaroq bolalar vositasida tasvirlar ekan, xayoliy va real voqelik o'rtasidagi chegaralarni olib tashlaydi. Bolalarga xos bo'lgan o'yinqaroqlik qahramonimizning xayoliy olamida to'laqonli hayot kechiradi. Mark Tven o'yinqaroq bolalarni katta mahorat bilan o'yindan real voqelikka, va aksincha, real voqelikdan xayoliy olamga olib o'tadi. “Xazina haqidagi fantaziya bolalarni hindu Joning jamg'armasiga olib keladi, sarguzasht haqidagi orzular Tom va Bekking

gʻordagi romantik va fojeaviy holati bilan tugaydi, “qaroqchilar” oʻyini natijasida bolalar haqiqiy qotil va bosqinchilarga duch kelishadi, “bevaqt vafot etgan” qarindoshlarining gʻam-tashvishlariga sherik boʻlish uchun “vaqtinchalik u dunyoga safar qilish” bolalarning uydan qochib ketishlari va oʻzlarining halok boʻlganliklari uchun oʻqilgan ibodatda ishtirok etishga majbur qiladi” [6, 20].

Muallif asarda, real voqelik bilan oʻyinni bunday mohirona uygʻunlashturuvi natijasida sarguzashtlar romantikasi qahramonlarning gʻayrioddiy holatlarga tushishi ularning istaklaridan tugʻilgan degan taassurot uygʻotadi. Bu esa asarga ichki butunlik va yaxlitlik bagʻishlaydi, realistik uslubga romantik boʻyoq beradi, romanning betakror original asarga aylanishiga xizmat qiladi.

Gek oʻz hikoyasini “Tom Soyerning sarguzashtlari”da tugagan joyidan davom ettiradi: u Sankt-Petersburgning Missuri shahrida Missisipi daryosi boʻyida yashovchi Tom bilan gʻordan qaroqchilar qoldirgan katta miqdordagi oltinni topib olishadi. Har birlari olti ming dollardan iborat boʻlgan pul miqdori sudya Tetcherning qaramogʻida bankka topshiriladi, ushbu mablagʻlar bolalarga har kuni bir dollar miqdorida foizli daromad keltirib turadi.

Biroq munofiq, ikkiyuzlamachi, mugʻombir kattalar yashaydigan dunyoda bolalarning oʻyinlari yaxshilik bilan tugamaydi. Hatto ularning topib olgan xazinasini ham ularga na quvonch, va na baxt keltiradi. “Buni romanning soʻnggi sahifalarida Tom bilan Gek oʻrtasida boʻlib oʻtgan suhbatdan ham bilish mumkin. Erkinlikka oʻrgangan Gek bu boyliklar oʻziga qanchalar tashvish keltirishini hatto tasavvur ham qilmagan edi” [6, 21].

Tom missis Duglasning uyidan qochib ketgan doʻsti Gekni shahar chetidagi tashlandiq boʻlib ketgan qushxonadan topadi va uni uyga qaytib borishga undaydi. “... yana ozgina chidasang, oʻrganib qolasan” [2, 269] – deydi u doʻstiga. Gek esa doʻstining soʻzlarini rad etadi.

“– Oʻrganib qolasan deysanmi? Qizib turgan choʻyan pechkaning ustida oʻtirishga oʻrganib boʻladimi? Yoʻq, Tom, men boy boʻlishni xohlamayman. Men oʻrmonlarni, suv boʻylarini, eski bochkalarning ichida yotib qolishni yaxshi koʻraman, mana bular mening koʻnglimdagidek narsalar. Xuddi shunday paytda, qoʻlimizda miltiqlarimiz bor, gʻor ichida joylarimiz bor va boshqa hamma narsalarimiz tayyor boʻlib, endi qaroqchilik ishiga kirishamiz deb turganda, qurib ketkur shu pulning chiqib qolgani juda yomon boʻldi-da, hamma ishimizni buzdi” [2, 269].

Ikki do'stning topib olingan xazinasini Gekning beg'ubor va osuda hayotini izdan chiqardi, yuragiga tashvish soldi, ajoyib "o'yin"ni yo'qqa chiqaradi:

"Oh, Huck, you know I can't do that. It isn't fair, and besides, if you try it just a while longer you'll come to like it.

Like it! The way I'd like a hot stove if I was made to sit on it! No, Tom, I won't be rich, and I won't live in stuffy houses. I like the woods and the river, and barrels; and I'll stick to them. Why, just as we've got guns and a cave, and all fixed up to rob, this foolishness spoils it.

Being rich isn't all it's cracked up to be. It's just worry, worry, and wishing you were dead all the time" [6, 281].

"Tom boylik, aftidan, menga to'g'ri kelmas ekan. – deydi Gek do'stiga. – Undan xafachilikdan boshqa hech narsa chiqmas ekan, undan doim bu kunimdan ko'ra o'lganim yaxshi deb yurar ekanman-da!" [4, 269].

Gekning ushbu so'zlari tasodifiy yoki o'ylamay aytilgan so'zlar emas, balki o'sha davr AQSH aholisining (eng avvalo, kapitalizmning) xudosi hisoblanmish pul, mol-davlatni ongli va tushungan holda rad etishdan iborat.

Gek uyga qaytganidan keyin Uotson xonim uni kiyimlarini iflos qilgani uchun tanbeh beradi. Beva Duglas Gekni tergamaydi, balki kiyimlarini yuvadi, xuddi shunday afsusda bo'lib, Gek ham o'zini to'g'ri tutishga qaror qildi. Uotson xonim Gekni ibodat qilish uchun cherkovga olib boradi va u nima so'rasa, o'sha narsaga erishishini aytadi, lekin Gek "qarmoq" uchun ibodat qilganida, u bunday fikr noto'g'ri degan xulosaga keladi, shuning uchun bunday ibodatlarni foydasiz deb bilar edi.

Garchi ular bir xil nasroniy qadriyatlariga ega bo'lsalar-da, Uotson xonim rahm-shafqatsiz va qattiqqo'l, beva Duglas xonim esa aksincha, rahmdil va mehribon edi. Xristianlik rahm-shafqatga asoslangan din bo'lganligi sababli, miss Uotson va beva ayol haqiqatan ham turli qadriyatlarga ega edi, deyish mumkin. Darhaqiqat, Uotson xonim Gekga nima uchun ibodat qilsa, unga erishishini aytsada, ammo bunday ibodat xristian dinining e'tiqot tushunchasiga mos emas edi.

Keyingi bir necha oy ichida Gek beva Duglas va Uotson xonim bilan hayotiga o'rganib qoladi. U, hatto, maktabni yaxshi ko'ra boshlaydi. Ammo, Gek Finn "madaniyatli" jamiyat hayotidagi tartib-qoidalarni yoqtirmaydi va ularga bo'ysunishni istamaydi. Uning erksevarligi nafaqat qiziqishlarida, xatti-harakatida,

balki e'tiqodida ham namoyon bo'ladi. Adibning nazarida uning voqelikka bo'lgan munosabati "tabiiylik" mezoni hisoblanadi.

Gek bir yildan ko'proq vaqt davomida ko'rinmay ketgan otasi haqida o'ylaydi. Otasi aroqxo'r bo'lib, odamlar uni cho'kib ketgan, deb o'ylashadi, chunki daryodan unga o'xshash jasad topiladi, lekin Gek buni otasining jasadi deb o'ylamaydi, chunki jasad chalqancha suzib cho'kkani aniqlangan va Gek uni ko'rgach, bu tana ayolniki bo'lishi kerak deb o'ylaydi.

Bu Papning keyinchalik romanda qayta paydo bo'lishini, shuningdek, Gek o'zini qiz qiyofasida yashirgan epizodini, uning kimligini bilib olishini anglatadi. Ayollar va erkaklarning qanday suzishini bilishi esa, Gek tabiatning halokatligi va o'lim dahshatlari bilan tanishligidan dalolat beradi, bu esa uning yosh tengdoshlarini hayratda qoldiradi.

"They said he was floating on his back in the water. They took him and buried him on the bank. But I wasn't comfortable long, because I happened to think of something. I knowed mighty well that a drowned man don't float on his back, but on his face. So I knowed, then, that this warn't pap, but a woman dressed up in man's clothes" [5, 12].

Odamlar:

– U daryoda chalqanchasiga oqib keldi, – deyishdi.

"Suvdan chiqarib, daryo bo'yiga ko'mishibdi. Ammo sevinchim ko'pga bormadi, chunki bir narsa esimga tushib ketdi. Suvga cho'kib o'lgan erkak kishining daryodan chalqanchasiga emas, balki muk tushib oqishini men yaxshi bilar edim. Shuning uchun suvdan tutib olingan odam mening otam bo'lmay, balki erkakcha kiyingan xotin kishi ekanligini payqadim" [3, 17].

"Tvenning hikoya uslubi turli badiiy misollarga boy, romandagi ko'plab dramatik – fojeaviy va kulgili sahnalarda adib dialog usulini tanlaydi, birinchi shaxs tilidan keltirilgan hikoyalar emotsionallikni ko'taradi va hikoyaga individual tus beradi, didaktik mushohadalar, maishiy hayot tasvirlari, go'zal tabiat manzaralari bir-birlari bilan uyg'unlashib ketadi" [7, 20].

Bir kuni ertalab Gek nonushta paytida tuz idishini yerga tushurib yuboradi. Bu unga omadsizlik keltirmasligi uchun chap yelkasiga tuz sepish uchun to'kilgan tuzga qo'l uzatadi, lekin Uotson xonim buning oldini olib, uning tartibsiz ekanligini aytadi. Gek bundan jahli chiqib uydan chiqib ketar ekan, yo'l-yo'lakay baxtsiz narsalarni sodir bo'lishini kutadi. U yurib ketayotib, qorda kimningdir izlarini ko'radi, uning

chap etik tovoniga mix qoqilganligi sababli, shaytondan qutulish uchun yerga tovonini bilan “X” shaklini chizadi.

Uotson xonim har doim Gekga nasroniy xurofotlari haqida gapirib beradi, lekin Gek uning xurofotlarini kulgili deb biladi. Ya’ni, Gek haqiqatdan ham ko’ngilsiz narsaga duch keladi: bu otasining qordagi izlarining aniq belgisi edi (garchi roman hali nima ko’ngilsizligini ochib bermagan bo’lsa ham). Gekning mantiqiy xatosi, tuzni to’kish otasining yana paydo bo’lishiga olib keldi, deb o’ylashida edi.

Roman hikoyachisi Gek “Tom Soyerning boshidan kechirganlari” voqealaridan so’ng, beva Duglas tomonidan jamiyatga qabul qilingan, undan avval esa u kichik bir shaharchaning piyanista fuqarosining oddiy bir o’g’li edi. Ozodlikka bo’lgan muhabbati bilan Gek otasi Papning buzuvchiligiga ham, unga qarama-qarshi bo’lib ko’ringan, qattiqqo’l, ammo ikkiyuzlamachi jamiyatga ham qarshi isyon ko’taradi. Yoshiga nisbatan juda dono, aqlli, ammo shunga qaramay, g’oyat insonparvar, Gek qora tanli qul Jim bilan do’stlashib, uni o’ziga teng deb qabul qiladi. Gekning kamolotiga uning hurmatli va ko’zga ko’ringan, ammo o’zini o’zi yoqtiradigan do’sti Tom Soyer “to’sqinlik” qiladi.

“But Tom Sawyer he hunted me up and said he was going to start a band of robbers, and I might join if I would go back to the widow and be respectable. So I went back. The widow she cried over me, and called me a poor lost lamb, and she called me a lot of other names, too, but she never meant no harm by it” [6, 2].

Ammo Tom Soyer meni qidirib topib:

– “Qaroqchilar to’dasiga odam yig’yapman dedi, – Bevanikiga qaytib borsang, uning gapidan chiqmasang, seni ham shu to’daga olaman.

Shundan keyin bevanikiga qaytib keldim.

Beva qilgan ishimdan biroz yig’lab oldi, meni yo’ldan adashgan qo’zichoq dedi va shunga o’xshash gaplarni aytdi, ammo meni xafa qiladigan biron yomon gap gapirmadi” [4, 4].

Beva Duglasning singlisi Uotson xonim Gekga qanday yozishni o’rgatadi, uning holatini tanqid qiladi, jannat va do’zax haqida so’zlab beradi. Vaziyatni o’zgartirishni xohlayotgan Gek, jannatdagidan ko’ra do’zaxda bo’lishni afzal ko’rishini aytadi, bu Uotson xonimni hayratda qoldiradi. U jannatga borishi uchun o’z hayotini yashayotganini aytadi. Gek, Uotson xonim qayerga bormasin, u albatta o’sha joyga bormaslikni ma’qul ko’radi, lekin uni xafa qilmaslik uchun bu haqda unga hech narsa demaydi. U Uotson xonimdan Tom Soyer jannatga yoki do’zaxga

boradimi, deb so‘raydi. Uotson xonim uni do‘zaxga borishini aytganida, Gek xursand bo‘ladi, chunki u va do‘sti birga bo‘lishi mumkin edi.

Uotson xonimning saboqlaridan, Gek jamiyatdan – uning qat‘iyligidan, inson qanday bo‘lishi va ko‘rinishi kerakligi haqidagi foydasiz qoidalaridan hafsalasi pir bo‘ladi. U jamiyat qandaydir tarzda o‘zgarishi kerakligini istaydi. U jahannamga borishni xohlaydi, chunki bu uning hozirgi holatidan yaxshiroq, kamroq zerikarli va qiziqroq deb o‘ylar edi. Bu tanlov Gekning Jimni qutqarish uchun murakkab bo‘lgan keyingi tanlovini anglatadi.

“Daryo, o‘rmon – butun tabiat Gekning ko‘zini quvontiradi, u ilgari “sezmagani” go‘zalliklarni ochadi. Mark Tvenda “ozodlik” tushunchasi aniq emotsional ma‘no kasb etadi va haqiqiy real obrazga aylanadi. Ranglar tiniqligi va jilosi bilan go‘zal tabiat tasvirisiz, daryoga tutashgan keng ufqlar tasvirisiz “ozodlik” tushunchasi Gek uchun hech qanday ma‘noga ega bo‘lmas edi” [2, 17].

Beva Duglas va Uotson xonim vakili bo‘lgan jamiyat yolg‘onning barcha ko‘rinishlarini qoralasa ham, Gek axloqiy hukmlarni shakllantirishda jamiyatning qat‘iy qoidalaridan tashqariga qarashga qodir bo‘lgan realistikdir. U odamlarning yolg‘on gapirishini va ba‘zi hollarda o‘zi ham yolg‘on gapirishni yaxshi tushunadi. Gek ushbu jamiyatdagi qattiqqo‘llikdan zerikadi va qochib ketadi. Faqat Tom Soyerning o‘ziga xos sarguzasht (agar “haqiqiy” sarguzasht bo‘lmasa) va‘da qilgan xayoliy o‘yinlari orqali qaytishga ishonch hosil qiladi.

Gek intuitiv ravishda jamiyatdagi xolatlarni o‘zboshimchalik chegaralari bilan ajratilishiga qarshi, masalan, u sinfiy va irqiy tafovutlarni ko‘rsatib berishga harakat qiladi. Gek o‘z ovqatini aralashganini yaxshi ko‘rgani kabi, yuragi to‘g‘ri deb bilgan narsaga xizmat qilish uchun jamiyat chegaralarini kesib o‘tishga ham moyil obraz. Bunday chegaralar, din kabi, o‘lganlarga xizmat qiladi. Gek tiriklar haqida, hayot haqida qayg‘uradi.

Beva Duglas yaxshi va mehribon, ammo jamiyatning ko‘plab a‘zolari kabi u ham ikkiyuzlamachi bo‘lishi mumkin. Uning ikkiyuzlamachiligiga shaxsiy manfaat sabab bo‘ladi: u Gekni tamaki chekkani uchun qoralasa-da, beva nopoklikni qoralamaydi, chunki uning o‘zi ham tamaki chekar edi.

Gekning asosiy maqsadi – qora tanli qul Jimni ozod shahar, Kair (Qohira) shahriga yuborish. Bu yo‘lda u har qanday mashaqqatlarga ham tayyor, har qanday sinovlarga dosh beradi va nihoyat asar so‘nggida maqsadiga ham erishadi.

Garchi kitob Gekning “sarguzashtlari” haqida bolsa-da, hikoya Jimning o‘zi, oxir-oqibat xotini va bolalari uchun erkinlik va xavfsizlikka erishishlari bilan yakun topadi. Gek qaysidir ma’noda asarda faqat “sayohat” qilish uchun yurgandek ko‘rinishi mumkin, ammo muallif uchun qullik mavzusini o‘ziga xos va qiziqarli tarzda hal qilish imkonini beruvchi Jimning kurashida Gek muhim obrazdir.

Kitobdagi eng muhim voqealarda qullik masalasi muhim o‘rin tutadi. Jim o‘z erkinligiga erishishga yaqin ekanligiga ishonar ekan, uning fikrlari oilasini qullikdan qutqarishga qaratilgan edi. Gek Jimning rejalaridan hayratga tushib, o‘quvchiga, shuningdek, jamiyatga xitob qiladi:

“We had Jim out of the chains in no time, and when Aunt Polly and uncle Silas and aunt Sally found out how good he helped the doctor nurse Tom, they made a heap of fuss over him, and fixed him up prime, and give him all he wanted to eat, and a good time, and nothing to do. And we had him up to the sick-room, and had a high talk; and Tom give Jim forty dollars for being prisoner for us so patient, and doing it up so good, and Jim was pleased most to death, and busted out” [5, 294].

“Bir zumda Jimni kishandan bo‘shatdik, Tomni boqqan doktorga u juda yaxshi qarashganini Salli xolaga, Saylas pochchaga va Polli xolaga aytganimizdan keyin ular Jimni o‘tqizgani joy topolmay qolishdi; Jim mahbus bo‘lgani, bunga chidab, hamma narsani ado etgani uchun Tom unga qirq dollar pul hadya qildi. Jim juda sevinib ketib, endi sira ham jim o‘tirolmay qoldi” [4, 334].

Asarda Jim yaxshi obraz sifatida tasvirlanadi u o‘zining qulligidan nafratlansa ham, Uotson xonim yoki uning manfaatlariga tahdid soladigan hech qanday ishga qo‘l urmaydi.

Shu o‘rinda asarning tarjimasiga e’tibor qaratar ekanmiz, asarning bilvosita (rus tili orqali) tarjima qilinganligini ushbu matndan ham sezish mumkin.

“But by and by pap got too handy with his hick’ry, and I couldn’t stand it. I was all over welts” [5, 26].

Yuqorida keltirilgan gapni tarjimon quyidagicha tarjima qiladi:

Ammo cholim tez-tez tayoq bilan uradigan bo‘lib qoldi, mana bunisiga chiday olmadim, uning kaltaklay berishidan hamma yog‘im ko‘karib ketgan edi [3, 30].

Asar matni bilan tanish bo‘lmagan o‘quvchi ushbu parcha o‘rta yoshdan oshgan ayol kishiga tegishli deb o‘ylashi mumkin. Chunki ingliz tilidagi “Pap” (“Ota”) so‘zini (*PAP’A*, noun [*Latin* *papa*] *Father*; *an informal term for a father; probably derived from baby talk. synonyms: dad, dada, daddy, pa, pappa, father. a male*

parent (also used as a term of address to your father) “*cholim*” tarzida berilishi albatta o‘quvchida tushunmovchilik keltirib chiqaradi. “Papa” so‘zini savodi ham havas qilarli darajada bo‘lmagan qahramonimiz tilidan muallif “pap” deya keltirib o‘tgan.

Tarjimon ushbu so‘zni “otam” deb tarjima qilganida yuqoridagi g‘alizlik bartaraf qilinib, matn mazmuni ham o‘quvchiga tushunarli bo‘lar edi deb o‘ylaymiz.

Shu o‘rinda asarning rus tiliga Nina Daruzes tomonidan qilingan tarjimasiga murojaat qilib ko‘rsak unda:

“Но мало-помалу старик распустился, повадился драться палкой, и этого я не стерпел. Я был весь в рубцах” [8, 25].

Romandagi ko‘plab qahramonlar uchun qora tanlilarning ham odamlar ekanligi haqidagi tushuncha hech qanday e‘tiborga olinmaydi. Ko‘pgina sahnalarda Tven o‘sha paytdagi odamlar qora tanlilarning shaxsiyatini muntazam ravishda inkor etgan shafqatsizlikni kinoya qilganga o‘xshaydi. Befarqlik shunchalik keng tarqalganki, hatto Jim o‘zini “mulk” deb qabul qiladi va o‘zining qanchalik qadrligi ekanligi bilan faxrlanadi; sakkizinchi bobda Jim o‘z ozodligi haqida o‘ylar ekan, Gekga shunday deydi: – “To‘g‘ri, agar tagini surishtirib qaraganda, hozir ham boyman. Izmim o‘zimda, menning bahom sakkiz yuz dollar! Shu pul menda bo‘lganida, ortiq sira ham so‘ramas edim” [3, 55].

“Yes; en I’s rich now, come to look at it. I owns mysef, en I’s wuth eight hund’d dollars. I wisht I had de money, I wouldn’ want no mo” [5, 43].

Kitobning so‘nggi boblarida Tom Soyer Jimni o‘zi tutqunlikda ushlab turilgan kulbadan ozod qilish uchun puxta reja tuzadi. Tom Jimga o‘zining qochish uchun ishlab chiqqan rejasini tushuntiradi; Tom Jimdan bema’ni va ba’zi hollarda imkonsiz harakatlar qilishni so‘raydi va hatto Jimning to‘shagini o‘rgimchak va ilonlar bilan to‘ldiradi. Oxir oqibat, Gek Jimga teng hurmat bilan munosabatda bo‘lgan yagona asosiy qahramon bo‘lib qoladi.

Muallifning bolalikni tasvirlashdagi mahorati shundaki, romanda bolaning qalbini va uning hayotga bo‘lgan o‘ziga xos qarashlarini juda tabiiy va chuqur ifoda etadi. Adib bolalikka xos beg‘uborlik, mustaqil fikrlash, tabiat va hayotning go‘zalligini kashf qilish jarayonini jonli tasvirlaydi. Shu bilan birga, Tvenning asarda ijtimoiy mavzularni, ayniqsa qullik va adolatsizlik masalalarini bolalarning beg‘ubor dunyosi orqali ochib berishi uning yozuvchilik mahoratining eng kuchli jihatidir.

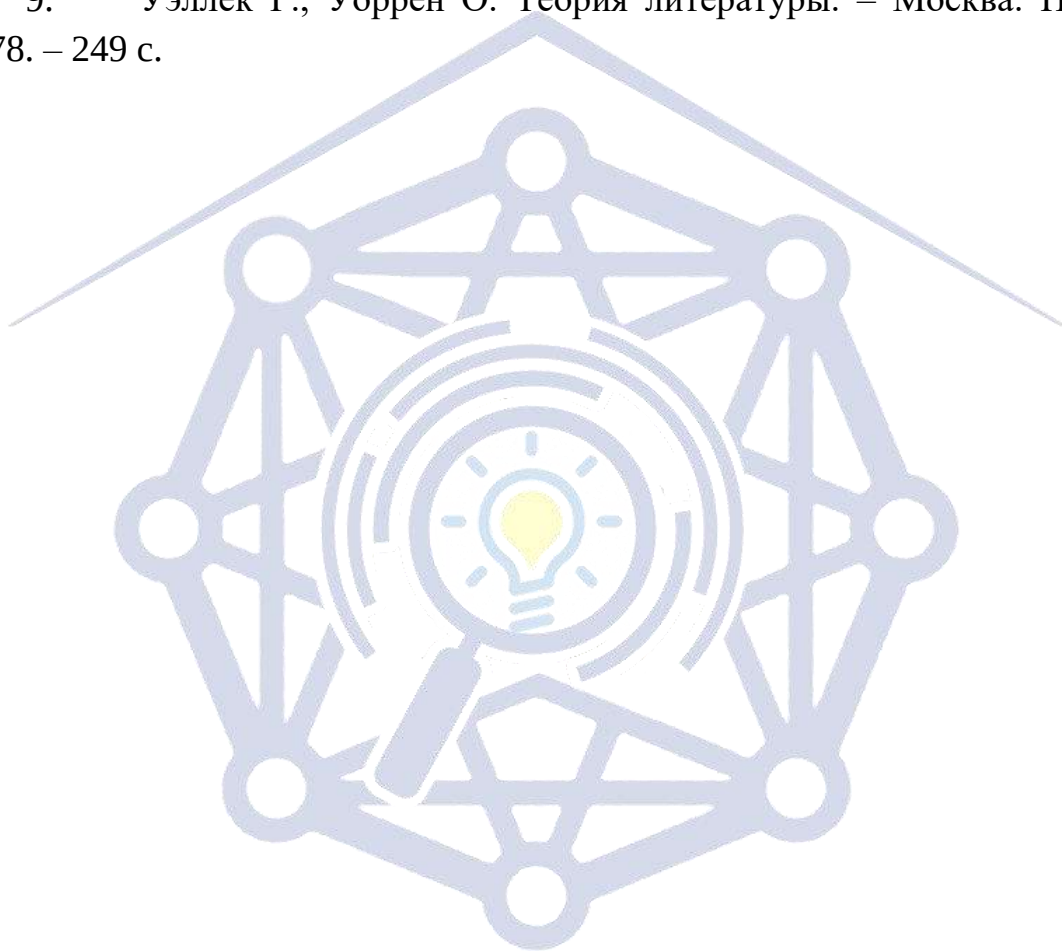
Mark Tvenning “Geklberri Finning boshidan kechirganlari” asari, bolalarning o‘z dunyosini yaratish va unda o‘zicha yashash istagini, hayotning katta muammolariga bolaning samimiy munosabatini ajoyib tarzda ifoda etadi.

Xulosa sifatida ta’kidlashimiz joizki, mazkur asarlarida tilga olingan va tasvirlangan personajlarning hayotdagi real prototiplari mavjud. Bu personajlar adibning yaqin qarindoshlari, qo‘shnilari, do‘st-birodarlari hisoblanadi. Asar qahramonlarning portretlarini adibning real hayotdagi insonlar boshidan kechirganlariga asoslanib yaratganlar. Ushbu romanlarda bolalar obrazi va ularning xarakteri o‘zining yorqin ifodasini topgan. Ammo “Geklberri Finning boshidan kechirganlari” butkul avtobiografik asarlar kiritib bo‘lmaydi. Biroq, bu asarda hikoya qilish va yorqin joziba beruvchi badiiy tasvir vositalariga boy to‘qima va avtobiografik elementlar mavjud. Asar muallifi ulardan boshqa maqsadda – oddiy hayotiy voqealar orqali umuminsoniy mazmunni ochib berishda foydalanishgan. Ushbu sarguzasht romanida bolalar portreti nihoyatda mohirlik bilan, badiiy tasvir vositalaridan samarali foydalanilgan holda yaratilgan. Ayniqsa, unda bolalar nutqiga alohida e’tibor qaratilgan, natijada asarda bolalar nutqi yorqin ifodasini topgan.

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A COMPARATIVE LINGUACULTURAL STUDY OF METAPHORS IN ENGLISH AND UZBEK IDIOMS AND PROVERBS

Halimova Shakhlo Hisomiddin kizi

1st year master's student of the Linguistics faculty of Asian Technology
University, Uzbekistan

E-mail: shaxlohisomiddinovnahalimova@gmail.com

Scientific advisor: **Musayeva Dilsuz Tuychievna**

PhD., assoc.prof., Asian Technology University, Uzbekistan

Abstract. This study investigates the linguacultural representation of natural elements - water, sky, and earth - in English and Uzbek idioms and proverbs. Drawing on the framework of conceptual metaphor theory and cultural linguistics, it analyzes how these elements reflect distinct cultural values, worldviews, and emotional associations in both languages. The findings reveal that while universal experiences shape many metaphors, their interpretation and usage are deeply rooted in specific cultural environments, religious beliefs, and traditional practices.

Key words: metaphor, nature, linguaculture, idioms, proverbs, English, Uzbek, cultural semantics.

Introduction. Metaphorical expressions play a fundamental role in human cognition and communication, allowing abstract ideas to be understood through concrete experiences. Among these, metaphors based on natural elements such as water, sky, and earth are particularly rich in symbolic meaning. These elements are among the most universal and ancient in human culture and are frequently used across languages to conceptualize human emotions, values, relationships, and social norms.

In English and Uzbek, idioms and proverbs that reference natural elements reflect the embedded worldviews and cultural values of their respective speakers. For instance, in English, water may metaphorically express emotional depth or unpredictability, whereas in Uzbek, it often represents life, purification, or scarcity due to the region's semi-arid geography. Similarly, while the sky might symbolize aspiration and freedom in English, it frequently connotes divine

power and humility in Uzbek. These differences illustrate that metaphors, though often grounded in shared physical experiences, are shaped by unique cultural, historical, and environmental contexts.

This topic is particularly relevant in an era of globalization and intercultural exchange, where metaphorical misunderstandings can create barriers in translation, diplomacy, and education. A nuanced understanding of nature metaphors in different languages can support effective communication and mutual cultural respect.

The purpose of this study is to conduct a comparative linguacultural analysis of how water, sky, and earth are metaphorically conceptualized in English and Uzbek idiomatic and proverbial expressions. By doing so, it aims to deepen our understanding of the cultural cognition embedded in metaphor and highlight the implications of these differences for cross-cultural communication and translation studies.

Methods. This research adopts a qualitative, contrastive analysis grounded in Conceptual Metaphor Theory (Lakoff & Johnson, 1980) and Cultural Linguistics (Sharifian, 2011). These frameworks are well-suited to examine how conceptual metaphors are shaped by and reflect cultural values.

A corpus of 150 idioms and proverbs was assembled from both English and Uzbek sources. English data were drawn from the Oxford Dictionary of Idioms and Oxford Dictionary of Proverbs. Uzbek data were collected from national databases such as O‘zbek tilining frazeologik lug‘ati and O‘zbek xalq maqollarining izohli lug‘ati.

Analytical Procedure: Each idiom or proverb was categorized under one of the three natural elements: water, sky, or earth. The metaphorical mapping was identified, e.g., EMOTION IS WATER, DIVINITY IS SKY, IDENTITY IS EARTH. The metaphors were then compared cross-linguistically to identify:

1. Shared metaphors with similar or identical mappings.
2. Culturally specific metaphors influenced by religion, geography, or social beliefs.

Analytical Techniques and Tools: A thematic coding approach was used to classify idioms and proverbs under conceptual domains. Comparative cultural analysis involved ethnolinguistic commentary and historical context to interpret metaphorical differences. When possible, insights from field interviews with

native speakers were used to verify cultural relevance and semantic interpretations.

Example Analysis: Uzbek: “Suvni ichgan joyingga tupurma” (Don't spit in the place where you drank water) – emphasizes respect and gratitude, rooted in Islamic teachings and local water scarcity. English: “To be in hot water” – indicates being in trouble; a metaphorical link between water and discomfort or challenge. By contextualizing metaphorical meanings within sociocultural frameworks, this study ensures a holistic and culturally sensitive interpretation of linguistic data.

Results. Water Metaphors: English: “Still waters run deep” → calmness hides emotional or intellectual depth.

“In hot water” → being in trouble or difficulty.

Uzbek: “Suvni arang topgan qush”

(“A bird that barely finds water”) → reflects struggle or scarcity.

“Suv hayot manbai” (“Water is the source of life”) → water as a sacred resource.

Sky Metaphors: English: “Reach for the sky” → limitless ambition.

“Under the same sky” → universal experience or unity.

Uzbek: “Ko‘kka chiqqan odam yerga tushadi” (“He who rises to the sky must come back to earth”) → humility before divine will.

“Osmonga talpingan qush qanotini yo‘qotadi” → aspiring too high leads to downfall.

Earth Metaphors: English: “Down to earth” → humility and practicality.

“Earth-shattering news” → overwhelming impact.

Uzbek: “Yerga suyan, elga ishon” (“Rely on the land, trust your people”) → land as foundation of trust.

“Yer bilan bitta bo‘lmoq” (“To become one with the earth”) → death, return to origin.

Discussion. The findings of this study affirm the dual nature of metaphor: while some conceptual metaphors are universal, many are shaped by local cultural cognition. The analysis of English and Uzbek idioms and proverbs reveals how these two languages draw on similar natural imagery yet project distinct meanings shaped by differing religious, ecological, and historical experiences.

In English, water often represents emotional states, challenges, or social tension (e.g., “treading water,” “in deep water”). This metaphorical domain reflects the cultural preoccupation with emotion, unpredictability, and psychological insight. Additionally, English water metaphors frequently convey caution, avoidance, or danger, such as “pouring cold water” on ideas to extinguish enthusiasm.

In contrast, in Uzbek, water is sacred, life-giving, and morally charged. Expressions like “Suv – hayot manbai” (Water is the source of life) underscore the spiritual and ecological importance of water. Uzbek metaphors tend to focus on cooperation, hospitality, and divine sustenance. This aligns with Islamic traditions, where water is not only essential for life but also a symbol of purity used in ablutions (wudu).

English metaphors depict the sky as a space of individual aspiration and possibility, in line with Western ideals of freedom and self-determination. For instance, “reach for the sky” promotes limitless ambition, often associated with the American Dream.

Uzbek metaphors frame the sky as a divine realm that must be approached with humility. For example, “Osmonga qarab yurma, yerga ham qaragin” (Do not only look up to the sky, also look at the ground) cautions against arrogance and reminds individuals of their earthly responsibilities. This reflects a collectivist worldview where spiritual balance and modesty are emphasized over individual achievement.

English usage emphasizes practicality and moral virtue through earth metaphors (“salt of the earth”). The metaphor reflects a Protestant work ethic and democratic ideals. The phrase “grounded person” implies someone who is stable, reasonable, and sincere.

Uzbek metaphors often convey deeper spiritual connections to the land, associating the earth with ancestry, heritage, and the return to one’s roots (especially in death). The earth is revered as a maternal force, a notion reflected in expressions like “Ona zamin” (Mother Earth). It not only provides sustenance but also symbolizes human origin and final destiny.

These contrasts reflect differing conceptualizations of nature. English metaphors often secularize and individualize natural elements, while Uzbek metaphors sacralize and collectivize them.

Moreover, in translation studies, such metaphorical differences can lead to mistranslations or cultural misunderstandings. A metaphor like “reaching for the sky” might be interpreted as arrogance in Uzbek unless context is carefully considered. Thus, translators and cultural mediators must be equipped with an understanding of metaphorical cognition within cultural frames.

Understanding the metaphorical structure of each language enhances not only linguistic competence but also intercultural empathy. By exploring the deeper meanings behind these nature metaphors, educators and translators can foster more meaningful communication between cultures.

Conclusion. Metaphors of nature are more than poetic devices—they embody a culture’s history and cognitive worldview. While English and Uzbek share some universal patterns in metaphorical conceptualization, the specific meanings are influenced by unique cultural experiences. Such comparative metaphor studies deepen our understanding of language and culture, promoting more effective translation, communication, and linguistic appreciation.

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BARQAROR RAQAMLI EKOTIZIMLAR SHAROITIDA TURIZM KOMPANIYALARIDA MARKETING STRATEGIYALARINI BOSHQARISHNING INNOVATSION-PARADIGMATIK ASOSLARI

Mo‘ydinjonova Durdonaxon Ilhomjon qizi

Farg‘ona Davlat Texnika Universiteti, Ishlab chiqarishda boshqaruv fakulteti,

Raqamli iqtisodiyot yo‘nalishi talabasi

E-mail: durdonaxonm.work@gmail.com

Boyqo‘ziyeva Gulsanamxon Adxamovna

Ishlab chiqarishda boshqaruv fakulteti

Iqtisodiyot kafedrasasi assistenti (PhD)

Annotatsiya: Sun‘iy intellekt, blokcheyn, IoT, AR va VR kabi ilg‘or texnologiyalar turizm kompaniyalariga resurslarni samarali boshqarish, shaxsiylashtirilgan xizmatlar ko‘rsatish va ekologik ta‘sirni kamaytirishda muhim rol o‘ynaydi. Raqamli transformatsiya jarayonida kompaniyalar nafaqat texnologik yangiliklarni joriy etadi, balki tashkilot madaniyati, yetakchilik va ish uslublarini ham tubdan yangilashga majbur bo‘lmoqda. Marketing strategiyalarida barqarorlikka asoslangan yondashuv, ya‘ni ijtimoiy, ekologik va iqtisodiy manfaatlarni uyg‘unlashtirish, zamonaviy sayyohlar ehtiyojlariga mos keladi va brend imidjini mustahkamlaydi. Amaliy misollarda esa ekologik toza joylashtirish, barqaror yo‘nalishlarni targ‘ib qilish, yashil sertifikatlarni raqamli platformalarda namoyish etish va ijtimoiy tarmoqlarda barqaror turizm bo‘yicha xabardorlikni oshirish kabi strategiyalar samaradorligi ko‘rsatib berilgan. Shu tariqa, innovatsion va paradigmatik yondashuvlar turizm marketingining raqamli va barqaror rivojlanishiga asos bo‘lib xizmat qiladi.

Kalit so‘zlar: barqaror turizm, raqamli ekotizim, marketing strategiyalari, innovatsion paradigmlar, sun‘iy intellekt, blokcheyn texnologiyasi, virtual va kengaytirilgan reallik, ekologik barqarorlik.

Kirish

So‘nggi yillarda turizm sanoati global miqyosda sezilarli o‘zgarishlarga uchramoqda. Raqamli texnologiyalarning tez sur‘atlar bilan rivojlanishi va



barqarorlik tamoyillarining dolzarbligi turizm kompaniyalarining marketing strategiyalarini qayta ko‘rib chiqishni talab qilmoqda. Barqaror raqamli ekotizimlar - bu raqamli texnologiyalar, ma’lumotlar tahlili va ekologik mas’uliyatni birlashtirgan kompleks tizim bo‘lib, u turizm sohasida innovatsion yondashuvlarni joriy etishga imkon yaratadi.

Turizm kompaniyalari uchun raqamli transformatsiya nafaqat mijozlar bilan samarali muloqot qilish, balki resurslarni barqaror boshqarish va ekologik ta’sirni kamaytirish nuqtai nazaridan ham muhim ahamiyat kasb etadi. Shu bois, marketing strategiyalarini innovatsion-paradigmatik asosda boshqarish kompaniyaning raqobatbardoshligini oshirish va barqaror rivojlanish maqsadlariga erishishda kalit hisoblanadi.

Ushbu maqolada barqaror raqamli ekotizimlar sharoitida turizm kompaniyalarida marketing strategiyalarini boshqarishning asosiy tamoyillari, zamonaviy texnologiyalar va paradigmatik yondashuvlar tahlil qilinadi hamda amaliy misollar orqali samaradorlik ko‘rsatkichlari baholanadi.

Adabiyotlar tahlili va metodologiya

Barqaror turizm va ekoturizm sohasida olib borilgan ilmiy tadqiqotlar asosida, barqarorlik uch asosiy yo‘nalishda - iqtisodiy, ekologik va ijtimoiy-madaniy omillarda amalga oshirilishi zarurligi aniqlandi. Xalqaro ekoturizm jamiyati va BMTning turizm bo‘yicha tashkiloti tomonidan berilgan ta’riflarga ko‘ra, barqaror turizm atrof-muhitni saqlash, mahalliy jamoalarning farovonligini oshirish va madaniy merosni himoya qilishga qaratilgan. Shu bilan birga, raqamli texnologiyalar, xususan sun’iy intellekt, blokcheyn va IoT, barqaror turizmni rivojlantirishda iqtisodiy samaradorlik va ekologik monitoringni ta’minlashda muhim vosita sifatida ko‘rilmoqda.

Metodologiya sifatida maqolada sifatli va miqdoriy tadqiqot usullari qo‘llanadi. Adabiyotlar tahlili orqali barqaror raqamli ekotizimlarning turizm marketingidagi innovatsion-paradigmatik asoslari aniqlanadi. Shuningdek, amaliy misollar va soha ekspertlarining fikrlari asosida zamonaviy texnologiyalarning marketing strategiyalariga ta’siri o‘rganiladi. Tadqiqotda ekologik, iqtisodiy va ijtimoiy ko‘rsatkichlarni o‘lchash uchun xalqaro standartlar va indikatorlardan foydalaniladi.

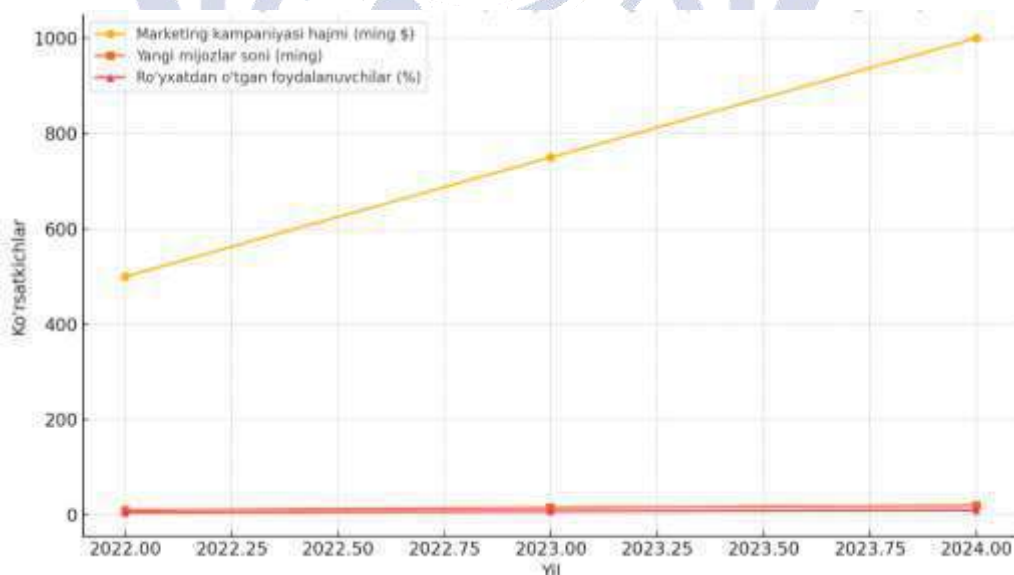
Ushbu yondashuv barqaror turizmni raqamli transformatsiya bilan uyg‘unlashtirish imkonini beradi, bu esa turizm kompaniyalarining



raqobatbardoshligini oshirish va atrof-muhitga salbiy ta'sirni kamaytirishga xizmat qiladi. Natijalar asosida innovatsion marketing strategiyalarining samaradorligi baholanadi va kelajakda rivojlantirish uchun tavsiyalar ishlab chiqiladi.

Natijalar

Tadqiqot natijalari shuni ko'rsatdiki, barqaror raqamli ekotizimlar sharoitida turizm kompaniyalarining marketing strategiyalarini innovatsion-paradigmatik asosda boshqarish ularning raqobatbardoshligini sezilarli darajada oshiradi. 2022-2024 yillar orasida onlayn marketing kampaniyalarining hajmi 500 ming dollardan 1 million dollargacha o'sishi natijasida yangi mijozlar soni 10 mingdan 20 minggacha ko'paydi, ro'yxatdan o'tgan foydalanuvchilar foizi esa 5% dan 10% gacha oshdi. Bu ko'rsatkichlar marketing axborotlaridan samarali foydalanish va raqamli texnologiyalarni joriy etish orqali kompaniyalarning mijozlar bazasini kengaytirishga muvaffaq bo'lganini tasdiqlaydi. Barqaror turizm marketing strategiyalarida ekologik, ijtimoiy va iqtisodiy barqarorlik tamoyillarini integratsiya qilish kompaniyaning brend imidjini mustahkamlashga va mahalliy jamoalar bilan hamkorlikni rivojlantirishga yordam beradi. Raqamli monitoring va elektron platformalar orqali karbon izini kamaytirish va resurslarni samarali boshqarish imkoniyati mavjudligi ekologik ta'sirni kamaytirishga xizmat qilmoqda.



1-rasm. 2022-2024 yillarda turizam kompaniyalaridagi raqamli marketing natijalari



Shuningdek, barqaror turizm konsepsiyasining strategik funksiyalari - faoliyatni rejalashtirish, bozor ulushini saqlab qolish va adaptatsion boshqaruv tizimini yo'lga qo'yish - kompaniyalarning o'zgarishlarga tez moslashishi va uzoq muddatli rivojlanishini ta'minlaydi. Bu esa raqamli ekotizimlarda marketing strategiyalarining paradigmaviy o'zgarishini talab qiladi. Natijalar asosida, innovatsion yondashuvlar va raqamli texnologiyalarni qo'llash orqali turizm kompaniyalari barqarorlik va samaradorlikni birlashtirgan marketing strategiyalarini muvaffaqiyatli amalga oshirmoqda. Bu esa global turizm bozorida ularning pozitsiyasini mustahkamlashga xizmat qiladi.

Muzokaralar

Ushbu tadqiqot natijalari barqaror raqamli ekotizimlar sharoitida turizm kompaniyalarining marketing strategiyalarini boshqarishning innovatsion-paradigmatik asoslari haqida ikki asosiy jihatni ko'rsatadi: birinchidan, barqarorlik tamoyillarining marketing faoliyatiga integratsiyasi, ikkinchidan esa raqamli texnologiyalarning innovatsion qo'llanilishi. Birinchi jihatdan, barqaror turizm konsepsiyasining asosiy tamoyillari – atrof-muhitni muhofaza qilish, mahalliy jamoalarning manfaatlarini himoya qilish va ijtimoiy mas'uliyatni ta'minlash – marketing strategiyalarida muhim o'rin tutadi. Tadqiqotlarda ta'kidlanishicha, barqaror turizm marketingi nafaqat ekologik barqarorlikni ta'minlash, balki mahalliy iqtisodiyot va madaniyatni qo'llab-quvvatlash orqali turistik brendning ijobiy imidjini shakllantiradi. Masalan, O'zbekistonning turizm sohasida ekologik inqiroz hududlariga ehtiyotkorona yondashish va mahalliy aholi fikrini inobatga olish amaliyotlari barqarorlikni ta'minlashda samarali ekanligi ko'rsatildi. Bu esa kompaniyalar uchun uzoq muddatli raqobatbardoshlikni kafolatlaydi. Ikkinchi jihatdan, raqamli transformatsiya va innovatsion texnologiyalar marketing strategiyalarining samaradorligini oshirishda hal qiluvchi rol o'ynaydi. Sun'iy intellekt, blokcheyn, IoT va VR kabi texnologiyalar mijozlarni chuqurroq tahlil qilish, shaxsiylashtirilgan xizmatlar yaratish va ekologik monitoringni amalga oshirish imkonini beradi. Bu esa marketing faoliyatini yanada barqaror va maqsadli qiladi. Masalan, raqamli monitoring tizimlari orqali karbon izini kamaytirish va resurslardan samarali foydalanish imkoniyati kompaniyalarning ekologik mas'uliyatini oshiradi. Shuningdek, innovatsion marketing yondashuvlari orqali turistik destinatsiyalarning rekreatsion yuklamasini optimallashtirish ham amalga oshirilmoqda. Shu bilan birga, ba'zi tadqiqotlar raqamli texnologiyalarni joriy etish



jarayonida tashkilot ichidagi madaniyat va boshqaruv uslublarini ham tubdan o'zgartirish zarurligini ta'kidlaydi. Bu esa innovatsion-paradigmatik yondashuvning muhimligini ko'rsatadi, ya'ni nafaqat texnologiya, balki boshqaruv va strategiya darajasida ham yangiliklarni qabul qilish talab etiladi. Xulosa qilib aytganda, barqarorlik va raqamli innovatsiyalarni uyg'unlashtirish turizm kompaniyalarining marketing strategiyalarini yanada samarali va mas'uliyatli qilishga xizmat qiladi. Bu ikki yo'nalish bir-birini to'ldiradi va global turizm bozorida barqaror raqobatbardoshlikni ta'minlash uchun asosiy omil hisoblanadi.

Xulosa

Ushbu maqolada barqaror raqamli ekotizimlar sharoitida turizm kompaniyalarida marketing strategiyalarini boshqarishning innovatsion-paradigmatik asoslari batafsil tahlil qilindi. Tadqiqotlar va amaliy misollar shuni ko'rsatadiki, barqarorlik tamoyillarini marketing strategiyalariga integratsiya qilish nafaqat ekologik va ijtimoiy mas'uliyatni oshiradi, balki kompaniyalarning brend imidjini mustahkamlash va mahalliy jamoalar bilan samarali hamkorlik o'rnatishga xizmat qiladi. Raqamli texnologiyalar – sun'iy intellekt, blokcheyn, IoT, VR va AR – marketing faoliyatining samaradorligini oshirishda, shuningdek, ekologik monitoring va resurslarni optimallashtirishda muhim vosita sifatida namoyon bo'lmoqda. Ularning qo'llanilishi kompaniyalarga mijozlar ehtiyojlarini chuqurroq tahlil qilish, shaxsiylashtirilgan xizmatlar yaratish va barqarorlik ko'rsatkichlarini raqamli platformalarda kuzatish imkonini beradi. Innovatsion-paradigmatik yondashuv esa nafaqat texnologik yangiliklarni, balki tashkilot madaniyati va boshqaruv uslublarini ham tubdan o'zgartirishni talab qiladi. Bu esa turizm kompaniyalarining raqamli transformatsiya jarayonida muvaffaqiyatli bo'lishi uchun zarur shartdir. Natijalar shuni ko'rsatadiki, barqaror raqamli ekotizimlarda marketing strategiyalarini boshqarish turizm sohasida raqobatbardoshlikni oshirish va uzoq muddatli barqaror rivojlanishni ta'minlash uchun samarali vositadir. Shu bilan birga, kompaniyalar innovatsion texnologiyalar va barqarorlik tamoyillarini uyg'unlashtirish orqali global turizm bozorida o'z o'rnini mustahkamlash imkoniga ega bo'ladi. Kelajakda tadqiqotlar raqamli ekotizimlarning yangi texnologiyalarini joriy etish va barqarorlik ko'rsatkichlarini yanada chuqurroq integratsiya qilish yo'nalishlariga qaratilishi lozim. Bu esa turizm sohasining barqaror va raqamli rivojlanishini ta'minlashda muhim ahamiyat kasb etadi.

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DIABETIK NEFROPATIYA RIVOJLANISHINING PATOGENETIK MEKANIZMLARI

Raximidinov G‘.S., Tursunova L.D., Jabbarov O.O.
Toshkent tibbiyot akademiyasi, Toshkent, O‘zbekiston

Email: raximidinovgofirjon@gmail.com

Tel: +998902030797

ORCID: 0009-0005-7130-1577

Annotatsiya. Hozirgi kunda qandli diabet bilan kasallangan bemorlar butun dunyoda, shu jumladan O‘zbekistonda ham ortib bormoqda. Diabetik nefropatiyaning etiopatogenezigaga bag‘ishlangan ko‘plab ilmiy tadqiqotlarga qaramay, uning shakllanishi va rivojlanish mexanizmlari to‘liq o‘rganilmagan. Ushbu maqola buyrak parenximasi hujayralari va interstitsiyasidagi metabolik kasalliklarning rivojlanish ketma-ketligi haqida yangilangan ma‘lumotlarni taqdim etadi. Glomerulyar gipertenziyaning buyrak koptokchalari shikastlanishi va nefronlar sonining progressiv kamayishi rivojlanishidagi yetakchi ro‘liga katta e‘tibor beriladi. Ushbu hodisalarning mohiyatini tushunish diabetning asoratlarini davolash va oldini olishning samarali usullarini ishlab chiqishning kalitidir.

Kalit so‘zlar: qandli diabet, giperglikemiya, dislipidemiya, arterial gipertenziya, glomeruloskleroz, diabetik nefropatiya.

ПАТОГЕНЕТИЧЕСКИЕ МЕХАНИЗМЫ РАЗВИТИЯ ДИАБЕТИЧЕСКОЙ НЕФРОПАТИИ

Рахимидинов Г.С., Турсунова Л.Д., Жаббаров О.О.
Ташкентская медицинская академия, Ташкент, Узбекистан

Аннотация. В настоящее время во всем мире, в том числе в узбекистане, прогрессирует заболеваемость сахарным диабетом. Несмотря на большое количество научных исследований, посвященных этиопатогенезу диабетической нефропатии, механизмы ее формирования и прогрессирования до конца не изучены. В данном обзоре представлена обновленная информация

о последовательности развития метаболических нарушений в клетках и интерстиции почечной паренхимы. Значительное внимание уделено ведущей роли клубочковой гипертензии в развитии гломерулярных повреждений и прогрессивной утрате нефронов. Понимание сущности данных явлений является ключом к разработке эффективных методов лечения и профилактики осложнений сахарного диабета.

Ключевые слова: сахарный диабет, гипергликемия, дислипидемия, артериальная гипертензия, гломерулосклероз, диабетическая нефропатия

PATHOGENETIC MECHANISMS FOR THE DIABETIC NEPHROPATHY DEVELOPMENT

Raximidinov G.S., Tursunova L.D., Jabbarov O.O.

Toshkent medical academy, Tashkent, Uzbekistan

Abstract. The prevalence of DM is currently increasing all over the world, including Uzbekistan. Despite the numerous researches of DN etiopathogenesis, the mechanisms of its formation and progression have not been fully studied. This review contains updated information about metabolic disorders development in cells and interstitial renal parenchyma. Significant attention is devoted to the glomerular hypertension formation as the cause of glomerular damage and nephrons progressive loss. Understanding of these phenomena essence is the key to development effective treatment methods and prevention of DM complications.

Keywords: diabetes mellitus, hyperglycemia, dyslipidemia, arterial hypertension, glomerulosclerosis, diabetic nephropathy.

Diabetik nefropatiya - qandli diabetda (QD) buyrakning o'ziga xos shikastlanishi bo'lib, glomerulosklerozning shakllanishi va surunkali buyrak yetishmovchiligi (SBY) rivojlanishi bilan birga keladi. Bu holat butun dunyoda diabet bilan kasallanishning ortib borayotgani sababli dolzarb muammo hisoblanadi. IDF prognozlariga ko'ra, 2040-yilga borib diabet bilan kasallanganlar soni 2015-yilga nisbatan 55 % ga oshib, 640 million kishiga etadi [1]. Buyrak shikastlanishi 2-tip qandli diabet bilan og'rigan bemorlarning taxminan 40-45 % ida va 1-tip qandli diabet bilan kasallanganlarning 25-30 % ida rivojlanadi. Qandli diabet bilan og'rigan odamlarda oxirgi bosqichdagi buyrak yetishmovchiligining tarqalishi umumiy

aholiga qaraganda 10 baravar yuqori. 2-toifa diabet bilan og'rigan odamlarda o'limning taxminan 10 % i buyrak yetishmovchiligi bilan bog'liq [1].

Xavf omillari

20-asrning 80-90-yillarida eksperimental va klinik tadqiqotlar shuni ko'rsatdiki, tugunli glomeruloskleroz diabetik nefropatiya (DN) rivojlanishida buyrak to'qimalarida morfologik o'zgarishlarning yakuniy bosqichidir. Buyrak tuzilmalaridagi eng erta o'zgarishlar diabet boshlanishining birinchi oylarida allaqachon aniqlanadi va kasallik rivojlanib borishi bilan kuchayadi. Bu jarayon kasallikning davomiyligi va glikemik profil darajasi bilan bog'liq. Vaqt o'tishi bilan buyraklarda morfologik o'zgarishlar sodir bo'ladi: ularning hajmi kichrayadi, buyrakning kortikal qatlamida qon oqimi kamayadi, kanalchalarda atrofik jarayonlar faollashadi, glomerulyar gialinoz va interstitsiyda sklerotik o'zgarishlar rivojlanadi [2, 3]. DN ning birinchi klinik ko'rinishlari (albuminuriya, koptokcha filtratsiya tezligi (KFT)ning o'rtacha ortishi diabet boshlanganidan taxminan 5-10 yil o'tgach paydo bo'ladi. Qandli diabet bilan kasallanishning 20 yillik tarixi buyraklar koptokcha apparatining umumiy zararlanishini va uremiya mavjudligini ko'rsatadi.

1-tip qandli diabet bilan og'rigan bemorlarning alohida toifasida nefropatiya rivojlanishiga genetik moyillikni aniqlash mumkin, bu AAF va NO-sintaza genlarining polimorfizmidan iborat. Ushbu genetik bog'lanish DN ning birlamchi rivojlanish jarayonida muhim ro'l o'ynaydi, lekin nefropatiyaning proteinuriya bosqichidan SBY bosqichiga o'tishi bilan yo'qoladi. Ushbu bosqichda SBY ning terminal bosqichiga olib keluvchi sabablar orasida birinchi o'ringa na uglevod almashinuvi kompensatsiyasining yetarli darajada emasligi, na buyrak patologiyasiga genetik moyillik chiqadi, balki arterial bosim (AB) darajasini nazorat qilish sifati hal qiluvchi omilga aylanadi. Arterial gipertenziya (AG) sharoitida koptokcha kapilyarlarida bosim oshadi, bu esa bazal membrana orqali oqsil filtratsiyasining ortishiga olib keladi, endoteliy shikastlanadi va sitokinlar ishlab chiqarilishi kuchayadi. Bu jarayonlar buyrakning normal to'qimasining fibroz to'qima bilan almashishini stimullaydi hamda glomeruloskleroz rivojlanishiga olib keladi [4,5].

Qandli diabet fonida AB yetarlicha nazorat qilinmaganda va glyukozaning yuqori darajasi (giperglikemiya) boshqarilmaganda, DN ning tez sur'atlarda progressiyalanishining asosiy sababi qon tomirlar endoteliysining disfunktsiyasi hisoblanadi. Arterial gipertenziya darajasi oshib borgani sari endoteliyning



vazomotor, adgeziya va boshqa funksiyalari qaytmas darajada buziladi. Bu esa nafaqat DNning kuchayishiga, balki og‘ir yurak kasalliklarining qo‘shilishiga va shunday nom olgan "kardiorenal sindrom" shakllanishiga olib keladi. 1-tip qandli diabet bilan kasallangan bemorlarda yurak ishemik kasalligi (YuIK) rivojlanish tezligi mikroalbuminuriya bosqichida 13 %, proteinuriya bosqichida 33 % va SBY bosqichida 53 % ni tashkil etadi [6, 7].

Giperlipidemiya diabetik nefropatiya rivojlanishida muhim ro‘l o‘ynaydi. Oksidlangan past zichlikdagi lipoproteinlar glomerulyar kapillyarlarning shikastlangan endoteliyasi orqali o‘tib, mezangial hujayralar tomonidan yutiladi va natijada ko‘pik hujayralar hosil bo‘ladi [8]. Bu hujayralar atrofida kollagen tolalari faol tarzda shakllanadi. Lipoproteidlarning o‘zi esa bazal membrananing zaryadini neytrallab, uning o‘tkazuvchanligini oshiradi. Ushbu o‘zgarishlar glomerulalarning sklerozlanishiga olib keladi. Bunda lipidlarning birlamchi siydikka tushishi yanada kuchayadi - bu esa o‘z navbatida buyrak kanalchalari hujayralarini shikastlab, keyinchalik kanalikulyar sklerozning rivojlanishiga olib keladi [9–11].

Giperglikemiya - nefronlarning progressiv yo‘qolishiga olib keluvchi asosiy omil

2-tip QDda giperglikemiya insulinga rezistentlik rivojlanishi oqibatida yuzaga keladi. Dastlabki bosqichlarda oshqozon osti bezining β -hujayralari kompensator tarzda insulin sekretsiyasini oshiradi, biroq vaqt o‘tishi bilan insulyar apparat zaiflashadi, insulin darajasi pasayadi va qonda glyukoza miqdori ortadi. 1-tip QDda esa glyukoza darajasining oshishi oshqozon osti bezining insulin ishlab chiqaruvchi β -hujayralarining autoimmun destruksiya bilan bog‘liq bo‘lib, bu holat insulin sekretsiyasining mutlaq yetishmovchiligi rivojlanishiga olib keladi [12].

Surunkali giperglikemiya rivojlanadi va aynan u diabetik nefropatiya rivojlanishida asosiy ahamiyatga ega bo‘lgan “patologik zanjir”dagi jarayonlarni ishga tushiradi. Tadqiqotlar shuni ko‘rsatadiki, agar qonda glyukozaning maqsadli darajasi nazorat ostida bo‘lsa, qandli diabetga xos o‘zgarishlar aniqlanmaydi [8].

QDda buyrak zararlanishi filtratsion to‘siq darajasida boshlanadi, uning asosiy komponenti podotsitlar hisoblanadi. Podotsitlar - ko‘plab o‘simtali sitopodiyalarga ega yirik epitelial hujayralar bo‘lib, ular orasida filtratsion yoriqlar joylashgan. Bu yoriqlar yoriqcha diafragmalari bilan yopilgan bo‘ladi [13]. Filtratsion yoriqning asosiy tarkibiy komponenti adgeziv xususiyatga ega

bo'lgan transmembran oqsili - nefrin hisoblanadi. Podotsitlar shikastlanishga juda sezuvchan bo'lib, giperglikemiya sharoitida ularning tuzilma va funksiyasi buziladi, bu holat - **podotsitopatiya** deb ataladi. Podotsitopatiyaning belgilari quyidagilardan iborat: podotsit oyoqchalarining yassilanishi, yoriqcha diafragmasining o'tkazuvchanligining buzilishi, podotsitlarning aktin skeleti shikastlanishi natijasida siydikda **nefrin** paydo bo'lishi. **Nefrinuriya** diabetik nefropatiyaning ilk diagnostik belgilaridan biri hisoblanadi [14]. Giperglikemiya sharoitida podotsitlar tomonidan **$\alpha\beta 1$ -integrinlar** ekspressiyasi pasayadi, buning natijasida ular glomerulaning asosiy membranasi bilan aloqani yo'qotadi va siydik oqimiga tushib ketadi, bu holat **podotsituriyaga** olib keladi. Kasallik boshida podotsitlarning moslashuvchan xususiyatlari faollashadi, ularning **gipertrofiyasi** rivojlanadi va podotsitlarning yo'qolishi qisman kompensatsiyalanadi. Yirik hujayralar koptokcha bazal membranasi bo'sh hududlarni to'ldirishga harakat qiladi, biroq vaqt o'tishi bilan bu kompensatsiya samarasiz bo'lib qoladi, chunki podotsitlar deyarli bo'linmaydi. Bu esa **p27 va p57** hujayra o'sishining ingibitorlari ekspressiyasining faolligi bilan bog'liq. Giperglikemiya sharoitida **p27** sintezi ortadi, apoptoz faollashadi va bu **podotsitopeniyani** yanada kuchaytiradi [15, 16].

DN rivojlanishining dastlabki bosqichida quyidagi qonuniyat kuzatiladi: glyukoza darajasi qanchalik yuqori bo'lsa, shuncha ko'proq koptokcha filtrlatsiya tezligi (KFT), qon oqimi, buyrak hajmi va massasi oshadi, bu holat kompensator mexanizm sifatida yuz beradi. Gipertifiltratsiya rivojlanganidan dalolat beruvchi muhim mezonlardan biri KFTning 135 ml/min dan yuqori bo'lishidir (yosh va jins hisobga olinmagan holda). Shuni yodda tutish kerakki, hatto KFTning normal darajasi ham qolgan nefronlarning kompensator gipertifiltratsiyasini yashirishi mumkin. Gipertifiltratsiya esa keyingi bosqichlarda xavfli va shikastlovchi kuchga aylanadi, chunki omon qolgan nefronlar nobud bo'lganlarning o'rnini to'liq qoplay olmaydi. Ma'lum bir bosqichda bu adaptiv jarayonlar zaiflashadi, filtrlatsiya yuzasi kamayadi va natijada KFT pasayadi [11, 17]. Yuqorida bayon etilgan jarayonlarni giperglikemiya turli mexanizmlarni faollashtirish orqali ishga tushiradi.

QDning boshlang'ich bosqichida **glyukoza aminokislotalarning erkin aminoguruhi bilan reaksiyaga kirishib, Shiff asosini (aldimin) hosil qiladi**, bu jarayon bir necha soat yoki kun davom etadi. So'ngra aldimin qayta tuzilishga uchrab, ketoamin (Amadori birikmasi) hosil qiladi, bu bosqich ham bir necha kun talab etadi. Keyinchalik haftalar, oylar, hatto yillar o'tishi bilan glikatsiyaning erta

mahsulotlari degradatsiyasi natijasida turli xil glikirlangan ohirgi mahsulotlar - AGElar hosil bo‘ladi. AGE (Advanced Glycation End products) — bu oqsillarning glyukoza bilan ortiqcha reaksiyaga kirishishi natijasida hosil bo‘ladigan yakuniy glikozillanish mahsulotlari bo‘lib, ularni ba’zida “shakarlanib ketgan” oqsil molekulalari deb atashadi. Ushbu glikotoksinlar shakllanishi uchun zarur vaqt oralig‘i organizmda “metabolik xotira” mavjudligini ko‘rsatadi. Ushbu moddalarning cheklangan miqdorda hosil bo‘lishi normal metabolizmning bir qismidir. Biroq, QDda bu glikotoksinlar ortiqcha to‘planadi, surunkali buyrak yetishmovchiligi rivojlanganda esa ular organizmdan chiqarilishi kamayadi, bu esa ularning konsentratsiyasini yanada oshiradi [18]. Kollagenning glikatsiyasi yuzaga keladi, bu esa uning elastikligi va eruvchanligini pasaytiradi, monomerlar zaryadining o‘zgarishiga hamda koptokcha bazal membrana arxitekturasini buzilishiga olib keladi. Kollagen zararlanishi tufayli tomir devori yupqalashadi va buyrak to‘qimalarining qon bilan ta’minlanishi buziladi. Shu bilan birga, koptokcha bazal membrana o‘zining manfiy zaryadini yo‘qotadi, bu esa albuminuriya rivojlanishiga turtki bo‘ladi [19].

AGE lar to‘planishi RAGE (receptor for advanced glycation end products) oqsilini faollashtiradi. Bu transmembran oqsil bo‘lib, u makrofaglar, neyronlar, buyrak kanalchalari va koptokchalardagi epitelial hujayralarda ekspressiyalanadi. AGE va RAGE o‘zaro bog‘langanda Akt proteinkinazasi va siklooksigenaza-2 ingibitsiyalanadi, bu esa apoptozga olib keladi, faol kislorod shakllarining hosil bo‘lishiga sabab bo‘ladi va ko‘plab yallig‘lanish genlarining ekspressiyasini kuchaytiradi [20]. Bundan tashqari, AGE-RAGE o‘qi faollashuvi NF-kB (yadro omili kappa-B) faktori darajasini oshiradi, u esa o‘z navbatida ZEB2 transkripsion faktorni faollashtiradi.

ZEB2 faollashuvi P-kadgerin - glomerulyar filtratsion diafragma komponenti ekspressiyasini pasaytiradi, shuningdek, epitelial marker bo‘lgan E-kadgerin ekspressiyasini ham pasaytiradi va mezinximal marker hisoblangan N-kadgerinni faollashtiradi [21]. Ushbu jarayonlar epitelial-mezinximal o‘tishga sabab bo‘ladi va buyrak tuzilmalarining sklerozlanish jarayonlarini tezlashtiradi [16].

Giperglikemiya darajasi 8,6 mmol/l dan oshganda poliol yo‘li faollashadi. Aldoza reduktaza fermenti ta’sirida hujayra ichida sorbitol va fruktoza to‘planadi, bu esa hujayralarning giperosmolyarligi, shishishi, deformatsiyasi va funksional

buzilishiga olib keladi. Yuqorida sanab o'tilgan o'zgarishlar natijasida buyrak tomirlarining endotelial hujayralarida qon aylanishi buziladi [10, 22].

Giperglikemiya sharoitida geksozamin yo'li faollashadi: odatda bu yo'l orqali glyukozaning 2–5 %i metabolizatsiyalanadi, glyukoza darajasi oshganda esa bu foiz ham ortadi. Ushbu yo'lning yakuniy mahsuloti UDP-N-atsetilglyukozamin hisoblanadi. Bu birikma transkripsiya faktorlarining glikozillanishida ishtirok etadi, natijada 1-tip qandli diabetda insulin rezistentlikni keltirib chiqaradi va 2-tip diabetda mavjud bo'lgan rezistentlikni yanada kuchaytiradi. Natijada buyrak kanalchalarining disfunktsiyasi yuzaga keladi, podotsitlar va koptokcha bazal membrana (KBM) o'rtasidagi aloqaning uzilishi tezlashadi [22–24]. Giperglikemiya sharoitida geparansulfatni sulfatlashda ishtirok etuvchi fermentlar faolligi pasayadi. Geparansulfatning sintezi to'laqonli bo'lmaydi, uning zanjirlari KBMga qo'shiladi, biroq ular manfiy zaryad hosil qilmaydi. Bu esa mikroalbuminuriya rivojlanishiga olib keladi [10, 25].

Giperglikemiya holatida VEGF (endotelial o'sish faktori) faollashuvi katta ahamiyatga ega. Bu omil glomerulosklerozning rivojlanishini kasallikning dastlabki bosqichlaridayoq quyidagi mexanizmlar orqali rag'batlantiradi: – buyrak koptokchalarining faollashgan proliferatsiyasi va gipertrofiyasi tufayli filtratsiya yuzasi ortadi, bu esa koptokcha ichki bosimi va filtratsion to'siqqa tushadigan yuklamani oshiradi; – koptokchalar gipertrofiyasi patologik qon tomirlarining o'sishi bilan kechadi; bunday tomirlar to'laqonli emas, ularning devorlari yupqa va bazal membranasi yuqori o'tkazuvchanlikka ega bo'ladi. Ushbu o'zgarishlar oqibatida bu tomirlar devorlaridan oqsillar chiqib ketadi. Ularning yetarli darajada mustahkam emasligi tufayli, oxir-oqibat bu tomirlar bo'shab, sklerozga uchraydi.

Nefrin sintezi kamayadi, IV-tip kollagen sintezi esa kuchayadi. Kollagenning faol sintezi uning siydik bilan ajralib chiqishi bilan kechadi, mezangial hududning kengayishi kuzatiladi va bu glomeruloskleroz rivojlanishini tezlashtiradi. Siydikdagi IV-tip kollagenning chiqarilishi qanchalik yuqori bo'lsa, albuminuriya shunchalik yaqqol, koptokcha filtratsiya tezligi (KFT) esa shunchalik past bo'ladi. Shu sababli siydikda IV tip kollagen paydo bo'lishi buyrak zararlanishining erta diagnostik mezoni sifatida qaralishi mumkin [10, 14, 26, 27].

Gemodinamik buzilishlar

Yuqorida tasvirlangan glomerulosklerozning bosqichma-bosqich rivojlanishi va buyraklardagi yetarli darajadagi qon aylanishining buzilishi natijasida faoliyat yuritayotgan nefronlar soni kamayadi. Qolgan nefronlarga tushayotgan yuk ortadi va bu renin–angiotenzin–aldosteron tizimi (RAAS)ning faollashuviga olib keladi. Podotsitlar zararlovchi omil, ya'ni giperglikemiyaning ta'siri ostida ATI-retseptorlar, prorenin retseptorlari hamda mineralokortikoid retseptorlarni aktivlashtiradi [28]. ATII ATI-retseptorlarga birikib, arteriolalarning spazmini, aldosteron ishlab chiqarilishini kuchaytiradi va natijada natriy va suvning qayta so'rilishini oshiradi. Bu asosan ko'tokchanning chiquvchi arteriolasida spazmga olib keladi. Kiruvchi arteriolaning tonusini avtoregulyatsiyalovchi mexanizmlar buzilgan sharoitda ko'tokchalar ichida gipertenziya rivojlanadi, bazal membrananing o'tkazuvchanligi oshadi va bu esa skleroz jarayonining yanada kuchayishiga olib keladi. Bu RAAS faoliyatining qadimdan ma'lum bo'lgan mexanizmidir. XX asr oxirida to'g'ridan-to'g'ri to'qimalar va nishon a'zolarida renindan tortib aldosterongacha bo'lgan mahalliy (to'qima) RAAS komponentlari aniqlangan. Bu holat RAAS tizimining nishon a'zolariga zarar yetkazishdagi patogenetik ro'lini tushuntirishga yordam beradi, hattoki plazmadagi renin faolligi normal yoki past bo'lsa ham [11, 14, 29]. ATII mezangial hujayralarning proliferatsiyasini va ular tomonidan kollagen ishlab chiqarilishini rag'batlantiradi, TGF- β 1, VEGFni faollashtiradi, podotsitlarda depolyarizatsiyani chaqiradi va bu orqali buyrakning to'siq funksiyasini buzadi. U apoptoz jarayonlarini faollashtiradi, nefrin ekspressiyasini va proteoglikanlar ishlab chiqarilishini pasaytiradi, natijada buyrak to'siq tizimining zaryadga sezuvchanligini yo'qolishiga, podotsitopeniyaga va proteinuriyaga olib keladi. Buyrak kanallari va interstitsial to'qimalaridagi ATI-retseptorlarning stimulyatsiyasi yallig'lanishga qarshi mediatorlar, matritsa oqsillari, sitokinlar, o'sish omillari, xemokinlar va boshqa ko'plab moddalar ishlab chiqarilishini kuchaytiradi. RAAS tizimining ortiqcha faolligi natijasida, tomirlarni kengaytiruvchi ta'sirga ega bo'lgan bradikinin sintezi kamayadi [30]. Aynan shu sababli, AAF ingibitorlari nefroprotektor sifatida qoraladi: ular AAF ni bloklab, RAAS faoliyatini kamaytiradi va buyrak hujayralari hamda to'qimalariga zararli ta'sirini cheklaydi [10, 31, 32]. Biroq so'nggi 20-30 yil ichida RAAS tizimining tuzilishi haqidagi tasavvurlar yanada murakkablashdi. AAF ishtirokisiz ATI dan

ATII hosil bo‘lish yo‘li aniqlandi — bu holatda angiotenzin aylantiruvchi ferment o‘rmini boshqa fermentlar, xususan ximaza, egallaydi. Aynan ximaza faolligi tufayli AAF ingibitorlarining samaradorligi pasayadi [31, 33].

Buyrak to‘qimasida yallig‘lanishning rivojlanishi

Surunkali giperglikemiya bazal membranani shikastlaydi va yallig‘lanish jarayonini faollashtiradi. SBY bo‘lgan bemorlarda antimikrob peptidlar va ba‘zi sitokinlar, xususan IL-6, IL-8, FNO- α darajalari yuqori aniqlanadi, bu ularning buyrak to‘qimasida yallig‘lanish rivojlanishiga aloqadorligini isbotlaydi. Qonda IL-6 miqdori KFT bilan bog‘liq: qonda IL-6 kontsentratsiyasi qanchalik yuqori bo‘lsa, KFT shunchalik past bo‘ladi [34]. Ushbu sitokin immun hujayralar, endoteliy hujayralari, adipotsitlar tomonidan ishlab chiqariladi va ko‘plab yallig‘lanishni rag‘batlantiruvchi ta‘sirlarga ega:

- limfotsitlar, monotsitlar, makrofaglarning buyrak to‘qimasidagi yallig‘langan sohalarga ko‘chishini kuchaytiradi;
- adipotsitlar tomonidan azot oksidi (NO) ishlab chiqarilishini susaytiradi;
- kortizol va glyukagon kabi kontrinsulin gormonlar ishlab chiqarilishini rag‘batlantiradi;
- gepatotsitlarning insulin sezuvchanligini kamaytiradi (bu orqali glikogen faoliyati pasayadi);
- koptokchalardagi mezangial hujayralarning ko‘payishini va ular tomonidan hujayralararo adgeziya molekulalari hamda ekstratsellyulyar matritsa ishlab chiqarilishini kuchaytiradi;
- fibroblastlar proliferatsiyasini faollashtiradi [35].

IL-6 bilan bir qatorda, diabetik nefropatiya shakllanishida TNF- α (o‘sma nekroz faktori-alfa) ham ishtirok etadi, u buyrakdagi mezangial hujayralarda endotelin-1 sintezini rag‘batlantiradi va bu orqali skleroz jarayonini faollashtiradi. Shuningdek, ba‘zi tadqiqotlar antimikrob peptidlar, xususan kalprotektin va katelitsidinining diabetik nefropatiya rivojlanishi va kechishiga ta‘sirini ko‘rsatgan. Kalprotektin monotsitlar, makrofaglarning TLR-retseptorlari bilan bog‘lanadi va yallig‘lanish sitokinlari sekretsiyasini kuchaytiradi, shuningdek endoteliy hujayralari bilan o‘zaro ta‘sirlashib, xemoattraktantlar ajralishini kuchaytiradi, bu esa qon tomirlarining zararlanishiga olib keladi [36].

Oksidativ stress

Glyukoza miqdori oshganida uning avtooksidlanishi yuz beradi, mitoxondriyalar disfunktsiyasi rivojlanadi va bu erkin radikallar hosil bo'lishiga olib keladi. Erkin radikallar fiziologik jarayonlar metabolizmida ishtirok etuvchi faol oksidlovchilardir, biroq ularning ortiqcha miqdorda hosil bo'lishi hujayra tuzilmalarining buzilishiga, natijada esa ularning nobud bo'lishiga olib keladi [37]. Faol kislorod shakllari (FKS) mitoxondriyalarda hosil bo'ladi. Ushbu organoidlar o'z DNK-siga ega bo'lib, u ochiq xromatin shaklida joylashgan, shu sababli mitoxondriyalar shikastlovchi omillarga juda sezuvchandir. FKS ortiqcha miqdorda mitoxondrial DNKni asta-sekin parchalaydi, bu esa o'z navbatida FKS ortiqcha ishlab chiqarilishini rag'batlantirib, «patologik zanjir»ni shakllantiradi [11]. FKS to'planishi natijasida qon tomirlarda, me'da osti bezi hujayralarida oksidativ stress rivojlanadi. Erkin radikallar organizm faoliyatida ko'plab buzilishlarga olib keladi va diabetik buyrak shikastlanishi shakllanishini tezlashtiradi. Bu quyidagi mexanizmlar orqali yuz beradi:

- FKS proinsulin vezikulalarining plazmatik membranaga qo'shilishini buzadi, ularning glyukozaga javoban qonga chiqarilishini kamaytiradi va natijada qondagi glyukoza kontsentratsiyasini oshiradi [38].
- Erkin oksidlangan radikallar podotsitlarning oyoqsimon o'simtalarini birlashtirib yuboradi, ularning sitoskeletonini shikastlaydi, podotsitlarning bazal membrana bilan bog'lanishini yo'qotadi va ularning apoptozini faollashtiradi, bu esa podotsitopeniyaga olib keladi [14, 39].
- FKS me'da osti bezi hujayralarining apoptozini chaqiradi, bu insulinning ishlab chiqarilishini kamaytiradi va giperglikemiyaning kuchayishiga olib keladi [40, 41].

Oksidativ stressning o'ziga xos jihati uning «metabolik xotira»da ishtirok etishidir: kislorodning erkin radikallaridan biri - superoksid qisqa umr ko'ruvchi molekula bo'lishiga qaramasdan, u uzoq yashovchi molekulalarning shakllanishida ishtirok etadi [42, 43]. Ya'ni, glyukoza darajasi maqsadli qiymatlarga yetkazilganda ham, ilgari hosil bo'lgan FKS va ularning hosilalari yuqori kontsentratsiyada bo'lsa, yuqorida ta'riflangan shikastlanishlarga sabab bo'lishda davom etadi [20, 44, 45].

Endoteliy disfunktsiyasining YuLK rivojlanishidagi ro‘li

Yuqorida keltirilgan mexanizmlar endoteliy disfunktsiyasining rivojlanishiga olib keladi, u esa klinik belgilarsiz bosqichda, mikroalbuminuriya paydo bo‘lishidan avvalroq yuzaga keladi [32, 44, 46–48]. Qon tomirlar endoteliasini - qandli diabetda zararlanishga eng ko‘p uchraydigan asosiy nishon a‘zodir. Endoteliotsitlar insulin ta‘siriga bog‘liq bo‘lmagan hujayralar bo‘lib, glyukoza ularga to‘sqinliksiz kiradi va giperglikemiya sharoitida ularning funksiyasi buziladi [49]. Endotelial NO-sintaza ifodalanishi yoki transkripsiyasining, shu jumladan metabolik omillar ta‘sirida buzilishi, shuningdek, erkin radikallar miqdorining ortishi fonida NO inaktivatsiyasi endoteliyaga bog‘liq vazodilatatsiya pasayishiga olib keladi. Bu holat fiziologik ta‘sirga javoban yurak usti sohasidagi (epikarddagi) qon tomirlarning paradoks torayishi (vazokonstriksiya) va koronar rezistent tomirlarning vazodilatatsion funksiyasining pasayishi bilan namoyon bo‘ladi [50, 51]. Endoteliy zararlanishi va aterosklerozning rivojlanishida oksidlangan past zichlikdagi lipoproteidlar muhim rol o‘ynaydi; ular ko‘pikli (penistiy) hujayralar hosil bo‘lishini va silliq mushak hujayralari proliferatsiyasini qo‘zg‘atadi. Shunday qilib, endoteliy disfunktsiyasi koronar arteriyalardagi aterosklerozning ishemik namoyon bo‘lishiga hissa qo‘shadi. Kuchaygan vazokonstriksiya va endotelial antitrombotik faollikning pasayishi o‘tkir koronar sindrom rivojlanishini keltirib chiqarishi mumkin [52].

Xulosa

Giperglikemiya, arterial gipertenziya va dislipidemiya - bu DN rivojlanishining modifikatsiya qilinadigan xavf omillaridir. QD bilan kasallangan bemorlarni glikemiya va arterial bosimni o‘z-o‘zini nazorat qilish usullariga o‘rgatish DN asoratlarini oldini olish va samarali davolashning muhim sharti hisoblanadi. QD bilan kasallangan bemorlar uchun har yili skrining sifatida albuminuriya, kreatinin miqdori va KFT darajasini baholash zarur. Bu SBY rivojlanishining oldini olishga hamda yurak-qon tomir asoratlari xavfini kamaytirishga yordam beradi, chunki nefropatiya belgilari bir vaqtning o‘zida yurak-qon tomir tizimi bilan bog‘liq yuqori o‘lim xavfining omillari hisoblanadi.

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Автоколебания линейного консольного стержня

Мансуров Мухсин Маннонович

Кокандский государственный университет, mansurov00707@mail.ru

Annotation. This article discusses the flutter problem of a physically nonlinear viscoelastic rod in a gas stream, taking into account nonlinear dependencies. A statement and a method for solving the flutter problem of a viscoelastic rod are given taking into account the physical and aerodynamic nonlinearities.

Keywords: viscoelasticity, rod, self-oscillations, flutter, physical nonlinearity, aerodynamic nonlinearity, Bubnov-Galerkin method, relaxation core, numerical method, nonlinear integro-differential equation.

Аннотация. В данной статье рассматривается задача о флаттере физически нелинейного вязкоупругого стержня в потоке газа с учетом нелинейных зависимостей. Приведена постановка и метод решения задачи флаттера вязкоупругого стержня с учетом физической и аэродинамической нелинейностей.

Ключевые слова: вязкоупругость, стержень, автоколебания, флаттер, физическая нелинейность, аэродинамическая нелинейность, метод Бубнова-Галёркина, ядро релаксации, численный метод, нелинейное интегро-дифференциальное уравнение.

Аннотация. Ушбу мақолада чизиксиз боғлиқларни ҳисобга олган ҳолда газ оқимидаги физик чизиксиз қовушқоқ эластик стерженнинг автотебраниш ҳолати ҳақидаги масала кўрилмоқда. Масаланинг кўйилиши, физик ва аэродинамик чизиксиз қовушқоқ эластик стерженнинг флаттер ҳолати учун масалани ечиш усули асосида математик модели келтириб чиқарилган.

Калит сўзлар: қовушқоқ-эластик, автотебраниш, флаттер, физик чизиксизлик, аэродинамик чизиксизлик, Бубнов-Галёркин усули, релаксация ядроси, сонли усул, чизиксиз интеграл-дифференциал тенглама.

Введение. Наследственная теория вязкоупругости предоставила широкую возможность для описания динамических процессов деформирования разнообразных материалов. Поскольку стержни используются в качестве конструктивных элементов во многих отраслях промышленности и техники, то изучение их динамического поведения при

различных формах и исследования конструкций на колебания и динамическую устойчивость с учетом физической линейности материала являются актуальными.

Постановка задачи. Рассмотрим задачу флаттера вязкоупругого стержня с учетом физической линейности [4, 7, 8]

$$\sigma = E(1 - R^*)\varepsilon, \quad \varepsilon = u_x, \quad u = -zw_x \quad (1)$$

или

$$\sigma = -E(1 - R^*)zw_{xx} \quad (2)$$

где E – модуль упругости.

Учитываем также влияние аэродинамической линейности, по одномерной теории газа давление газа на поршень который имеет вид [1]:

$$q = \frac{\chi p_\infty}{c_\infty} \left[V \frac{\partial w}{\partial x} + \frac{\partial w}{\partial t} \right]$$

где обозначен $q = p - p_\infty$, $k = \frac{\chi p_\infty}{c_\infty}$

$$q = k \left[V \frac{\partial w}{\partial x} + \frac{\partial w}{\partial t} \right] \quad (3)$$

Решим задачу о флаттере в линейной вязкоупругой постановке учитывая физические и аэродинамические линейности. С этой целью построим математическую модель для исследования вязкоупругого стержня в потоке газа с учетом этих линейностей.

В данном случае, принимая гипотезу плоских сечений для изгибающего момента используем следующую формулу [2]:

$$M_x = \int_{-h/2}^{h/2} b(x) \sigma_x z dz \quad (4)$$

(2) поставим в (4) и получаем

$$\begin{aligned}
 M_x &= -Eb(x)(1-R^*) \int_{-h/2}^{h/2} zw_{xx} dz = -Eb(x)(1-R^*) w_{xx} \int_{-h/2}^{h/2} z^2 dz = \\
 &= -Eb(x)(1-R^*) w_{xx} \frac{z^3}{3} \Big|_{-h/2}^{h/2} = -Eb(x)(1-R^*) w_{xx} \frac{h^3}{12} = \\
 &= -E(1-R^*) \frac{b(x)h^3(x)}{12} w_{xx}
 \end{aligned}$$

или

$$M_x = -E(1-R^*) J_2 w_{xx} \quad (5)$$

и равные для стержней шириной $b(x)$ и высотой $h(x)$

$$J_2 = \frac{b(x)h^3(x)}{12}.$$

Подставляя (3) и (5) в уравнение равновесия [2] и перейдя к безразмерным координатам и опуская штрихи имеем

$$(1-R^*) \frac{\partial}{\partial x^2} [g(x)w_{xx}] + F(x)w_{tt} + Pw_x + \gamma w_t = 0 \quad (6)$$

где

$$w = h_0 \bar{w}, \quad x = a\bar{x}, \quad t = t_1 \bar{t}, \quad m(x) = m_0 \bar{F}(x), \quad h(x) = h_0 \bar{h}(x), \quad b(x) = b_0 \bar{b}(x),$$

$$J_2 = J_2^0 g(x), \quad g(x) = b(x)h^3(x), \quad J_2^0 = \frac{b_0 h_0^3}{12},$$

$$P = \frac{kVa^3}{EJ_2^{(0)}}, \quad t_1 = \sqrt{\frac{m_0 a^4}{EJ_2^{(0)}}}, \quad \gamma = \frac{kza^4}{EJ_2^{(0)}t_1}, \quad F(x) = b(x)h(x)$$

$$b(x) = c - a_1 x; \quad h(x) = 1 - a_2 x; \quad c = 5$$

h_0 – величина высоты стержня в концах, b_0 – величина ширины стержня в концах, m_0 – величина массы соответствующий единичному переменного сечения стержня.

Линейные интегро-дифференциальное уравнение в частных производных (6), вместе с граничными [5] и начальными условиями представляют математическую модель задачи о флаттере линейного вязкоупругого стержня. Требуется найти критические скорости $P_{кр}$ приводящий к нарастающему амплитуде колебаний.

Приближенное решение построим методом Бубнова-Галеркина. Представим решение уравнения (6) в виде

$$w = \sum_{k=1}^N u_k(t) \varphi_k(x) \quad (7)$$

где $\varphi_k(x)$ - известные, базисные функции удовлетворяющие заданным граничным условиям, $u_k(t)$ - неизвестные функции от времени, подлежащие определению.

Для нахождения неизвестных функций $u_k(t)$ подставляем (7) и следующие частные производные в (6)

$$\begin{aligned} w_x &= \sum_{k=1}^N u_k(t) \varphi'_k(x); & w_{xx} &= \sum_{k=1}^N u_k(t) \varphi''_k(x); \\ w_t &= \sum_{k=1}^N \dot{u}_k(t) \varphi_k(x); & w_{tt} &= \sum_{k=1}^N \ddot{u}_k(t) \varphi_k(x). \end{aligned}$$

получим

$$(1-R^*) \sum_{k=1}^N u_k(t) [g(x) \varphi''_k(x)]'' + F(x) \sum_{k=1}^N \ddot{u}_k(t) \varphi_k(x) + P \sum_{k=1}^N u_k(t) \varphi'_k(x) + \gamma \sum_{k=1}^N \dot{u}_k(t) \varphi_k(x) = 0$$

полученную умножая на $\varphi_i(x)$ и проинтегрируем по x , получаем следующие линейные системы обыкновенных интегро-дифференциальных уравнений

$$\sum_{k=1}^N [a_{ki} \ddot{u}_k(t) + b_{ki} \dot{u}_k(t) + \omega_{ki} (1-R^*) u_k(t) + P d_{ki} u_k(t)] = 0, \quad i = \overline{1, N} \quad (8)$$

где

$$\begin{aligned} a_{ki} &= \int_0^1 F(x) \varphi_k(x) \varphi_i(x) dx, & b_{ki} &= \int_0^1 \varphi_k(x) \varphi_i(x) dx, \\ \omega_{ki} &= \int_0^1 [d(x) \varphi''_k(x)] \varphi_i(x) dx, & d_{ki} &= \int_0^1 \varphi'_k(x) \varphi_i(x) dx, \end{aligned}$$

Интегрирование линейной системы (8) выполнялось численным методом основанном аналитических преобразований [3], используя ядро Ржаницына-Колтунова $R(t) = A \cdot e^{-\beta t} t^{\alpha-1}$, $A > 0$, $\beta > 0$, $0 < \alpha < 1$. Согласно этого

метода, численные значения искомых функций $u_k(t_l) = u_{k,l}$ находятся из решения следующей рекуррентной системы линейных алгебраических уравнений

$$\sum_{k=1}^N \left[a_{ki} + \gamma \frac{\Delta t}{2} b_{ki} \right] u_{k,l} = \sum_{k=1}^N \left[(a_{ki} + \gamma b_{ki}) u_{k,0} + t_l a_{ki} u_{k,0} \right] - \sum_{k=1}^N \sum_{i_1=1}^{l-1} \left[\gamma A_{i_1} b_{ki} u_{k,i_1} + A_{i_1} (t_l - t_{i_1}) \cdot \left(\omega_{ki} \left(u_{k,i_1} - \frac{A}{2} \sum_{i_2=1}^{i_1} B_{i_2} e^{-\beta t_{i_2}} u_{k,i_1-i_2+1} \right) + P d_{ki} u_{k,i_1} \right) \right], i = \overline{1, N} \quad (9)$$

где

$$t_i = i \Delta t, B_i = \frac{\Delta t^\alpha}{2}, B_{i_2} = \frac{\Delta t^\alpha \left[(i_2 + 1)^\alpha - (i_2 - 1)^\alpha \right]}{2}, i_2 = \overline{2, i_1 - 1}$$

$$B_{i_1} = \frac{\Delta t^\alpha \left[i_1^\alpha - (i_1 - 1)^\alpha \right]}{2}, A_i = \frac{\Delta t}{2}, A_i = \Delta t, i_1 = \overline{2, i - 1}, i = 1, 2, \dots$$

Вычисление проводилось при различных реологических параметров и форм стержня в плане. Расчет произведен как в идеально упругой так и для вязкоупругой стержня.

Анализ и заключение. Анализ результатов физически нелинейных задач показывает, что при изучении влияния параметров наблюдается снижение значения критической скорости упругого состояния ($P_{кр}=27.61$) относительно вязкого состояния ($A=0.05$, $P_{кр}=22.63$), которая показывает 18,0%. Изучены влияния параметров α и γ . Эффекты, вызванные учетом наследственных свойств материала стержня на критическую скорость, в линейной постановке оказались существенными, например, незначительное уменьшение или увеличение параметра сингулярности α приводит к существенному повышению: при $\alpha=0.15$ ($P_{кр}=20.57$), при $\alpha=0.5$ ($P_{кр}=23.31$) на 11.8% выше. При $\gamma=0.5$ значение критической скорости равна $P_{кр}=27.55$. Ниже чем при $\gamma=0.0$. Влияние параметра β незначительно.

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O‘ZBEKISTONDA VIRUSLI GEPATIT A: EPIDEMIOLOGIK DINAMIKA VA PROFILAKTIK STRATEGIYALAR

Matnazarova G.S., Saidkasimova N.S., Ismoilov O.D.,
Toshkent Davlat Tibbiyot Universiteti, Epidemiologiya kafedrası

Dolzarbligi

Virusli gepatit A (VGA) global sog‘liqni saqlash sohasida muhim ijtimoiy-iqtisodiy va epidemiologik ahamiyatga ega bo‘lgan yuqumli kasallik sifatida dolzarb muammo bo‘lib qolmoqda. Ushbu kasallikning keng tarqalishi, ayniqsa, o‘rtacha va yuqori endemik mintaqalarda, shu jumladan O‘zbekiston va Rossiya Federatsiyasi kabi davlatlarda, uning global iqtisodiyot va aholining salomatligiga ta‘sirini ta‘kidlaydi. VGA nafaqat bolalar, balki katta yoshdagi shaxslar orasida ham tarqalishi, kasallikning uzoq muddatli va og‘ir kechishi, turli klinik shakllarning mavjudligi va boshqa etiologiyadagi jigar kasalliklari bilan kombinatsiyalanishi uning murakkab tabiatini yanada kuchaytiradi [11,12]. Shu bilan birga, yuqori immunogen vaksinalarning mavjudligiga qaramay, ko‘plab mamlakatlarda, xususan, Rossiya Federatsiyasida rejalashtirilgan emlash dasturlarining yetarli darajada qamrovga ega emasligi VGA tarqalishini nazorat qilishda jiddiy to‘siqlarni keltirib chiqarmoqda. O‘zbekiston o‘rtacha endemiklik darajasiga ega bo‘lsa-da, ayrim hududlarda kasallanishning yuqori ko‘rsatkichlari qayd etilmoqda, bu esa mahalliy sog‘liqni saqlash tizimi uchun qo‘shimcha muammolar yaratmoqda.

VGA tarixiy jihatdan qadimiy davrlardan boshlab jiddiy epidemiologik muammo sifatida hujjatlashtirilgan bo‘lib, Xitoyda 5000 yil avvalgi yozma manbalarda va Gippokrat tomonidan eramizdan avvalgi V asrda Tasos orolida tasvirlangan sariqlik holatlari ushbu kasallikning uzoq tarixga ega ekanligini ko‘rsatadi [11,12]. Zamonaviy biotexnologik yutuqlar viruslarni aniqlash va tahlil qilish imkoniyatlarini kengaytirgan bo‘lsa-da, VGA hali ham global sog‘liqni saqlash tizimlari uchun muhim xavf-xatar bo‘lib qolmoqda. Jahon sog‘liqni saqlash tashkilotining (JSST) 2016 yilgi hisob-kitoblariga ko‘ra, VGA tufayli dunyo bo‘yicha 7134 kishi vafot etgan, bu virusli gepatitdan umumiy o‘limning 0,5% ni tashkil qiladi [13]. Ushbu kasallikning fekal-og‘iz yo‘li orqali, asosan ifloslangan suv va oziq-ovqat orqali yuqishi uning yuqumlilik darajasini yanada oshiradi. Globallashuv sharoitida VGA tarqalishi transmilliy xarakterga ega bo‘lib, har bir

mintaqa uchun virusning epidemiologik xususiyatlarini chuqur tushunishni talab qiladi.

2022 yilda AQShning Florida shtatida VGA, invaziv meningokokk kasalligi (IMD) va mpoxning bir vaqtda tarqalishi qayd etildi, bu esa ushbu kasalliklarning sinergetik xususiyatlarini va ularning tarqalishiga ta'sir qiluvchi ijtimoiy-demografik omillarni tahlil qilish zaruriyatini ko'rsatdi [14]. Florida shtatida VGA tarqalishi (153 holat) asosan genotip IA bilan bog'liq bo'lib, Markaziy Floridada mart-iyun oylarida eng yuqori darajaga chiqdi. IMD (44 holat) Neisseria meningitidis serogrup C bilan, mpox esa (2845 holat) global epidemiyaning bir qismi sifatida Janubiy Floridada avgust oyida cho'qqisiga yetdi [14]. Ushbu epidemiyalarda, ayniqsa, erkaklar o'rtasida jinsiy aloqa qiluvchi shaxslar (MSM) orasida yuqori tarqalish ko'rsatdi, bunda OIV infeksiyasi mpox holatlarida (52%) VGA (21%) va IMD (34%) ga nisbatan yuqori foizni tashkil etdi [14]. Ushbu guruhlarda VGA va IMDning tarqalishi 1997–2005 va 2016–2017 yillarda Yevropada, shuningdek, 2017–2018 yillarda AQShda qayd etilgan epidemiyalarda bilan o'xshashliklarni ko'rsatadi [15–20]. Bu holatlar yuqori xavfli guruhlar uchun maqsadli emlash dasturlari va profilaktik choralar zarurligini ta'kidlaydi [21–24].

Tadqiqot maqsadi

O'zbekistonda virusli hepatit A kasalligining epidemiologik dinamikasini tahlil qilish va uning tarqalishiga ta'sir qiluvchi asosiy omillarni aniqlash.

Tekshiruv usullari va materiallari

Tadqiqot 2008–2023 yillardagi O'zbekiston Respublikasi bo'yicha rasmiy statistik ma'lumotlar, 300 ta VGA bilan kasallangan bemorlarning kasallik tarixlari va 300 ta epidemik o'choqlarda o'tkazilgan epidemiologik tekshiruv xaritalariga asoslanadi. Tahlil jarayonida kasallanishning ko'p yillik dinamikasi, mintaqaviy tarqalishi va ijtimoiy-epidemiologik omillar tizimli ravishda o'rganildi.

Olingan natijalar

O'zbekistonda 2008–2023 yillar davomida virusli hepatitlar orasida VGA yetakchi o'rinni egallab, umumiy kasallanishning 97,9% ni tashkil etdi, keyingi o'rinda VGB (1,4%), VGC (0,4%), VGD (0,1%) va VGE (0,2%) turadi [22]. VGA kasalligining o'rtacha ko'p yillik intensiv ko'rsatkichi 100 ming aholiga nisbatan 100,1 ni tashkil etdi. Kasallanish dinamikasi nomutanosib bo'lib, 2009 yilda 136,7, 2010 yilda 107,7, 2011 yilda 114,5, 2012 yilda 100,6, 2013 yilda 112,3, 2014 yilda 119,9, 2016 yilda 81, 2017 yilda 119,7, 2018 yilda 99,8, 2019 yilda 79,9, 2020 yilda

33,2, 2021 yilda 21,8, 2022 yilda 82,8 va 2023 yilda 162 ni tashkil etdi [22]. 2020 yildagi keskin pasayish COVID-19 pandemiyasi davrida qo‘llanilgan qat’iy karantin choralariga bog‘liq bo‘lib, aholining sanitariya-gigiena qoidalariga rioya qilishi va ijtimoiy izolyatsiya kasallanishni sezilarli darajada kamaytirdi.

VGA kasalligi mintaqaviy jihatdan nomutanosib taqsimlangan bo‘lib, Namangan, Sirdaryo va Navoiy viloyatlarida eng yuqori ko‘rsatkichlar, Toshkent, Farg‘ona va Andijon viloyatlarida respublika o‘rtacha ko‘rsatkichidan bir oz yuqori, Xorazm, Buxoro, Qashqadaryo viloyatlari va Qoraqalpog‘iston Respublikasida esa nisbatan past ko‘rsatkichlar qayd etildi [22]. Ushbu farqlar quyidagi omillarga bog‘liq:

1. **Vaktsinatsiya qamrovi:** 1 yoshdan 14 yoshgacha bo‘lgan bolalar orasida, ayniqsa, uyushgan jamoalarda (maktablar, bog‘chalar), VGA ga qarshi vaktsinatsiya darajasi yetarli emas.
2. **Ichimlik suvi sifati:** Aholining toza va sifatli ichimlik suvi bilan ta’minlanish darajasi hududlar bo‘yicha turlicha.
3. **Sanitariya-gigiena sharoitlari:** Maktab va bog‘chalarda shaxsiy gigiena qoidalariga rioya qilish uchun zarur infratuzilmaning yetishmasligi.
4. **Aholining bilim saviyasi:** Kasallikning yuqish yo‘llari va profilaktik choralari to‘g‘risida aholining ma’lumot darajasi, sanitariya madaniyati va sog‘lom turmush tarziga rioya qilish darajasi.
5. **Ijtimoiy omillar:** Bolalar muassasalari xodimlari va o‘qituvchilarning profilaktik tadbirlarni amalga oshirishdagi faoliyati.

Virusli gepatit B (VGB) kasalligi esa 2000-yillardan boshlab yangi tug‘ilgan chaqaloqlarga qarshi rejalashtirilgan emlash dasturlari tufayli uzluksiz pasayish tendensiyasini ko‘rsatmoqda. Ushbu dasturlar bolalar orasida kasallanishni 4 baravar, 1991–2001 va 2002–2023 yillar o‘rtacha ko‘rsatkichlarini solishtirganda esa 23 baravar kamaytirdi [22].

Xulosa

O‘zbekistonda VGA kasalligi yuqori epidemiologik ahamiyatga ega bo‘lib, uning tarqalishini nazorat qilish uchun kompleks yondashuv talab qilinadi. Rejalashtirilgan vaktsinatsiya dasturlarini kengaytirish, toza ichimlik suvi bilan ta’minlash, sanitariya-gigiena sharoitlarini yaxshilash va aholining sog‘liq haqidagi bilimlarini oshirish orqali kasallikning tarqalishini sezilarli darajada kamaytirish

mumkin. Ushbu chora-tadbirlar nafaqat iqtisodiy samaradorlikni oshiradi, balki aholining umumiy salomatligini mustahkamlashga xizmat qiladi.

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TUPROQLARNING SHO'RLANISHI BARTARAF ETISH CHORA- TADBIRLARI

O.M.Yusupova-Buxoro davlat texnika universiteti talabasi

Annotatsiya. Ushbu maqolada tuproqlarning sho'rlanish darajalari, sabablari va tuproqlar sho'rlanishining ortishiga ta'sir ko'rsatuvchi omillar hamda tuproqlarning sho'rlanishini oldini olishga qaratilgan chora-tadbirlar keltirilgan.

Kalit so'zlar: sho'rlanish, sho'rlanish darajalari, ona jins, sho'r yuvish, sho'r yuvish, fiziologik quruqlik.

Abstract. This article presents the levels of soil salinity, causes and factors affecting the increase in soil salinity, as well as measures aimed at preventing soil salinity.

Key words: salinity, levels of salinity, parent rock, saline leaching, saline leaching, physiological dryness.

Kirish: Tuproq tugaydigan va tiklanadigan resurslarga kiradi. Tuzilishiga ko'ra tuproqda 3 asosiy qatlam ajratiladi: A-eng ustki gumus (chirindi)li qatlam; B-yuqori qatlamdan mineral va organik birikmalar to'planadigan qatlam. C-tuproq vujudga keladigan ona jins qatlami. Tuproqning har bir gorizonti organik va mineral birikmalar aralashmasidan iborat. Tuproq tarixiy tarkib topgan murakkab, mustaqil tabiiy jism bo'lib, o'zgaruvchan dinamik hosiladir. Yer yuzi turli qobiqlari o'rtasidagi aloqadorlik tuproq orqali amalga oshadi. Tuproq tabiiy landshaftlarning asosi hisoblanadi. Inson tuproqlarga ijobiy va salbiy ta'sir ko'rsatadi. Inson tuproqlarning hosildorligini oshirishi, yerlarning holatini yaxshilashi mumkin. Shuning bilan birga shahar qurilishi, atrof muhitning ifloslanishi, agrotexnik tadbirlarning talabga javob bermasligi natijasida tuproqlar bevosita yo'q qilinishi, yaroqsiz holga kelishi, yemirilishi mumkin. Hozirgi kunda tuproqlar maydonining kamayishi uning tiklanishidan minglab marta tezroq, amalga oshmoqda.

Sho'rlangan tuproq hosil bo'lishi er osti suvlari va jinslarda tuzlarning to'planishi va ularning tuproqlarda to'planishi uchun qulay shart-sharoitlar bilan bog'liq.

Tog' jinslarining parchalanishi paytida sezilarli miqdorda tuzlar hosil bo'ladi. Quruqlikdan okeanga tez eriydigan tuzlarning yillik oqimi 2735 million tonnani

tashkil etadi, har yili 1 milliard tonnaga yaqin tuzlar qit'alarining yopiq hududlariga kiradi.

Tuproqlarning sho'rlanish darajalari 2 xil bo'ladi:

- 1) birlamchi sho'rlanish;
- 2) ikkilamchi sho'rlanish.

Birlamchi sho'rlanish bu tuproqlarning ona jinsi tarkibida mavjud bo'lgan tuz miqdori.

Ikkilamchi sho'rlanish – atrof-muhitda yuz beradigan turli antropogen omillar ta'sirida tuproq tarkibidagi tuz miqdorining ortishi.

Sug'oriladigan dehqonchilik rayonlarida tuproqlarning sho'rlanishi asosiy ekologik muammolardan hisoblanadi. Tuproqlarning sho'rlanishisug'orishni noto'g'ri olib borganda yer osti suvlari sathining ko'tarilishi natijasida ro'y beradi. Birlamchi va ikkilamchi sho'rlanish kuzatiladi. Ikkilamchi sho'rlanishda suv kappilyarlar orqali ko'tarilib tuzi tuproqda qoladi yoki ortiqcha sug'orish natijasida yer osti suvlari erigan tuzlar bilan sho'rlanadi. Ikkilamchi sho'rlanish tuproqlarga ko'proq zarar yetkazadi.

Tuproqning sho'rlanishi ta'siri ostida o'simliklarda fotosintez va nafas olish intensivligi sezilarli darajada kamayadi, modda almashinuvi susayadi. Tuproqning sho'rlanish darajasi ortishi bilan quruq modda kamroq to'plana boshlaydi. Tuproqning sho'rlanish darajasi ortishi bilan o'simliklar o'sish davridagi umumiy suv sarfi kamaya boradi. Shu bilan birga maydon birligiga to'g'ri keladigan o'simlik soni ham kamayadi. Tuzlarning o'simlik suv rejimiga zararli ta'siri urug' unib chiqqan paytdan boshlanadi. Tuproq sho'rlangan bo'lsa. Urug'larning nam tortishi juda sekinlashadi. Urug' namligi yaxshi unib chiqish uchun zarur bo'lgan darajasiga ko'tarila olmavdi. Shu sababli urug'ning unib chiqishi ancha sekinlashadi yoki butunlay unib chiqmaydi.

Tuproqning sho'rlanish darajasi ortishi bilan tuproq eritmasining osmotik bosimi o'simlik ildizining so'rish kuchidan ortib ketadi. Shu sababli o'simliklarning suv ichishi qiyinlashadi, tuproqda fiziologik quruqlik deb ataladigan sharoit vujudga keladi. Bunda tuproq nam bo'lishiga qaramasdan o'simlik yetarlicha suv iste'mol qila olmaydi. Natijada uning o'sish darajasi yomonlashadi, rivojlanishi sekinlashadi.

Tuproqning sho'rlanishi qishloq xo'jaligi o'simliklarining ildiziga salbiy ta'sir ko'rsatadi. Tuproqning pastki qavatida tuz zonasi ko'p bo'lsa, ildizni chuqurlashishi

ancha qiyin kechadi. Tuzlar ayniqsa, normal soda (Na_2CO_3) ildizni o'yib yuboradi. Natijada ildiz shilimshiqqlanib qorayadi va nobud bo'ladi. Maydonlarning botqoqlanishi va sho'rlanishi ularni qishloq xo'jaligida foydalanish uchun yaroqsiz qilib qo'yadi. Bizga ma'lumki, sizot suvlarining to'planishi va chiqib keta olmasligi tuproqning sho'rlanishiga yoki botqoqlanishiga sabab bo'ladi. Sho'rlanib qolgan ba'zi yerlar esa qishloq xo'jaligida ishlatilishidan chiqib ketadi.

Tabiiyki, sho'rlangan yerlarda qishloq xo'jalik ekinlaridan mahsulot olish uchun. ularga me'yordan 2-3 hissa ortiq sug'orish suvi talab qilinadi. aks holda bu yerda mo'ljallangan hosilning 70- 80% i nobud bo'lishi mumkin.

Ma'umki tuproq sho'rini yuvish sho'rlanishning bartaraf etishning eng yaxshi - samarali usulidir. buning natijasida kafolatlangan yuqori hosildorlikka erishish mumkin. Sho'rlanishning oldini olish uchun sho'r yuvishning maqbul muddatlarini belgilashda faqat iqlim va tuproq-meliorativ sharoitlarni emas. balki sho'r yuvishda tuproqning g'o'za nihollarini sug'ormasdan undirib olish uchun yetarlicha nam zahirasini hosil bo'lishini nazarda tutishi kerak, chunki nihollarni sug'orib undirib olishning salbiy tomonlari ham mavjuddir. Shuning uchun sho'r bosgan yerlarni joriy yuvish muddatlari ekish davriga yaqin vaqtda o'tkazilishi kerak. Yengil mexanik tarkibli tuproqlarda bunday yuvish erta bahorda, og'ir tuproqlarda esa kuzgi - qichki sho'r yuvishlarni erta bahorda yuvish bilan qo'shib olib borish yaxshi samara beradi, bunda umumiy yuvish me'yoring 2/3 qismi kuzgi -qichki davrda. 1/3 qismi erta bahorda beriladi. Sho'r yuvish me'yori uzluksiz ravishda emas. balki bo'lib - bo'lib berilsa. tuzlarning yuvib ketkazish jadalligi ortadi.

Tuproqning sho'rini egatlar orqali yuvishda ham tuproqni 30- 35sm chuqurlikda ag'darib haydash va diskali molada molalash bilan boshlanadi. Tuproq zich joylashgan yerlarda zichlik. gipslanganlik va qatlamlarning joylanish chuqurligiga qarab namlatish ishlarini amalga oshirilishi kerak. Yumshatish ikki yo'nalishda-zovurning bo'yiga va eniga qarab zarur chuqurlikda o'tkaziladi. Tuproq chuqur yumshatilganidan keyin maydon yuzasi tekislanib, qator oralig'i 45-60 sm dan iborat kalta (50- 100m) egat olinadi va ularga suv beriladi.

Sho'rlangan yerlarni chuchuklashtirishni sug'orish maydonlarida sho'r yuvish ishlarisiz amalga oshirish mumkin emas. Ayni paytda sho'r yerlarning sho'rini yuvishdan hosil bo'lgan suvlarni zovurlar yordamida maydon tashqarisiga olib chiqib ketish ham kerak. buning uchun sun'iy zovurlar hosil qilinadi. Sho'r yuvish tuproqdagi ortiqcha tuzlarni ketkazishdagi yagona-almashtirib bo'lmaydigan

tadbiridir. Sho'r yuvish me'yor. miqdori va davomiyligi sho'r tuproqdagi tuzlar tarkibiga, ular sho'rlanganlik darajasiga. sho'r yuvish qatlamining chuqurligiga, tuproqlarning suv fizik xossalariga sizot suvlarining joylashgan chuqurligiga maydonning zovurlanganligiga qarab aniqlaniladi.

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Такрорий кунгабоқар экинини зовур сувлари билан суғоришнинг тупроқни ҳажм массасига таъсири

О.У.Муродов-Бухоро давлат техника университети катта ўқитувчиси
қ.х.ф.ф.д. (PhD)

У.А.Жураев- Бухоро давлат техника университети профессори, қ.х.ф.д.,
проф.

О.М.Юсупова- Бухоро давлат техника университети талабаси

Аннотация: Ушбу мақолада Бухоро воҳасининг ўтлоқи аллювиал, ўртача даражада шўрланган, механик таркибига кўра ўрта қумоқ, сизот сувлари сатҳи 2,0-2,5 метр, минерализацияси 2,5-3,0 г/л бўлган тупроқлар шароитида такрорий экин сифатида экилган кунгабоқарни экинларини кам минераллашган зовур сувлари билан суғорилган ҳамда Нанокремний ва AMINOSID Universal Si биопрепаратларини қўллашнинг тупроқнинг ҳажм массаси маълумот берилган.

Калит сўзлар: зовур сувлари, минерализация, биопрепарат, Нанокремний, AMINOSID Universal Si, тупроқнинг агрокимёвий тавсифи, тупроқнинг ҳажм массаси, сув ўтказувчанлик.

Такрорий кунгабоқар экинини 50-70-50 см қатламда кучсиз минераллашган зовур сувлари билан суғориб етиштирилган 1-вариантда тупроқнинг ҳажм массаси амал даври охирида тупроқнинг ҳайдов 0-30 см қатламда ҳажм массаси 1,28 г/см³ га ва 0-50 см қатламда 1,29 г/см³ га ҳамда 0-70 см қатламда эса 1,33 г/см³ ни ташкил қилди. Зовур сувлари билан суғорилган ва Нанокремний биопрепарати билан ишлов бериб етиштирилган 2-вариантда тупроқнинг ҳажм массалари 0-30 см қатламда 1,26 г/см³ ва 0-50 1,28 г/см³ тенг бўлиб, 0-70 см қатламда эса 1,30 г/см³ га назорат яъни 1-вариантга нисбатан 0-50 ва 0-70 см қатламларда 0,01-0,03 г/см³ га кам зичлашганлигини кўриш мумкин. такрорий кунгабоқарни кучсиз минераллашган зовур сувлари билан суғорилган ва AMINOSID Universal Si биопрепарати билан ишлов бериб етиштирилган 3-вариантда тупроқнинг ҳажм массаси ҳайдов 0-30 қатламда 1,27 г/см³, 0-50 см қатламда 1,29 г/см³ га тенг бўлгани кузалилган бўлса, 0-70 см қатламда эса 1,31 г/см³ га тенг бўлиб,

назорат яъни 1-вариантга нисбатан 0-50 см қатламда ўзгариш кузатилмаган бўлса, 0-70 см қатламда 0,02 г/см³ га кам зичлашганлигини кўриш мумкин.

Шунингдек, такрорий кунгабоқар экинини 40-50-40 см қатламини суғориш бўйича олиб борилган тажрибанинг назорат 4 вариантыда зовур сувлари билан суғориш натижасида тупроқнинг ҳажм массаси 0-30 қатламда 1,27 г/см³, 0-50 см қатламда 1,29 г/см³ га тенг бўлгани кузалилган бўлса, 0-70 см қатламда эса 1,32 г/см³ га тенг бўлди. Зовур сувлари билан суғорилган ва Нанокремний биопрепарати билан ишлов берилган 5-вариантда тупроқнинг ҳажм массалари 0-30 см қатламда 1,25 г/см³ тенг бўлган бўлса, 0-50 ва 0-70 см қатламларда 1,27; 1,30 г/см³ га назорат яъни 4-вариантга нисбатан 0-50 ва 0-70 см қатламларда бир хил 0,02 г/см³ га кам зичлашганлиги аниқланди. Зовур сувлари билан суғорилган ва AMINOSID Universal Si биопрепарати билан ишлов берилган 6-вариантда тупроқнинг ҳажм массаси 0-30 қатламда 1,26 г/см³, 0-50 см қатламда 1,28 г/см³ га тенг бўлгани кузалилган бўлса, 0-70 см қатламда эса 1,30 г/см³ га тенг бўлиб, назорат 4-вариантга нисбатан 0-50 см қатламда 0,02 г/см³ ҳамда 0-70 см қатламда 0,02 г/см³ га кам зичлашганлигини кўриш мумкин.

1-жадвал

Тупроқнинг ҳажмий массаси, г/см³

Тупроқ қатлами, см	Тупроқ ҳажм массаси, г/см ³						
	Амал даври боши да	Амал даври охирида					
		Кунгабоқар 50-70-50 см			Кунгабоқар 40-50-40 см		
		-4	-5	-6	-4	-5	-6
0-10	1,25	1,27	1,25	1,26	1,26	1,24	1,25
10-20	1,26	1,27	1,26	1,27	1,27	1,25	1,27
20-30	1,28	1,29	1,28	1,29	1,29	1,27	1,29
30-40	1,29	1,30	1,29	1,30	1,30	1,28	1,30

40-50	1,30	1,33	1,31	1,31	1,32	1,30	1,30
50-60	1,35	1,37	1,34	1,34	1,36	1,33	1,33
60-70	1,39	1,43	1,40	1,37	1,42	1,39	1,36
70-80	1,41	1,47	1,45	1,48	1,45	1,44	1,47
80-90	1,39	1,45	1,44	1,47	1,44	1,43	1,46
90-100	1,37	1,44	1,43	1,46	1,43	1,42	1,45
0-30	1,26	1,28	1,26	1,27	1,27	1,25	1,26
0-40	1,27	1,29	1,27	1,28	1,28	1,26	1,27
0-50	1,27	1,29	1,28	1,29	1,29	1,27	1,28
0-70	1,30	1,33	1,30	1,31	1,32	1,30	1,30
0-100	1,33	1,36	1,35	1,36	1,35	1,34	1,35

Тадқиқотлар даласида кузги буғдойдан сўнг такрорий етиштирилган кунгабоқар экинини зовур сувлари билан суғорилган ва Нанокремний ва AMINOSID Universal Si биопрепаратлари билан ишлов бериш натижасида ўсимликларнинг ўсиб-ривожланиши яхшиланиб, биомасса тўплаши шу билан бирга илдиз тизимининг яхши ривожланиши натижасида тупроққа назорат вариантыга нисбатан кўп миқдорда биомасса қолдириши натижасида тупроқнинг ҳажм массасининг камайиши кузатилиб, кейинчалик ушбу илдиз қолдиқларининг чириши натижасида тупроқда чиринди миқдорининг ошиши ҳам кузатилдади.

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BOSHLANG'ICH SINIF O'QUVCHILARINING TASAVVURI VA TAFAKKURINI KENGAYTIRISHDA BADIY ASARLARNING O'RNI

Otabayeva Xusniya Sharofiddin qizi

Urganch davlat pedagogika instituti

Boshlang'ich ta'lim yo'nalishi 3-bosqich talabasi

E-mail: xusniyaotaboyeva7@gmail.com

Annotatsiya. Ushbu maqolada boshlang'ich sinf o'quvchilari uchun badiiy asarlar o'qishning tasavvuri va tafakkuri rivojlanishidagi ahamiyati va o'rni haqida so'z yuritiladi. Badiiy asarlar o'qishning o'quvchilar fikrlash qobiliyatini o'stirishdagi o'rni ham beqiyosdir.

Kalit so'zlar. O'quvchilar, fikrlash, badiiy asar, tafakkur, tasavvur, qobiliyat, rivojlantirish, bilim.

РОЛЬ ХУДОЖЕСТВЕННЫХ ПРОИЗВЕДЕНИЙ В РАЗВИТИИ ВООБРАЖЕНИЯ И МЫШЛЕНИЯ УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ

Отабаева Хусния Шарафиддиновна

Студентка 3 курса направления

начального образования Ургенчского

государственного педагогического института

E-mail: xusniyaotaboyeva7@gmail.com

Аннотация. В данной статье рассматривается важность и роль чтения художественных произведений для учащихся начальных классов в развитии воображения и мышления. Роль чтения художественных произведений в развитии мыслительных способностей учащихся также неопределима.

Ключевые слова. Учащиеся, мышление, художественное произведение, воображение, способности, развитие, знания.

THE ROLE OF ARTISTIC WORKS IN EXPANDING THE IMAGINATION AND THINKING OF PRIMARY SCHOOL STUDENTS

Otabayeva Khusniya Sharofiddin kizi

3rd year student of primary education

Urgench State Pedagogical Institute

E-mail: xusniyaotaboyeva7@gmail.com

Abstract. This article discusses the importance and role of reading literary works for elementary school students in the development of imagination and thinking. The role of reading literary works in developing students' thinking abilities is also incomparable.

Keywords. Students, thinking, work of art, thinking, imagination, ability, development, knowledge.

Boshlang‘ich sinf o‘quvchilarida mustaqil fikrlash malakalarini, mustaqil ravishda muammolarni hal qila bilish ko‘nikmasini shakllantirish ta‘lim samaradorligini oshirishning muhim omilidir.

Boshlang‘ich sinflarning o‘qish darslarida garchi ilmiy jihatdan bo‘lmasa-da, amaliy jihatdan turli janrga mansub asarlar o‘qib o‘rganiladi. O‘qish darsliklariga, asosan, hikoya, she‘r, ertak, masal, maqol, doston, rivoyat va topishmoq kabi janrdagi asarlar kiritilgan. Bulardan tashqari, ilmiy-ommabop asarlar ham o‘qitiladi. [1] Bu janrdagi asarlarni o‘rganish mobaynida o‘quvchilarning tasavvuri va tafakkuri rivojlanishi bilan birga, o‘z fikrini erkin va ravon tarzda ham ifodalay oladilar.

O‘quvchilarni badiiy asar ustida ishlashga o‘rgatish ularda adabiy-estetik tahlil malakasini shakllantirish va o‘stirish orqali ta‘lim-tarbiya berishni nazarda tutadi. Asar matnini tahlil qilish muallif fikrini, hissiyoti va xulosalarini tushunishga yordam beradi, asarda ifoda etilgan voqealarga munosabat uyg‘otadi. Badiiy asarni yaxshi idrok etish uchun uni tushunishning o‘zigina yetarli emas. Asarni idrok etish murakkab jarayon bo‘lib, asarga unda tasvirlangan voqelikka qandaydir munosabatning yuzaga kelishini o‘z ichiga oladi. Badiiy asar tilini tahlil qilish orqali o‘quvchilarda o‘z ona tiliga muhabbat hissi, badiiy asarni ongli o‘qish ko‘nikmasi o‘stiriladi, asar g‘oyasini chuqur idrok etishga zamin hozirlanadi, o‘quvchilar nutqi rivojlantiriladi. [5] Ushbu ko‘nikmalarni o‘rganish mobaynida so‘z boyligi oshadi. Tasavvur qila olish, ulardagi sifatlarni ajrata olish kabi zaruriy sifatlarga ega bo‘lib boradilar.

Boshlang‘ich sinflarda adabiy tushunchalar va badiiy vositalar ustida ishlash o‘quvchilarning ijodiy tafakkurini o‘stirishga, ularda jonlantirish, o‘xshatish, mubolag‘a kabi adabiy tushunchalar yuzasidan dastlabki tasavvur hosil qilishga yordam beradi.

O‘qish metodikasi adabiyotshunoslik, psixologiya, pedagogika ishlab bergan nazariy qoidalarga asoslanadi. Sinfda o‘qishni to‘g‘ri uyushtirish uchun o‘qituvchi

badiiy asarning o‘ziga xos xususiyatlarini, ta’limning turli bosqichlarida o‘qish jarayonining psixologik asoslarini, kichik maktab yoshidagi o‘quvchilarning matnni idrok etish va o‘zlashtirish xususiyatlarini hisobga olishi zarur. Badiiy asarda borliqni, voqelikni obrazlar vositasida tasvirlash va bu orqali turli timsol va personajlar yaratish orqali o‘quvchilarga anglashi lozim bo‘lgan qahramonlar ko‘rinishi gavdalantiriladi.

O‘quvchilarni badiiy asar ustida ishlashga o‘rgatish ularda adabiy-estetik tahlil malakasini shakllantirish va o‘stirish orqali ta’lim-tarbiya berishni nazarda tutadi. Asar matnini tahlil qilish muallif fikrini, hissiyoti va xulosalarini tushunishga yordam beradi, asarda ifoda etilgan voqealarga munosabat uyg‘otadi. Asar tahlili o‘qituvchidan o‘quvchilar faoliyatini ma’lum maqsadga yo‘naltirishni taqozo qiladi. Kelajagimiz egalari bo‘lmish bugungi kun yoshlari qalbiga go‘zal fazilatlarni singdirishda adabiyot darslarida o‘rganiladigan badiiy asarlar, jumladan, inson tarbiyasi haqidagi axloqiy, ta’limiy-tarbiyaviy ahamiyatga ega adabiy ertaklar chinakam didaktika manbai hisoblanadi.

«Maktabda badiiy asarni tahlil qilishdan asosiy maqsad asarda ifodalangan hayotiy voqeani yoritish orqali o‘quvchilarni badiiy adabiyot olamiga olib kirish, tasvirlanayotgan voqealarga nisbatan muallifning munosabati va niyatlarini payqab olishga imkoniyat yaratishdan iboratdir. O‘quvchilarning yozuvchi oldinga surgan g‘oya, muammolarni to‘liq tushunishlariga erishmay turib, adabiyotning yoshlarni tarbiyalashdagi vazifasini amalga oshirib bo‘lmaydi» [6] Shunday ekan, ushbu vazifalar o‘quvchilarni yangi qahramonlarni, ularning xarakterlarini o‘rgatish, hayotni tasavvur qilishida, qiyin vaziyatlarda to‘g‘ri yo‘lni tanlay olishlariga chin ma’noda yordamchi bo‘la oladi. O‘quvchilarni kasbga, ijodga yo‘naltirish va ular iqtidorlarini ochish, mustaqil fikrlash va tanqidiy fikrlash kabi murakkab vazifalarni yechishda ham, ushbu darslarning ahamiyati juda katta. O‘quvchilarni badiiy adabiyotlarni tanlash, o‘qish, ularni saqlash va asar ustida ishlash kabi malakalari rivojlantiriladi.

Tafakkur jarayoni insonning ruhiyati bilan uzviy bog‘liqlikda kechadi. Fikrlayotgan odamning ichki dunyosi qanchalik boy, dunyoqarashi nechog‘lik keng, bilimi qay darajada chuqur bo‘lsa, fikrlari, xulosalarining saviyasi ham shuncha baland bo‘ladi. Teranlik, tiniqlik, mantiq, erkinlik, mustaqillik, badiiylik, ijodiylik inson tafakkuri darajasini ko‘rsatuvchi ijobiy xususiyatlardir. Odam dunyoni tafakkur orqali anglaydi, fikr va ruhiyat yordamida undan o‘ziga xos tarzda



ta'sirlanadi, xulosalar chiqaradi [7]. Shuning uchun ham yosh o'quvchilarda ushbu ko'nikmalarni ertadan singdirib borish muhimdir.

Bola yosh bosqichlariga ko'ra turfa qiziqishga ega bo'ladi, o'ziga xos fikrlaydi va his qiladi. Har yoshida turlicha faoliyat ko'rsatadi, borliqqa munosabati ham har xil bo'ladi. Beshinchi, oltinchi sinf o'quvchilari – kichik o'smir yoshidagi bolalarning o'qituvchilar va bir-birlari bilan o'zaro munosabatida ma'lum o'zgarishlar ro'y bera boshlaydi. Bu davrda faollikning xususiy shakllari kuzatiladi, ularning intellekti o'zini namoyish eta boshlaydi. 11 – 13 yoshli bolalarning ko'pchiligi o'qishga beparvolik bilan qaraydilar: o'zlarini oshiqcha qiynamaydilar, uy vazifasini berilgan topshiriq darajasidagina bajaradilar, ba'zan shuni ham qilmaydilar. Ko'pincha, o'zlarini ovutadigan boshqa narsalarni o'ylab topishga moyil bo'ladilar.

O'smir yoshidagi o'quvchida boshlang'ich maktab bolasiga xos bo'lgan insonni baholashdagi biryoqlamalik kamayadi. 5 – 7-sinf o'quvchisini shaxsning axloqiy sifatlari, uning ichki dunyosi, xarakterining shakllanishi va bunga turtki bo'lgan omillar qiziqtiradi. Ammo o'smir hali adabiy qahramonni uning shaxsiga xos bo'lgan barcha jihatlar bilan yaxlit qabul etish va baholashga qodir emas. U ko'pincha qahramonning biror fazilatiga tayanib shaxsini baholaydi. O'rta maktabning dastlabki bosqichidagi bolalar fikrlashida anchagina sabrsizlik seziladi. Bu davrda ular darsda bajariladigan ishlarning tezligiga ehtiyoj sezaдилar, oradagi bo'shliqlarni qiyinchilik bilan o'tkazadilar. Qiyin va murakkab vaziyatlarning uzoq saqlanishini yoqtirmaydilar. Shunisi xarakterliki, bu yoshdagi bolalarning ko'pchiligi berilgan topshiriqni yoki bir o'tirishda qoyillatib hal qiladilar yoki umuman bajarmaydilar [8]. Shunga ko'ra, o'quvchilar bilan ishlashda ushbu jihatlarga ham e'tibor qaratish lozim.

Bu bosqichdagi o'quvchilar bilimlarni o'ta maydalangan, tayyor holda qabul qilishni xushlamaydilar. Ayrimlar vazifani ko'chirmasdan o'zlari yechishga moyil bo'ladilar, agar topshiriqni o'zlari hal qila olishlariga ko'zlari yetisa, ustozining qo'shimcha tushuntirishlaridan qochadilar. Ba'zan ularning fikr ifodalashlarida mustaqillikni ham ilg'ash mumkin.

«Fikrlash jarayoni, – deb yozadi L. Vigotskiy, – bolaning ota-onasi bilan muloqotidan boshlanadi. Mustaqil fikrlash esa bu suhbatlarni bola «yutib», o'zicha «hazm qila» boshlaganidan so'ng shakllanadi». Bu qarashga tayanib, shunday xulosa chiqarish mumkinki, fikrlash bevosita o'z yo'naltiruvchi kuchi, maqsadi,



usullariga ega bo'lgandagina mustaqil faoliyatga aylanadi. Fikrlashning mustaqilligi uning yuqorida sanalgan shakllaridan biri sifatida kishi shaxsiyati va siyrati, ichki «men»i bilan bog'liq [9]. Ya'ni, har bir o'quvchining ichki dunyosi va fikrlashi ham turlichadir.

Xulosa qilib aytganda, boshlang'ich sinf o'quvchilarining tasavvurini kengaytirishda, yangi voqea va hodisalarni o'rganishda, shu bilan birga og'zaki nutqining rivojlanishida ham badiiy asarlarning o'rni nihoyatda kattadir. Badiiy asarlarning tarbiyaviy ahamiyati ham o'ziga xos bo'lib, o'quvchilarda ijobiy va ijodiy fikrlash, yaxshilik qilish, yomonliklardan qochish kabi sifatlarga ham ega bo'la boradilar. Kelgusida ham o'quvchilarning murg'ak qalbida insoniy fazilatlar shakllanib, ezgu ishlarni amalga oshirishida turtki bo'la oladi.

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“O‘ZBEKISTON – 2030” STRATEGIYASI, XOTIN-QIZLARNI QO‘LLAB- QUVVATLASHGA QARATILGAN IMKONIYATLAR ESHIGI

Xusanova Shohida Alibek qizi

Yengil sanoat texnologiya va jihozlari kafedrası dotsenti, Farg'ona davlat texnika universiteti, Farg'ona, O‘zbekiston

E-mail: shohida04.90@gmail.com

Annotatsiya: Ushbu maqolada “O‘zbekiston – 2030” strategiyasi doirasida xotin-qizlarni qo‘llab-quvvatlashga qaratilgan islohotlar va imkoniyatlar tahlil qilingan. Xotin-qizlarning ijtimoiy, iqtisodiy va siyosiy hayotdagi faol ishtirokini kengaytirish, gender tenglikni ta‘minlash va ularning huquqlarini himoya qilishga qaratilgan dasturlar mazmuni yoritilgan. Shuningdek, tadbirkorlikni rivojlantirish, ta‘lim olish imkoniyatlari va huquqiy kafolatlar kabi muhim yo‘nalishlarga alohida e‘tibor qaratilgan. Maqolada xotin-qizlarning jamiyat taraqqiyotidagi o‘rni va ularni qo‘llab-quvvatlashning istiqbolli yo‘nalishlari ochib berilgan.

Tayanch so‘zlar: Islohot, imkoniyat, tahlil, ijtimoiy, iqtisodiy, siyosiy, gender, huquq, dastur, ta‘lim, jamiyat, taraqqiyot, istiqbolli yo‘nalish.

Kirish

Har qanday davlatning tarixiy taraqqiyot yo‘lidan ma‘lumki, yurtning jadal rivojlanishi, muayyan yutuqlarga erishishi, xalqning farovon bo‘lishi o‘sha davlatda yoshlar hamda **xotin-qizlarning ma‘naviy yetuk**, ta‘lim-tarbiyasi va kelajagiga beriladigan e‘tibor darajasiga bog‘liq. Shu ma‘noda, O‘zbekistonda **xotin-qizlarning** masalasi davlat siyosatining eng ustuvor yo‘nalishlaridan biri hisoblanadi.

Jamiyatimiz ijtimoiy-siyosiy hayotining barcha jabhalaridagi jarayonlarda xotin-qizlarning ishtiroki va faolligi tobora ortib bormoqda. Buning zamirida xotin-qizlarga yaratilayotgan va berilayotgan imkoniyatlarni ochib berayotgan eshiklardir

Tadqiqot uslubiyoti. Bu yo‘lda amalga oshirilayotgan samarali ishlar o‘z salohiyatlarini to‘laqonli yuzaga chiqarishi uchun yaratib berilayotgan imkoniyatlar, imtiyozlar, umuman, ularni qo‘llab-quvvatlashga qaratilgan keng ko‘lamli ishlar natijasidir.



Qolaversa, jamiyatni muhim tarkibi xisoblangan xotin-qizlarning ma'naviy yetuk, tafakkuri keng, iqtisodiy, huquqiy jihatdan bilimdon va faol bo'lishi kelajak avlodni tarbiyalashda ham ijobiy natijalar beradi.

Oxirgi yillarda yurtimizda xotin-qizlarni qo'llab-quvvatlash, gender tengligini ta'minlash, turli tazyiq va zo'ravonliklardan himoya qilish, salomatligini mustahkamlash, umuman, xotin-qizlar masalasi davlat siyosati darajasiga ko'tarildi. Prezidentimiz, hukumatimiz tomonidan ana shu yo'nalishga oid 40 dan ortiq me'yoriy-huquqiy hujjat qabul qilindi.

O'zbekiston Respublikasi taraqqiyotining uzoq muddatli strategik rejalari doirasida qabul qilingan “O'zbekiston – 2030” strategiyasi mamlakat ijtimoiy-iqtisodiy rivojlanishini yangi bosqichga olib chiqishga xizmat qilmoqda. Ushbu strategiyada aholining barcha qatlamlari, ayniqsa, xotin-qizlarning huquq va imkoniyatlarini kengaytirishga alohida e'tibor qaratilgan. Xotin-qizlarning jamiyatdagi rolini oshirish, ularni qo'llab-quvvatlash va gender tenglikni ta'minlash – strategiya ustuvor yo'nalishlaridan biri hisoblanadi.

Ayollar faoliyatining asosiy yo'nalishlari

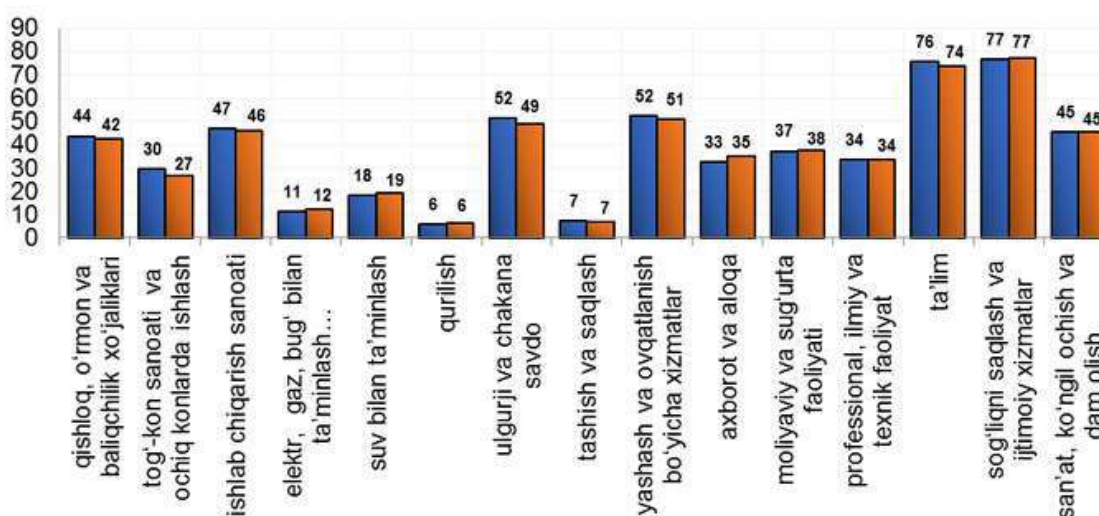
O'zbekistonda ayollar ko'proq barqaror ish o'rinlari va qulay sharoitlarni taklif qiladigan davlat sektorida ishlaydi.

Ayollar bandligining tarmoq tuzilmasi shu bilan xarakterlanadiki, ular asosan ish haqi past va ish vaqti qisqaroq sohalarda ishlaydi.

Bular ta'lim, sog'liqni saqlash kabi tarmoqlar va umuman, ijtimoiy soha. Erkaklar va ayollarning ish haqi o'rtasidagi tafovut sababi ham aynan mana shu bilan bog'liq. [1]

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Tadqiqot natijalari. Xotin-qizlarni qo'llab-quvvatlash siyosati

O'zbekiston hukumati tomonidan amalga oshirilayotgan islohotlarning muhim yo'nalishlaridan biri – xotin-qizlarning huquq va manfaatlarini himoya qilish, ularni tadbirkorlikka jalb etish va ijtimoiy faolligini oshirishdir. “O'zbekiston – 2030” strategiyasi doirasida quyidagi asosiy yo'nalishlar belgilangan:

- Xotin-qizlarning ijtimoiy himoyasini ta'minlash;
- Tadbirkor ayollar uchun imtiyozli kreditlar va moliyaviy yordam dasturlarini kengaytirish;
- Ta'lim va kasb-hunar o'rganishga keng imkoniyatlar yaratish;
- Ayollar bandligini ta'minlash va mehnat huquqlarini himoya qilish;
- Ayollarning siyosiy va ijtimoiy hayotdagi ishtirokini oshirish.
- Ta'lim va malaka oshirish imkoniyatlari

Strategiya doirasida xotin-qizlarning ta'lim olishi va kasb-hunar o'rganishi uchun alohida dasturlar ishlab chiqilgan. Xususan, qishloq hududlarida yashovchi ayollarning axborot texnologiyalari va tadbirkorlik sohasida malakasini oshirishga alohida e'tibor qaratilmoqda.

Tadbirkorlikni rivojlantirish

Xotin-qizlarning tadbirkorlik faoliyatini qo'llab-quvvatlash maqsadida davlat tomonidan subsidiyalar, imtiyozli kreditlar va grantlar ajratilmoqda. Bu esa ayollar orasida o'z biznesini boshlashga qiziqishni kuchaytirmoqda.

Gender tenglik va huquqiy kafolatlar

“2030” strategiyasi asosida gender tenglikni ta’minlashga qaratilgan qonunchilik bazasi mustahkamlanmoqda. Xotin-qizlarning jamiyat hayotidagi faol ishtirokini ta’minlash va zo’ravonlikka qarshi himoyasini kuchaytirish bo’yicha maxsus dasturlar amalga oshirilmoqda.

2022-2024-yillar uchun “Biznes ayollar” dasturi qabul qilinishi belgilandi. Uning ijrosiga jami 8 trillion so‘m yo‘naltiriladi. Ayollar uchun tadbirkorlik kurslari tashkil etiladi, imtiyozli kreditlar beriladi.

Prezidentimiz bu borada obro‘-e’tiborli, bilimli xotin-qizlardan iborat “Oqila ayollar” harakatini tashkil qilish taklifini bildirdi.

– Bu harakat “mahallaning vijdoni”ga aylanishi kerak. Chunki ma’rifatli jamiyatni ma’rifatli onalarsiz qurib bo‘lmaydi, – deya ta’kidladi Shavkat Mirziyoyev.

Ko‘pchilik, ayol kishi nima sababdan ishlashi kerak, nimaga ayollar raxbar bo‘ladi buning nimasi yaxshi, uning vazifasi uy ro‘zg‘or bola tarbiyasi bilan shug‘ullanishi kerak degan fikrlarni bildiradi. Bunday savolga javob, xotin-qizlarimiz ijtimoiy masalalarga ko‘proq yurakdan his qilib yondashadi, dilidan o‘tkazib qarorlar qabul qiladilar. Ijtimoiy masalalar esa, bu — xalqning dardi, xalqning muammosi, shu kecha-kunduzda uning boshidan o‘tayotgan muammolar bilan uzviy bog‘liqdir. Ayol u oila bekasi, bolalar tarbiyachisi, ularning sog‘lig‘i uchun qayg‘uradigan shifokordir. Siyosiy hayotda faol bo‘lgan xotin-qizlarimiz aynan mana shunday xislatlari tufayli qonunlarning yana-da hayotiy bo‘lishi uchun kurashadilar, ularda aniq masalalar, muammolarning yechimlarini anglab tushinib, xis qilib jon kuydiradilar.

O‘zbekistonda xotin-qizlar masalasiga juda katta e’tibor qaratilyapti. Ularning huquqlari, erkinliklari, qonuniy manfaatlari Konstitutsiyamiz, qonunlarimizda mustahkamlab qo‘yilgan.

Quvonarlisi, bugungi kunda yaratilayotgan va berilayotgan imkoniyatlar negizida zamonaviy fikrlaydigan ayollarimizdan ota-onalar, ko‘payib boryapti. O‘z navbatida, xotin-qizlarning ta’lim olishi, kasbli bo‘lishi uchun qog‘ozda emas, real hayotda katta qulayliklar, yengilliklar yaratilmoqda. Bugungi kunda ayrim sohalarda uchratishimiz mumkin gender tengligini, buning samarasi olib borilayotgan erkin demokratik tamoyillarni tizimli ishlayotganligi fikrimizga misol bo‘la oladi.

Keyingi yillarda yurtimizda ayollarni qo‘llab-quvvatlashga qaratilgan ishlarning ijobiy natijalarini jamiyat boshqaruvida faoliyat ko‘rsatib kelayotgan ko‘p sonlar misolida ko‘rishimiz mumkin.



Davlat boshqaruvining turli sohalarida faoliyat olib borayotgan rahbarlik salohiyati va qobiliyatiga ega hamda korxona, tashkilot, jamoani boshqarayotgan, ortidan ko‘plab opa-singillarimizni ergashtira oladigan, lider ayollarimizdan juda ko‘pini tashkil etmoqda.

Jamiyatimizning eng og‘riqli muammolaridan biri bo‘lgan ishsizlik masalasini ijobiy hal etish, ayol va qizlarning bandligi ta‘minlashda, tadbirkorlik yo‘lida ularga berilayotgan imkoniyatlar, imtiyozli kredit olib yoki taqdim etilgan subsidiyalardan foydalanish borasida xar bir viloyatlarda sezilarli darajada sezilmoqda.

Bu borada Respublika xotin-qizlar jamoatchilik kengashining 2021-yil 27-apreldagi 2-sonli bayonnomasida “Yil ayoli” milliy tanlovi, O‘zbekiston Respublikasi Oliy majlisi senati kengashining qarori bilan, “Yil ayoli” va “Gender tenglik faoli” milliy tanlovi, “Hududning 100 nafar ixtirochi ayoli”, Zulfiya nomidagi Davlat mukofoti tanlovlari shular jumlasidandir.

Bundan tashqari, O‘zbekistonda oliy o‘quv yurtlarining talabalari uchun 6 xil nomdagi davlat stipendiyalari joriy etilgan. Jumladan:

1. Beruniy nomidagi;
2. Ibn Sino nomidagi;
3. Navoiy nomidagi;
4. Ulug‘bek nomidagi;
5. Imom al-Buxoriy nomidagi;
6. Islom Karimov nomidagi.

Shuncha imkoniyat va e‘tibor ayolning qalbiga yorug‘lik kirita oldi. Farzand, millat tarbiyachisi bo‘lgan shuncha ayol qalbida minnatdorchilik, davlatga ishonch, ertangi kunga umid tuyg‘ulari yanada mustahkamlandi.

Jamiyatimiz ayollari tabiatan kurashuvchandir, oilasi, yaqinlari uchun har qanday mashaqqatu sinovlardan o‘tishga qodir zotdir. Shunday ekan ayolning ushbu fazilatini suiiste‘mol qilmaslik lozim. Aslida hamisha himoyaga, asrab-avaylashga muhtoj ayolni kamsitish, zo‘ravonliklardan asrash ham muhim masalalaridan biri hisoblanadi. Shu bois xotin-qizlarimizni turli tazyiq va zo‘ravonliklardan asrash, ana shunday ko‘ngilsiz holatlarga tushib qolishining oldini olish maqsadida himoya orderlarining joriy etilgani ham ijobiy natijalar bermoqda.

Xulosa

Mamlakatimizda xotin-qizlarni qo‘llab-quvvatlash borasida amalga oshirilayotgan islohotlar, qonunlar, shuningdek, qator farmon va qarorlar ijrosi doirasida olib borilayotgan ishlar jamiyatda xotin-qizlarining nufuzini oshirish, ularning muammolarini bartaraf etish, o‘z hayotlaridan rozi bo‘lib yashashini ta‘minlashga xizmat qilmoqda.

“O‘zbekiston – 2030” strategiyasi mamlakatda xotin-qizlarning ijtimoiy, iqtisodiy va siyosiy hayotdagi ishtirokini kengaytirish uchun yangi imkoniyatlar eshigini ochmoqda. Ushbu islohotlar xotin-qizlarning huquqlarini ta‘minlash, jamiyatda ularning mavqeini mustahkamlash va mamlakat taraqqiyotiga munosib hissa qo‘shishlariga xizmat qiladi.

FOYDALANILGAN ADABIYOTLAR RO‘YXATI:

1. “O‘zbekiston – 2030” strategiyasi. O‘zbekiston Respublikasi Prezidenti Farmoni.
2. O‘zbekiston Respublikasi “Xotin-qizlarni qo‘llab-quvvatlash va gender tenglikni ta‘minlash to‘g‘risida”gi qonuni.
3. Davlat statistika qo‘mitasi ma‘lumotlari.
4. O‘zbekiston xotin-qizlarining iqtisodiy faolligi pastligi, avvalo ularning uy-ro‘zg‘or ishlari va bola parvarishi bilan to‘liq band ekanligi bilan bog‘liq, deyiladi PMTI xabarida.
5. "O‘zbekiston – 2030" strategiyasi: xotin-qizlarni qo‘llab-quvvatlashga qaratilgan ishlar izchil davom ettiriladi": Mazkur maqolada strategiya doirasida xotin-qizlarni qo‘llab-quvvatlash bo‘yicha amalga oshirilayotgan ishlar haqida batafsil ma‘lumot berilgan.
6. "O‘zbekiston – 2030" strategiyasi xotin-qizlarning hayotdan rozi bo‘lib yashashini ta‘minlaydi" Ushbu maqolada strategiyaning xotin-qizlar hayotiga ijobiy ta‘siri haqida so‘z yuritiladi.

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ПОЛИПОЗ РИНОСИНУСИТ БЕМОРЛАРДА БАЪЗИ ДАВО УСЛУБЛАРИНИНГ САМАРАДОРЛИГИ

**Қаршиев Бобир Ботир ўғли, Назаров Сухраб Ўлмас ўғли,
Ғаниев Дастан Нурали ўғли**

Самарқанд давлат тиббиёт университети 1-сон Оториноларингология
кафедраси 1-курс клиник ординаторлари

Аннотация. Полипоз риносинусит жуда кенг тарқалган, аммо ҳозирги кунгача жуда кам даражада ўрганилган патологиядир. Полиплар этиологик, патогенетик ва морфологик нуқтаи назардан бир хил бўлмаган, яхши сифатли ўсмалардан аллергик ёки яллиғланишли табиатнинг гиперпластик шаклланишига қадар бўлган турли хил касалликларнинг ранг-баранг тасвирини акс эттиради. Кўп сонли полиплар мавжуд бўлганда, "полипоз" атамаси қўлланилади. Бизнинг фикримизча, ушбу этиопатогенетик шаклнинг энг тўғри номланиши "полипоз риносинусит" бўлади, чунки бу бурун ёндош бўшлиқлари ва биринчи навбатда галвирсиомн суякнинг лабиринт хужайралари бу локализациянинг дастлабки манбаи бўлиб ҳисобланади.

Калит сўзлар: полипоз риносинусит, бурун бўшлиғи, бурун ёндош бўшлиқлари, яллиғланиш, полипоз, самарадорлик, касаллик.

Аннотация. Полипозные риносинуситы являются довольно распространенной, но как это ни странно, мало изученной патологией полости носа и околоносовых пазух. Полипы представляют собой довольно пеструю картину самых различных заболеваний, далеко не однородную в этиологическом, патогенетическом и морфологическом отношениях от доброкачественных — опухолей — до гиперпластических — образований аллергической или воспалительной природы. При наличии большого количества полипов применяют термин «полипоз», хотя граница между понятиями «множественные полипы» и «полипоз» условна. Но все-таки, с нашей точки зрения, наиболее правомерным названием данной этиопатогенетической формы будет «полипозный риносинусит», так как именно околоносовые пазухи и в первую очередь клетки решетчатого лабиринта и являются местом локализации данного процесса.

Ключевые слова: полипозный риносинусит, носовая полость, придаточные пазухи носа, воспаление, полипоз, эффективность, болезнь.

Abstract. Polypous rhinosinusitis is a fairly common, but oddly enough, poorly studied pathology of the nasal cavity and paranasal sinuses. Polyps represent a rather motley picture of various diseases, far from uniform in etiological, pathogenetic and morphological respects from benign tumors to hyperplastic formations of allergic or inflammatory nature. In the presence of a large number of polyps, the term "polyposis" is used, although the boundary between the concepts of "multiple polyps" and "polyposis" is conditional. But still, from our point of view, the most legitimate name for this etiopathogenetic form will be "polypous rhinosinusitis", since it is the paranasal sinuses and primarily the cells of the ethmoid labyrinth that are the site of localization of this process.

Key words: polyposis rhinosinusitis, nasal cavity, paranasal sinuses, inflammation, polyposis, efficacy, disease.

Долзарблиги. Сурункали полипоз риносинусит ҳозирги вақтда кенг тарқалган касалликлардан бири саналади, хусусан полипоз риносинусит бўйича мурожаатлар ҳар 10000 аҳолига 3,2 дан то 5,2 гача кўрсаткични ташкил этади. Бурун ёндош бўшлиқлари касалликлари орасида бурун ва бурун ёндош бўшлиғи полиплари нисбатан кўп учрайди.

Полипоз риносинусит билан оғриган беморларни даволаш замонавий ринологиянинг ҳал қилинмаган муаммоларидан бири ҳисобланади: қўлланиладиган даво усулларининг турли-туманлигига қарамасдан, беморларни соғайишига эришиш қийин бўлади, чунки касаллик қайталанишга мойил саналади. Полипоз риносинуситни келиб чиқиши ва ривожланиш назариялари орасида инфекцион – аллергияк аутоиммун, нерв – трофик кабилари бирмунча кенг тарқалган. Шунингдек сурункали риносинуситлар ва бурун, бурун ёндош бўшлиқлари (БЁБ) полиплари ривожланишида микотик, бактериал ва вирусли сенсibiliзациянинг роли ҳам ўрганилган.

Шу сабабли, бажарилган жарроҳлик аралашувининг турига қараб, сурункали полипоз риносинусит билан оғриган беморларни операциядан кейинги даврда олиб бориш борасида саволлар юзага келади.

Ишнинг мақсади: этиопатогенитик ҳолатни ҳисобга олиб, ушбу патология мавжуд беморларни комплекс даволашнинг урта варинатини

самарадорлигини урганиш.

Текширув манбалари ва усуллари. Биринчи гуруҳни 14 дан то 50 ёшгача бўлган 30 киши ташкил этди. 14 – нафари аёллар ва 16 нафари эркаклар. Беморларнинг 10 нафарида икки томонлама сурункали полипоз этмоидит диагностика қилинди, 10 нафар беморда у полипоз гайморит билан қўшилиб келганлиги аниқланди, 7 нафар бемор кишиларда полипоз этмоидит билан бир қаторда сурункали гипертрофик ринит, 3 нафарида эса бурун тўсиғи қийшайиши аниқланди. Касаллик 9 нафар беморда бирламчи, 21 нафарида эса – қайталанувчи характерда кечиб, жумладан 6 нафар беморда қайталаниш бир марта, 8 нафар беморда 2-3 марта, 7 нафар беморда эса 1-12 мартагача кузатилди. Барча беморларда икки этапли этмоидотомия бажарилди ва асосан маҳаллий яллиғланишга қарши, бурун ён бўшлиқлари соҳасига гипосенсибилизацияловчи таъсирга эга бўлган дори воситалари қўлланилди.

Ушбу соҳанинг ўзига хос анатомик тузилишга эга эканлигини ҳисобга олиб, биринчи этапда оддий этмоидотомия бажарилди, 4-5 кун ўтгач эса эндоскоп назорати остида, максимал даражада полипоз тўқима қаердан ўсиб чиқиб келган бўлса, ўша катакча ва деворлардан синчковлик билан олиб ташланди (иккинчи этап). Операциядан кейинги даврда очилган бўшлиқлар соҳасига интерлейкин-1-В (РАИЛ) рецептор антогонисти билан «Хитоксин-гель» деб аталувчи гидрогел қопламаси қўлланилди, у эса яллиғланишга қарши ва антиаллергик таъсирга эга бўлган таркибга эга: Преднизалон, Аминокапрон кислотаси, Кальций хлорид, Димедрол, Каланхое шарбати. Кейинги кунда бурун ва БЁБ дан тампонлар олиб ташлангач, этмоидал ва гаймор бўшлиқлар соҳасига 9% гидрокортизон малҳами билан ташқи фонофорез қўлланилди ва 5% кальций хлорид ва 1% димедрол эритмалари билан эндоназал электрофорез усули билан алмашлаб борилди. Организм резистентлигини оширишга катта эътибор берилди.

Иккинчи гуруҳни 20 дан то 60 ёш бўлган 40 нафар бемор, жумладан аёллар 16, эркаклар 24 нафарни ташкил этди. Уларнинг 13 нафарида икки томонлама сурункали полипоз этмоидит, 10 тасида гаймороз этмоидит, 10 нафарида эса полипоз этмоидит билан бир қаторда сурункали гипертрофик ринит, бурун тўсиғи қийшайиши аниқланди. Беморларни 5 нафарида полипоз этмоидит ва гаймороз этмоидит биринчи марта аниқланди, 35 нафар беморда эса касаллик қайталанувчи характер касб этиб, жумладан уларнинг 9 нафарида

рицидив биринчи марта, 8 нафарида 2-3 марта, 11 нафарида 4-5 марта, 7 нафарида эса 6-10 марта такрорланганлигини айтиш мумкин. Ушбу гуруҳ беморларда этмоидотомия ва гайморозтмоидотомия амалга оширилди ва операциядан кейинги 4-5 кунларда, «КУА 02» аппарати ёрдамида биз томонимиздан ишлаб чиқилган криоапликация усулини қўллаб, операциядан кейинги бўшлиқ ва бурундаги полипоз ўзгарган шиллиқ қават қолдиқларининг криодеструкцияси амалга оширилди. Учинчи гуруҳга 65 ёшгача бўлган 30 киши киритилиб, уларни 16 таси аёллар ва 14 нафари эркеклар. Улардан 10 нафари полипоз этмоидит билан оғриганлиги аниқланди, 6 нафарида касаллик полипоз гайморит билан қўшилиб келганлиги, 9 нафар беморда полипоз гайморозтмоидит билан бир қаторда сурункали гипертрофик ринит, 5 нафар беморда эса бурун тўсиғи қийшайиши аниқланди. Беморларни 4 нафарида касаллик биринчи марта диагностика қилинган, 26 тасида эса қайталанувчи характерга эга бўлиб, жумладан 7 кишида рецидивлар биринчи марта аниқланган бўлса, 5 тасида 2-3 марта, 8 тасида 4-5, 6 тасида 10 марта, ва 1 нафарида 10 мартадан кўпроқ қайталанганлигини айтиш ўтиш мумкин.

Тадқиқот натижалари. Келтириб ўтилган клиник тавсивдан кўриниб турибдики, барча уч гуруҳ беморларда асосий касалликни кечиши ва бурун бўшлиғидаги йўлдош патологиянинг хусусиятлари деярли бир хилликни касб этди. Учинчи гуруҳ беморларда операциядан кейинги даврда парасимпатик нерв тизим реактивлигини пасайтириш, бурун шиллиқ қаватидаги аллергик ўзгаришларни пасайтириш, тўқима трофикасини яхшилаш мақсадида, ёноқ-қанотсимон ости йўли билан видиев нервнинг новокаинли блокадаси бажарилди. Бунинг учун проорбитал чизикнинг маркази белгилаб олинди, ва ушбу соҳадан инъекция амалга оширилди. Игна токи қанотсимон ўсиқнинг ташқи пластинкасига қадалгунгақадар атроф тўқимага (новокаинни узлуксиз киритишда) киритилади, сўнгра у ярмигача ортгақайтарилади ва 12-19° бурчак остида олд томонга шундай йўналтириладики, бунда у видиев нерв ўтадиган қанот-танглай чуқурчасига тушиши керак, ва яна қадалиш юзага келгунча киритилади. Ҳар иккала томондан ҳам, 2% ли 5 мл лидокаин эритмаси юборилади.

Барча гуруҳларда даволашдан кейинги узок муддатли натижалар 12-18 ойдан сўнг таҳлил қилинди. Қўлланилаётган даво усуллари самарадорлигини қиёсий баҳолаш учун 2 йиллик (2023-2024) архив маълумотлар таҳлили



ўтазилди, полипоз этмоидит билан оғриган ва фақатгина жарроҳлик усулида (этмоидотомия) даволанган 50 нафар беморнинг касаллик тарихлари ўрганилди, беморларда операциядан кейинги биринчи йилдаёқ қайталанишлар кузатилганлиги қайд этилди.

Биринчи гуруҳ беморларда фақат 36,6% ҳоллардагина касаллик қайталаниши юзага келди, жумладан 26,6% ҳолатда шиллиқ қаватлар полипоз ўзгарганлиги аниқланди, ва бу ҳолат биз томонимиздан қайталаниш жараёнининг дастлабки белгиси сифатида баҳоланди, ва 10% ҳолатларда бурундан нафас олишга ҳалал бермайдиган – майда полиплар аниқланди. Иккинчи гуруҳда 44,8% кузатувларда полипоз жараён қайталаниши аниқланди, бунда 24,2% полипоз ўзгарган шиллиқ қават, 20,65% - бурун бўшлиғи ва операциядан кейинги юқори жағ бўшлиғидаги майда полиплар аниқланди. Бироқ, 2 йилдан кейин касаллик рецидивлари текширилганларнинг 48,3% да пайдо бўлди, жумладан бурундан нафас олишга ҳалал бермайдиган майдо полиплар – 22,2% ҳолларда аниқланди.

Биринчи гуруҳ беморларда микроб антигенлари ва полипоз тўқимага нисбатан организм сенсбилизациясининг сезиларли пасайишганлиги, маълум бир вақт оралиғида улардаги полипоз гайморит қайталаниш кўрсаткичларининг бирмунча сезиларли камайишига олиб келди. Рецидивлар сонининг камайишини, афтидан шу билан тушунтириш мумкинки, криодеструкция амалиёти бутун организм ва полипоз ўзгарган бурун бўшлиғи шиллиқ қавати юқори сезувчанлигини пасайтиради. Учинчи гуруҳдаги беморларда рекидивлар сонининг камайиши организмдаги ўзгаришлар билан боғлиқ бўлиб, булар лейкоцитоз реакцияси намоён бўлишида ўз аксини топмайди.

Хулоса. Шундай қилиб, полипоз этмоидит ва гайморозтмоидитларни даволашда, биз томонимиздан таклиф этилаётган комплекс даво вариантлари касалликнинг қайталаниш кўрсаткичларини камайтиради. Бироқ, микроорганизм ва полипоз антигенларга нисбатан, бемор организмдаги сенсбилизацияси ўзгаришларининг динамикаси шуни тасдиқлайдики, операциядан кейинги даврда умумий наркоз остида шейвер усулида жарроҳлик амалиёти ва яллиғланишга қарши таъсирга эга бўлган дори воситаларни бурун бўшлиғи шиллиқ қаватига ультратовуш ва электрофорез йўли билан киритиш усуллари биргаликда олиб бориш мақсадга мувофиқ

бўлади. Эндоназал жарроҳлик амалиётини ўтказган беморларда операциядан кейинги даврда, РАИЛ билан бирга «Хитоксин-гель» жароҳат қоплагичларни қўллаш, назал ажралмадаги цитокинлар миқдорини коррекция қилиш ва мос равишда ўткир маҳаллий яллиғланишни назоратга олиш имконини беради, бу эса ўз навбатида, субъектив белгиларни тезда ортга қайтиши, реактив белгиларни пасайиши ва госпитализация муддатларининг қисқаришига олиб келади.

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Kredit bozorlarining iqtisodiy rivojlanishga ta'siri va defolt xavfi

Guliston davlat universiteti

Raqamli iqtisodiyot va innovatsiyalar fakulteti talabasi

No'monjonova Shoxsanam Muzaffar qizi

nomonjonovashohsanam221@gmail.com

Annotatsiya: Ushbu maqolada kredit bozorlarining iqtisodiy rivojlanish jarayonlariga ko'rsatayotgan ta'siri va defolt xavflarini boshqarish masalalari tahlil qilingan. O'zbekiston kredit bozorining hozirgi holati, rivojlanish tendensiyalari va iqtisodiyotning real sektoriga ta'siri o'rganilgan. Tadqiqot davomida kredit bozorlarining makroiqtisodiy barqarorlikka ko'rsatayotgan ta'siri, defolt xavflarini baholash mexanizmlari va ularni minimallashtirishning zamonaviy usullari tahlil qilingan. **Kalit so'zlar:** kredit bozori, iqtisodiy rivojlanish, defolt xavfi, moliyaviy barqarorlik, kredit riski, bank tizimi, kreditlash siyosati, makroiqtisodiy ta'sir, qarz yuki, moliyaviy vasitatchilik.

KIRISH

Kredit bozorlarining zamonaviy iqtisodiyotdagi roli va ahamiyatini inkor qilib bo'lmaydi. Moliyaviy vositachilik tizimining muhim tarkibiy qismi bo'lgan kredit bozori iqtisodiy o'sish, investitsiyalarni rag'batlantirish va innovatsiyalarni moliyalashtirish jarayonlarida hal qiluvchi rol o'ynaydi. Shu bilan birga, kredit bozorlarining noto'g'ri rivojlanishi yoki nazorat qilinmasligi jiddiy moliyaviy inqirozlarga olib kelishi mumkin.

O'zbekiston Respublikasida kredit bozorining rivojlanishi mamlakatning bozor iqtisodiyotiga o'tish jarayonining muhim elementlaridan biri hisoblanadi. 1991-yildan boshlab bank tizimining shakllanishi va kreditlash faoliyatining rivojlanishi milliy iqtisodiyotning zamonaviylashtirish jarayonida muhim rol o'ynadi.

Kredit bozorlarining iqtisodiy rivojlanishga ijobiy ta'sirini ta'minlash bilan birga, defolt xavflarini boshqarish zamonaviy moliyaviy tizimning asosiy vazifalaridan biri hisoblanadi. Bu muammoning dolzarbligi, ayniqsa, so'nggi yillarda global moliyaviy bozorlar barqarorligiga bo'lgan e'tibor ortishi bilan yanada oshdi.

Hozirgi kunda O'zbekistonda 2025-yil 1-yanvardan boshlab qarz yuki (DSTI) koeffitsienti 50 foizgacha qisqartirilishi va yangi kreditlash standartlarining joriy etilishi kredit bozorida muhim o'zgarishlarni keltirib chiqarmoqda.

Kredit bozori jamg'armalar va investitsiyalar o'rtasida ko'prik vazifasini o'taydi. Bank tizimlari aholi va korxonalar jamg'armalarini yig'ib, ularni iqtisodiyotning eng samarali sohalariga investitsiya shaklida yo'naltirish jarayoni kapitalning optimal taqsimlanishini ta'minlaydi va iqtisodiy samaradorlikni oshiradi.

Mamlakatimizda turli xil kredit yo'nalishlari rivojlangan:

- Iste'mol kreditlari
- Avtokreditlar
- Uy-joy kreditlari
- Biznes-kreditlar
- Mikroqarzlar
- Ta'lim kreditlari

1-jadval. Turli banklarning kredit takliflari¹

Kredit nomi, bank nomi	Foiz stavkasi	Muddat	Summa
Ipak Yo'li Banki Avtokredit-UzAuto Motors	16.99dan - 23.99 % gacha	2 yil - 4 yil	1 000 000dan - 950 000 000 so'mgacha
O'zsanoatqurilishbank Bir necha daqiqa ichida mikroqarz	29dan - 34 % gacha	1 yil - 4 yil	2 000 000dan - 100 000 000 so'mgacha
Asakabank Avtokredit GM	5.5dan - 20.5 % gacha	2 yil - 4 yil	1 000 000 000 so'mgacha
Anorbank Avtokredit 3.0	33 %	3 yil - 5 yil	400 000 000 so'mgacha
TBC Bank TBC Kredit	28 % dan	3 oy - 3 yil	300 000dan - 100 000 000 so'mgacha

¹ Markaziy bank statistik ma'lumotlari



Trastbank Mikroqarz	28dan - 30 % gacha	1 yil - 5 yil	100 000 000 so'mgacha

Kredit mablag'lari kichik va o'rta biznes faoliyatlarini qo'llab quvvatlashda, yangi ish o'rinlari yaratish orqali aholini ish bilan taminlashda, iqtisodiyotga yangi ilmiy texnologiyalar va g'oyalarni joriy etishda, raqobatbardoshlikni oshirishda muhim ahamiyat kasb etadi.

Tahlil va natijalar:

Hozirgi kunda O'zbekiston bank tizimida 31 ta tijorat banki faoliyat ko'rsatmoqda, ularning 17 tasi yirik va 14 tasi kichik banklar hisoblanadi. Bank tizimining kredit portfeli yildan yilga o'sish ko'rsatkichlarini namoyon qilmoqda.

Kredit bozorining rivojlanishi YIM o'sish sur'atlariga bevosita ta'sir ko'rsatadi. Kreditlash hajmining oshishi iste'mol va investitsiya talabini oshiradi, bu esa iqtisodiy faollikni rag'batlantiradi.

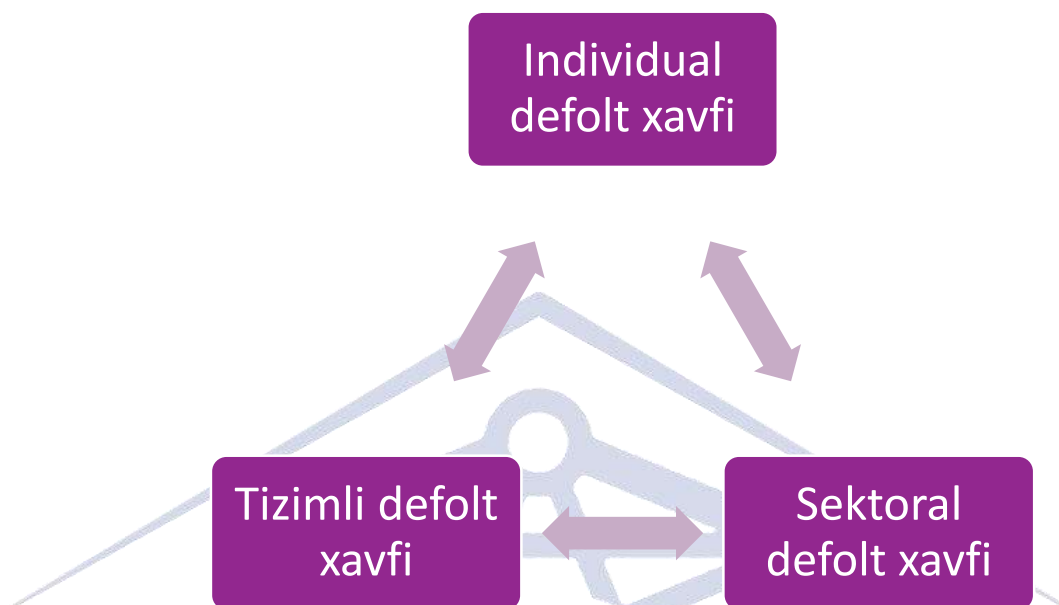
Shuningdek, kredit mablag'larining haddan tashqari o'sishi inflyatsion bosimni kuchaytirishi mumkin. Shu sababli Markaziy bank pul-kredit siyosati orqali kredit bozorini tartibga soladi. Biznes-kreditlarning ko'payishi yangi ish o'rinlarini yaratishga yordam beradi va ishsizlik darajasini pasaytiradi.

Defolt - bu qarz oluvchining o'z majburiyatlarini belgilangan muddatda to'la bajara olmasligi holatidir² va buning ham bir necha xil turlari mavjud(1-rasm). Bu moliyaviy institutlar uchun kredit riskini oshiradi.

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1. ² G'ulomov S., Haydarov A., G'ulomov Sh. va boshqalar. **Bank ishi:** O'quv qo'llanma. – Toshkent: Iqtisodiyot, 2010. – 456 b.





1-rasm. Defolt xavfining turlari

O‘zbekistonda ko‘plab iqtisodchilarda davlat aholi qarzini qaytara olmasligi bilan bog‘liq muammolar yuzaga kelishi haqida xavotir bor. Markaziy bank 2024-yildagi moliyaviy barqarorlik sharhida bu masalaga alohida to‘xtalgan.

Aytish joizki, bu o‘ziga yarasha xavflarni keltirib chiqarmoqda. Misol uchun, uy-joylar narxlarining ortiqcha baholanishi davom etmoqda, mikroqarzlarning yuqori sur‘atlarda o‘sishi hamda kiber xatarlar qizg‘in tus olmoqda, tashqi moliyalashtirish bo‘yicha yuqori xarajatlar uzoq muddatda saqlanib qolishi, O‘zbekistonning moliyaviy hamda nomoliyaviy sektori ishtirokchilariga nisbatan ikkilamchi sanksiyalarni joriy etish xavfi asosiy xatarlar hisoblanmoqda.

Rivojlangan mamlakatlar tajribasidan shuni ko‘rish mumkinki, kredit bozorining muvozanatli rivojlanishi iqtisodiy o‘shishning muhim shartlaridan biridir. Biroq, 2008-yilgi global moliyaviy inqiroz kreditlash standartlarining yumshatilishi va defolt xavflarini noto‘g‘ri baholashning oqibatlarini ko‘rsatdi.

Xulosa:

Xulosa qilib aytganda, kredit bozorlarining iqtisodiy rivojlanishga ta‘siri ko‘p qirrali va murakkab jarayon hisoblanadi. Birinchidan, kredit bozorining rivojlanishi iqtisodiy o‘shish, investitsiyalarni rag‘batlantirish va moliyaviy inklyuziyani oshirishda muhim rol o‘ynasa, ikkinchi tomondan, noto‘g‘ri boshqarilgan kredit



bozori jiddiy moliyaviy xavflar yaratishi va makroiqtisodiy barqarorlikni buzishi mumkin.

O‘zbekiston kredit bozorining tahlili shuni ko‘rsatadiki, so‘nggi yillarda bu soha sezilarli rivojlanishga erishgan. Ushbu sohaning ijobiy tomonlari sifatida kredit portfelining o‘shishganligi, yangi kredit mahsulotlarining joriy etilganligi va kreditlash jarayonlarining takomillashganligini aytish joiz.

Biroq, Markaziy bankning moliyaviy barqarorlik sharhida ko‘rsatilganidek, defolt xavflari ortib borishi va aholining qarz yukining oshishi tashvish uyg‘otmoqda. Bu masalalarni hal qilish uchun qabul qilingan DSTI koeffitsientini 50 foizgacha cheklash va boshqa chora-tadbirlarni o‘z vaqtida amalga oshirish maqsadga muvofiq hisoblanadi.

Kelajakda O‘zbekiston kredit bozorining barqaror rivojlanishi uchun kredit riskini boshqarish tizimlarini takomillashtirish, kredit riskini boshqarish tizimlarini takomillashtirish, prudentsial nazoratni kuchaytirish, makroiqtisodiy siyosatni muvofiqlashtirish muhim ahamiyatga ega.

Kredit bozorlarining muvozanatli rivojlanishi O‘zbekiston iqtisodiyotining uzoq muddatli barqaror o‘shishi uchun muhim shart hisoblanadi.

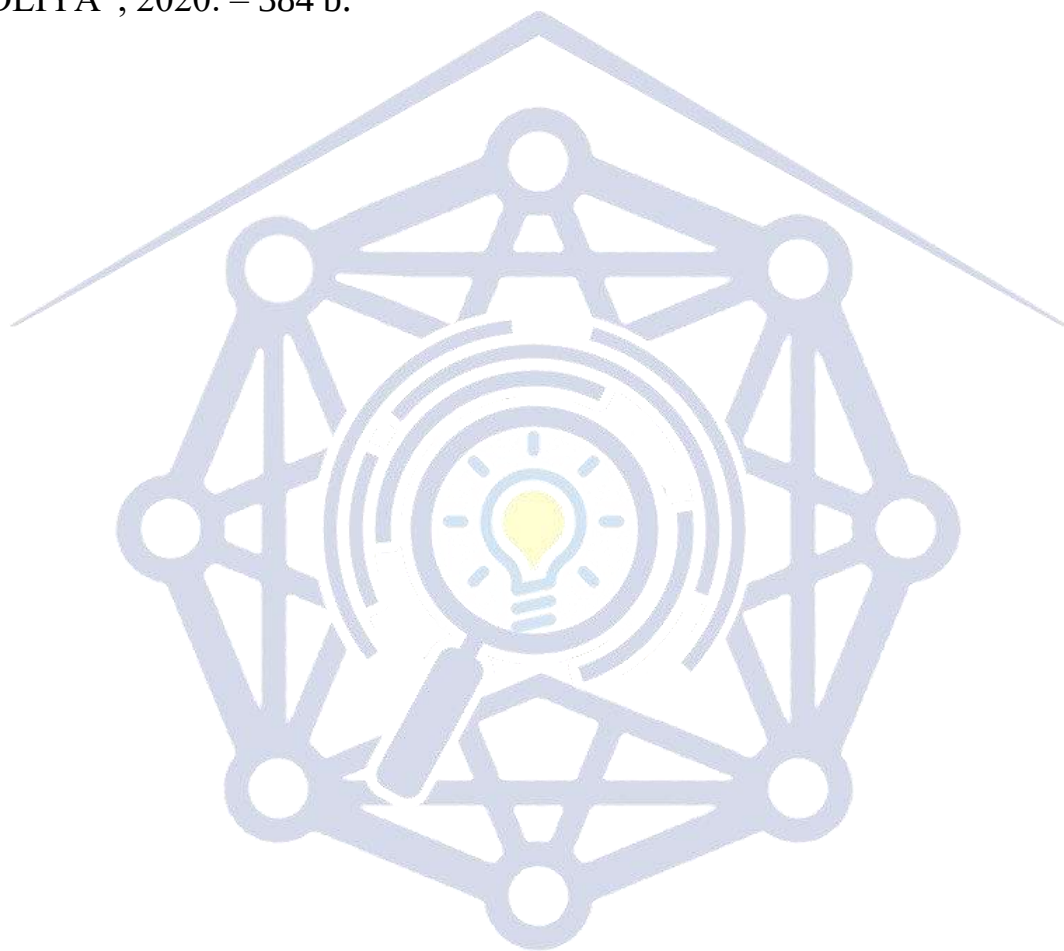
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"Teri-tanosil infeksiyasi" to'g'risida

Alfraganust universiteti nodavlat oliy ta'lim tashkiloti

Tibbiyot fakulteti 2-kurs talabasi

Ziyodullayeva Iroda Baxriddinovna

Gmail: irodaziyodullayeva67@gmail.com Teli: +99897 374 25 05

Annotatsiya

Mazkur maqolada teri-tanosil infeksiyalari, ularning turlari, kelib chiqish sabablari, klinik belgilar, tashxislash va davolash usullari to'g'risida ilmiy ma'lumotlar keltiriladi. Shuningdek, ushbu infeksiyalarni oldini olish choralari ham alohida e'tibor qaratilgan. Teri-tanosil infeksiyalari jamiyat salomatligiga jiddiy tahdid soluvchi kasalliklar sirasiga kirib, ularning o'z vaqtida aniqlanishi va samarali davolanishi katta ahamiyatga ega. Maqolada zamonaviy diagnostika va davolash usullari haqida so'z yuritilib, kasallikning oldini olishda profilaktik chora-tadbirlarning roli batafsil yoritilgan. Ushbu maqola tibbiyot xodimlari, talaba va tadqiqotchilar uchun foydali manba sifatida xizmat qiladi.

Kalit so'zlar: teri-tanosil infeksiyalari, dermatovenerologiya, klinik belgilar, tashxislash, davolash, profilaktika, tibbiyot, jamiyat salomatligi.

Annotation

This article provides scientific information about skin and sexually transmitted infections, their types, causes, clinical symptoms, diagnosis, and treatment methods. Particular attention is given to preventive measures against these infections. Skin and sexually transmitted infections are considered serious threats to public health, and timely diagnosis and effective treatment are of great importance. The article discusses modern diagnostic and treatment methods, emphasizing the role of preventive measures in disease prevention. This article serves as a valuable resource for medical professionals, students, and researchers.

Keywords: skin and sexually transmitted infections, dermatovenerology, clinical symptoms, diagnosis, treatment, prevention, medicine, public health.

Аннотация

В данной статье представлена научная информация о кожных и венерических инфекциях, их типах, причинах возникновения, клинических признаках, методах диагностики и лечения. Особое внимание уделено

профилактическим мерам против этих инфекций. Кожные и венерические инфекции считаются серьёзной угрозой для общественного здоровья, и своевременная диагностика и эффективное лечение имеют большое значение. В статье обсуждаются современные методы диагностики и лечения, подчёркивается роль профилактических мероприятий в предупреждении заболеваний. Данная статья служит полезным источником для медицинских работников, студентов и исследователей.

Ключевые слова кожные и венерические инфекции, дерматовенерология, клинические признаки, диагностика, лечение, профилактика, медицина, общественное здоровье.

Kirish

Teri-tanosil infeksiyalari (TTI) – bu teri va jinsiy a’zolari zararlovchi, asosan mikroorganizmlar – bakteriyalar, viruslar, zamburug‘lar va parazitlar tomonidan yuzaga keluvchi yuqumli kasalliklar guruhidir. TTI zamonaviy tibbiyotda global sog‘liqni saqlash tizimi uchun dolzarb muammo bo‘lib, ularning tarqalishi aholining turli qatlamlarida sezilarli darajada ortib bormoqda. Jahon sog‘liqni saqlash tashkiloti (JSST) ma’lumotlariga ko‘ra, har yili dunyoda 376 milliondan ortiq yangi TTI holatlari qayd etiladi. Ushbu infeksiyalar orasida gonoreya, sifilis, xlamidioz va genital herpes eng keng tarqalganlaridan hisoblanadi. TTI nafaqat bemorlarning jismoniy salomatligiga salbiy ta’sir ko‘rsatadi, balki ularning psixologik holatiga ham zarar yetkazadi. Shuningdek, ayrim infeksiyalar reproduktiv tizim faoliyatiga jiddiy zarar yetkazib, bepushtlikka, homiladorlik asoratlari hamda onadan bola orqali yuqish xavfiga sabab bo‘lishi mumkin. Shu boisdan, ushbu kasalliklarni o‘z vaqtida aniqlash, samarali davolash hamda profilaktika tadbirlarini amalga oshirish dolzarb vazifa hisoblanadi. Maqolada teri-tanosil infeksiyalarining klinik manzarasi, tashxislash usullari, zamonaviy davolash metodikasi hamda kasallikning oldini olish choralari batafsil yoritiladi. Shu bilan birga, tibbiyot amaliyotida qo‘llanilayotgan yangi diagnostika texnologiyalari va davolash strategiyalari tahlil qilinadi. Maqolaning mazmuni tibbiyot xodimlari, talaba va tadqiqotchilar uchun nazariy va amaliy ahamiyat kasb etadi.

Asosiy qism

Teri-tanosil infeksiyalarining turlari va kelib chiqish sabablari. Teri-tanosil infeksiyalari turli mikroorganizmlar tomonidan yuzaga keladi va ularning asosiy turlari bakterial, virusli, zamburug‘li hamda parazitlar infeksiyalardir. Bakterial

infeksiyalar qatoriga gonoreya, sifilis, xlamidioz kabi kasalliklar kiradi. Virusli infeksiyalarga esa inson papilloma virusi (IPV), genital herpes va inson immunitet tanqisligi virusi (OITS) kiradi. Zamburug‘li infeksiyalar ko‘pincha kandidoz shaklida namoyon bo‘ladi, parazitlar esa trixomonoz va boshqa organizmlar bilan bog‘liq. Har bir infeksiya turi o‘ziga xos patogenetik xususiyatlarga ega bo‘lib, klinik belgilar, kasallikning davomiyligi va asoratlari jihatidan farqlanadi. TTI ning asosiy kelib chiqish omillari orasida noaniq jinsiy munosabatlar, gigiyena qoidalariga rioya qilmaslik, immunitet tizimining pasayishi va ijtimoiy omillar (masalan, ta‘lim darajasi, salomatlik madaniyati) mavjud. Infeksiya ko‘pincha jinsiy yo‘l bilan yuqadi, ammo ba‘zida infeksiya teri va shilliq qavatlar orqali bevosita kontakt yoki infektsiyalangan predmetlar orqali ham tarqaladi. Klinik belgilar va tashxislash usullari. Teri-tanosil infeksiyalarining klinik belgilarida keng tarqalgan umumiy simptomlar — terida yoki jinsiy a‘zolarida qizarish, shishish, og‘riq, qichishish, ajralmalar va yara shakllanishi. Ba‘zan kasallik surunkali kechishi mumkin, bu esa tashxisni murakkablashtiradi. Shu sababli, aniq tashxis qo‘yish uchun laboratoriya usullari, jumladan, mikroskopiya, madaniyat olish (kultivatsiya), serologik testlar va molekulyar diagnostika usullari (PCR) keng qo‘llaniladi. Zamonaviy tibbiyotda PCR diagnostikasi yuqori sezgirlik va aniqlik bilan ajralib turadi, u virus va bakteriyalar DNK yoki RNK sini aniqlash imkonini beradi. Shuningdek, immunofluoresensiya va ELISA testlari ham keng tarqalgan. Davolash usullari va yondashuvlar. Teri-tanosil infeksiyalarining samarali davolashida etiologik (kasallik sababchisini yo‘qotish) va simptomatik yondashuvlar qo‘llaniladi. Bakterial infeksiyalar antibiotiklar yordamida, virusli kasalliklar antiviral preparatlar bilan davolanadi. Masalan, gonoreya va sifilisdan penitsillin va boshqa antibiotiklar samarali, genital herpesda esa asiklovir kabi antivirus vositalari qo‘llaniladi. Davolash davomida dori vositalarining dozasi, kursi va kontrindikatsiyalari diqqat bilan hisobga olinishi zarur. Immunitetni oshirish uchun qo‘shimcha preparatlar va sog‘lom turmush tarzini rag‘batlantirish muhimdir. Shuningdek, ayrim infeksiyalarda terapevtik va profilaktik choralar sifatida jinsiy sheriklarning ham tekshirilishi va davolanishi tavsiya etiladi. Profilaktika va oldini olish choralari. Teri-tanosil infeksiyalarining oldini olishda eng samarali vosita — profilaktika tadbirlaridir. Bu yerda jinsiy tarbiya, gigiyena qoidalariga rioya qilish, shaxsiy gigiyena vositalaridan foydalanish, himoyalangan jinsiy aloqa qilish (prezervativlar), muntazam tibbiy ko‘riklardan o‘tish muhim ahamiyatga ega.

Shuningdek, ba'zi virusli infeksiyalar (masalan, IPV)ga qarshi emlash amalga oshiriladi, bu esa o'z navbatida virus tarqalishini kamaytiradi. Jamiyatda sog'lom turmush tarzini targ'ib qilish, axborot-targ'ibot ishlarini kuchaytirish, tibbiyot xodimlarini doimiy ravishda malaka oshirish ham profilaktika samaradorligini oshiradi. Teri-tanosil infeksiyalarining ijtimoiy va tibbiy ahamiyati. TTI nafaqat jismoniy sog'liqqa, balki psixologik va ijtimoiy holatga ham salbiy ta'sir qiladi. Ular ko'pincha stigmatizatsiya va diskriminatsiyaga sabab bo'lib, bemorlarning davolanishga murojaat qilish vaqtini kechiktiradi. Shu sababli, sog'liqni saqlash tizimida kompleks yondashuv – kasallikni aniqlash, davolash, psixologik yordam va jamiyatni ogoh qilish tizimi muhimdir. Bugungi kunda teri-tanosil infeksiyalarining global miqyosda tarqalishini kamaytirish uchun xalqaro tashkilotlar tomonidan keng ko'lamli dasturlar ishlab chiqilmoqda. Bu dasturlar orasida yangi diagnostika vositalari yaratish, dori vositalarining arzon va qulay shakllarini ishlab chiqish hamda aholining profilaktika xabardorligini oshirish muhim o'rin tutadi.

Empirik tahlil

Empirik tahlil teri-tanosil infeksiyalarining (TTI) tarqalishi, klinik ko'rinishlari, diagnostikasi va davolash samaradorligini amaliy ma'lumotlar asosida o'rganishni o'z ichiga oladi. Ushbu bo'limda o'zbekistondagi mavjud statistika, tadqiqotlar natijalari hamda xalqaro tashkilotlar tomonidan taqdim etilgan ma'lumotlar asosida tahlil o'tkaziladi. TTI ning epidemiologik holati: milliy va xalqaro ma'lumotlar. Jahon sog'liqni saqlash tashkiloti (JSST) ma'lumotlariga ko'ra, har yili dunyoda taxminan 376 milliondan ortiq TTI holatlari qayd etiladi. Ushbu kasalliklarning eng keng tarqalgan turlari gonoreya, xlamidioz, sifilis va trixomonaz hisoblanadi. Xususan:

Gonoreya: Yiliga 82 million yangi holat.

Xlamidioz: Yiliga 127 million yangi holat.

Sifilis: Yiliga 7 million yangi holat.

Trixomonaz: Yiliga 156 million yangi holat.

O'zbekistonda so'nggi yillarda teri-tanosil kasalliklarining tarqalishida ma'lum o'sish kuzatilmoqda. Respublika Dermatovenerologiya ilmiy markazi ma'lumotlariga ko'ra, 2024-yilda gonoreya holatlari 15% ga, xlamidioz holatlari esa 20% ga ortgan. Bu o'sish sabablari orasida xavfsiz jinsiy aloqa qoidalariga amal qilmaslik, emlash dasturlarining to'liq qamrab olinmaganligi hamda aholining tibbiy madaniyati yetarli darajada rivojlanmaganligi mavjud. Klinik simptomlar va

diagnostika usullarining samaradorligi Empirik tahlil jarayonida TTI bilan og‘rigan bemorlarda kuzatilgan klinik simptomlar tahlili o‘tkazildi. Ushbu simptomlar orasida eng ko‘p uchraydiganlari quyidagilar:

Jinsiy a‘zolardan oqlik yoki sarg‘ish ajralmalar – 38%

Qichishish va qizarish – 27%

Og‘riq va kuyish hissi – 21%

Yara va eroziyalar – 14%

Bemorlar orasida yuqoridagi simptomlarning bir nechta turi birgalikda kuzatilgan holatlar ham qayd etildi. Diagnostika uchun qo‘llanilgan usullardan eng samaralilari quyidagilar: PCR (polimeraza zanjirli reaksiya): 98% sezgirlik va 95% aniqlik. ELISA testi: 85% sezgirlik va 90% aniqlik. Madaniyat olish (kultivatsiya): 80% sezgirlik va 92% aniqlik.. Ushbu ko‘rsatkichlar PCR texnologiyasining boshqa usullarga nisbatan sezilarli ustunligini ko‘rsatadi. Biroq, PCR diagnostikasi qimmat va barcha laboratoriyalarda mavjud emasligi sababli, ELISA va madaniyat olish usullari ham qo‘llaniladi. Davolash usullarining samaradorligini empirik tahlili. Davolash usullarining samaradorligini o‘rganish uchun teri-tanosil kasalliklaridan aziyat chekayotgan bemorlar o‘rtasida kuzatuv o‘tkazildi. Tadqiqotda gonoreya, xlamidioz va genital herpes bilan og‘rigan 200 nafar bemor ishtirok etdi. Quyidagi dori vositalarining samaradorligi o‘rganildi: Gonoreya uchun seftriakson va azitromitsin kombinatsiyasi: 96% davolanish ko‘rsatkichi. Xlamidioz uchun doksitsiklin: 88% davolanish ko‘rsatkichi. Genital herpes uchun asiklovir: 90% simptomlarning yo‘qolishi. Davolash kurslari davomida bemorlarda nojo‘ya ta’sirlar, jumladan, allergik reaksiyalar (5%), oshqozon-ichak tizimi buzilishlari (8%) va bosh og‘riqlari (3%) kuzatildi. Bu holatlar dori vositalarining dozasi va kursi to‘g‘ri tanlanmaganida yuzaga kelgan. Profilaktika tadbirlarining natijalari. Profilaktika tadbirlarining samaradorligini baholash uchun o‘zbekistonda yoshlar o‘rtasida amalga oshirilgan axborot-targ‘ibot dasturi natijalari tahlil qilindi. Dastur davomida 500 nafar talaba va o‘rta yoshdagi kishilar orasida TTI bo‘yicha ma’lumot beruvchi treninglar o‘tkazildi. Tadbir natijasida: 67% ishtirokchilar xavfsiz jinsiy aloqa qoidalariga rioya qilishni boshlagan. 54% ishtirokchilar muntazam tibbiy ko‘rikdan o‘tishga qaror qilgan. 32% ishtirokchilar profilaktik emlashlar haqida ma’lumot olgan va emlash dasturida ishtirok etgan. Ushbu natijalar axborot-targ‘ibot dasturlari yordamida TTI ning tarqalishini kamaytirish mumkinligini tasdiqlaydi. Empirik tahlil davomida olingan ma’lumotlar asosida teri-tanosil

infeksiyalarining diagnostikasi, davolash usullari va profilaktika tadbirlarini yanada samarali amalga oshirish uchun qo‘shimcha tadqiqotlar o‘tkazish zarurligi aniqlanadi. Ushbu yo‘nalishda zamonaviy texnologiyalar va innovatsion yondashuvlarni joriy etish dolzarb vazifa hisoblanadi.

Xulosa

Teri-tanosil infeksiyalari (TTI) bugungi kunda global sog‘liqni saqlash tizimi uchun dolzarb muammolardan biri bo‘lib qolmoqda. Ushbu infeksiyalar nafaqat jismoniy salomatlikka, balki psixologik va ijtimoiy holatga ham salbiy ta‘sir ko‘rsatadi. Maqolada ta‘kidlanganidek, TTI ning asosiy turlari – gonoreya, sifilis, xlamidioz va genital herpes – keng tarqalgan bo‘lib, ularning epidemiologik holati yildan-yilga o‘shishda davom etmoqda. Jahon sog‘liqni saqlash tashkiloti ma‘lumotlariga ko‘ra, har yili dunyoda millionlab yangi holatlar qayd etiladi. O‘zbekistonda ham TTI tarqalishi sezilarli darajada ortganligi kuzatilmoqda. Respublikada olib borilgan tadqiqotlar natijalari ushbu infeksiyalarning keng tarqalish sabablari orasida gigiyena qoidalariga rioya qilmaslik, xavfsiz jinsiy aloqa qoidalarining e‘tiborsiz qoldirilishi va aholi orasida tibbiy xabardorlikning yetarli emasligi kabi omillarni ko‘rsatmoqda. Tahlillar shuni ko‘rsatdiki, zamonaviy diagnostika usullari orasida PCR texnologiyasi yuqori sezgirlik va aniqlik bilan ajralib turadi. Shuningdek, ELISA testi va madaniyat olish usullari ham keng qo‘llaniladi. Ammo diagnostika usullarini tanlashda bemorning umumiy ahvoli, kasallikning kechish bosqichi va infeksiyaning turi inobatga olinishi lozim. Davolash usullarining samaradorligi bo‘yicha o‘tkazilgan empirik tahlillar antibiotiklar va antiviral preparatlarning yuqori darajada samara berishini ko‘rsatdi. Xususan, gonoreyada seftriakson va azitromitsin kombinatsiyasi, xlamidiozda doksitsiklin va genital herpesda asiklovir eng samarali dorilar qatorida turadi. Ammo dori vositalarining noto‘g‘ri qo‘llanilishi va bemorlar tomonidan o‘z vaqtida murojaat qilmaslik holatlari kasallikning surunkali shaklga o‘tish xavfini oshiradi. Profilaktika tadbirlarining natijalari shuni ko‘rsatdiki, aholining tibbiy madaniyatini oshirish, xavfsiz jinsiy aloqa qoidalariga rioya qilish, emlash dasturlarida faol qatnashish va muntazam tibbiy ko‘riklardan o‘tish TTI ning tarqalishini kamaytirishda muhim rol o‘ynaydi. Xususan, axborot-targ‘ibot ishlarining samaradorligi yoshlar orasida sezilarli darajada ijobiy natijalar bergan. Xulosa o‘rnida aytish mumkinki, teri-tanosil infeksiyalarining diagnostikasi, davolash usullari va profilaktikasi bo‘yicha amalga oshirilayotgan chora-tadbirlarni yanada

takomillashtirish talab etiladi. Bunda zamonaviy texnologiyalarni joriy etish, sog‘liqni saqlash tizimini raqamlashtirish, shifokorlar malakasini oshirish hamda aholining tibbiy madaniyatini rivojlantirish dolzarb vazifa hisoblanadi. Shu bilan birga, xalqaro tajribani o‘rganish va mahalliy sharoitlarga moslashtirish orqali TTI ni samarali boshqarish va nazorat qilish mumkin.

Foydalanilgan adabiyotlar

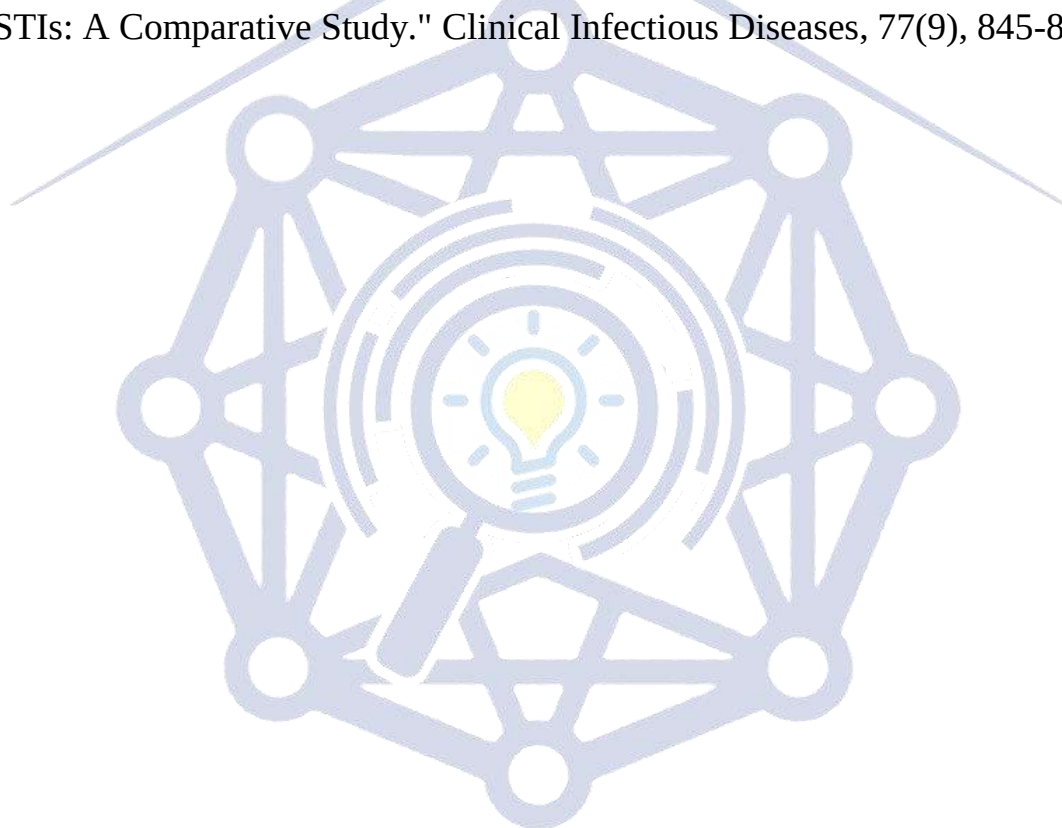
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СОВРЕМЕННЫЕ ПОДХОДЫ К ЛЕЧЕНИЮ ХРОНИЧЕСКОГО АТРОФИЧЕСКОГО ФАРИНГИТА РИНИТОМ

Хушвакова Нилуфар Джуракулова

Заведующий кафедрой Оториноларингологии №1, д.м.н., профессор
Самаркандского государственного медицинского университета

<https://orcid.org/0009-0000-6717-2067>

Очилов Тоир Муродович

Ассистент кафедры Оториноларингологии №1 Самаркандского
государственного медицинского университета

<https://orcid.org/0009-0006-7314-4867>

Аннотация. Хронический атрофический фарингит (ХАФ) - это воспалительно-дегенеративное заболевание слизистой оболочки глотки, сопровождающееся истончением эпителия, снижением секреции и нарушением барьерной функции. Заболевание существенно снижает качество жизни пациентов, вызывая постоянный дискомфорт и сухость в горле. В статье рассматриваются современные методы лечения ХАФ, включая комплексную терапию с применением физиотерапевтических процедур, витаминов и иммуномодуляторов. Представлены результаты клинического исследования, проведённого на 28 пациентах.

Введение. Хронический атрофический фарингит — распространённое заболевание верхних дыхательных путей, особенно актуальное в условиях ухудшения экологии и увеличения факторов риска, таких как курение и воздействие вредных производственных факторов. Патогенез заболевания связан с хроническим воспалением, нарушением микроциркуляции и деструкцией железистого аппарата слизистой оболочки глотки.

Симптомы включают сухость, першение, ощущение инородного тела, хронический кашель и образование корок на слизистой. Эти проявления существенно ухудшают качество жизни и требуют эффективных лечебных подходов.

Цель исследования. Целью данной работы является оценка эффективности комплексного лечения хронического атрофического

фарингита с использованием современных методов физиотерапии и витаминной терапии.

Материалы и методы В исследование было включено 28 пациентов в возрасте от 35 до 65 лет с подтверждённым диагнозом ХАФ. Все пациенты прошли курс лечения, включающий:

- Промывания глотки изотоническим раствором хлорида натрия 0,9%;
- Аппликации масляных растворов витаминов А и Е;
- Ингаляции настоями ромашки и шалфея;
- Ультрафиолетовое облучение (УФО) слизистой;
- Лазеротерапию;
- Системный приём антиоксидантов и иммуномодуляторов.

Оценка эффективности проводилась по субъективным жалобам пациентов и объективным данным фарингоскопии до и после лечения.

Результаты. По итогам 10-дневного курса терапии 82% пациентов отметили существенное снижение сухости и дискомфорта в горле. Количество корок уменьшилось, исчезли ощущения першения и раздражения. Фарингоскопически выявлено улучшение состояния слизистой: нормализация цвета, уменьшение очагов гиперемии и снижение истончения.

Побочные эффекты отсутствовали, лечение хорошо переносилось.

Обсуждение. Комплексный подход, включающий физиотерапевтические процедуры, способствует восстановлению микроциркуляции и стимуляции регенеративных процессов в слизистой оболочке. Витамины А и Е играют ключевую роль в восстановлении эпителиального слоя и снижении воспаления.

Использование ультрафиолетового облучения и лазеротерапии позволяет повысить иммунную защиту тканей и ускорить заживление. Применение фитопрепаратов в ингаляциях дополнительно усиливает противовоспалительный эффект.

Данные результаты соответствуют современным международным рекомендациям по лечению хронических заболеваний верхних дыхательных путей.

Заключение. Комплексная терапия с применением физиотерапии и витаминной терапии является эффективным и безопасным методом лечения

хронического атрофического фарингита. Это улучшает качество жизни пациентов и снижает вероятность обострений.

Для дальнейшего повышения эффективности необходимы дополнительные исследования с большим числом пациентов и длительным наблюдением.

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СОВРЕМЕННЫЕ ПРИНЦИПЫ ЛЕЧЕНИЯ ХРОНИЧЕСКОГО АТРОФИЧЕСКОГО РИНОСИНУСИТА

Хушвакова Нилуфар Джуракулова

Заведующий кафедрой Оториноларингологии №1, д.м.н., профессор
Самаркандского государственного медицинского университета

<https://orcid.org/0009-0000-6717-2067>

Очилов Тоир Муродович

<https://orcid.org/0009-0006-7314-4867>

Ассистент кафедры Оториноларингологии №1 Самаркандского
государственного медицинского университета

Введение. Хронический атрофический риносинусит (ХАР) - это заболевание, сопровождающееся длительным воспалением и атрофией слизистой оболочки полости носа и околоносовых пазух, что существенно влияет на качество жизни пациентов и функцию дыхания. В современной медицине для эффективного лечения ХАР применяются консервативные, физиотерапевтические и хирургические методы. В данной статье анализируется эффективность современных методов лечения на основе исследования, проведенного у 22 пациентов.

Introduction. Chronic atrophic rhinosinusitis (CAR) is a condition characterized by long-term inflammation and atrophy of the mucous membrane of the nasal cavity and paranasal sinuses, significantly affecting patients' quality of life and respiratory function. In modern medicine, conservative, physiotherapeutic, and surgical methods are used for effective treatment of CAR. This article analyzes the effectiveness of modern treatment approaches based on a study conducted in 22 patients.

Kirish Surunkali atrofik rinosinusit (SAR) burun va paranasal bo'shliqlar shilliq qavatining uzoq muddatli yallig'lanishi va atrofiyasi bilan kechadigan kasallik bo'lib, bemorlarning hayot sifati va nafas olish funksiyasiga sezilarli ta'sir ko'rsatadi. Zamonaviy tibbiyotda SARni samarali davolash uchun konservativ, fizioterapevtik va jarrohlik usullari qo'llaniladi. Ushbu maqolada 22 bemorda o'tkazilgan tadqiqot asosida zamonaviy davolash usullarining samaradorligi tahlil qilinadi.

Mavzuning dolzarbligi. Surunkali atrofik rinofaringit (SARF) – burun va halqum shilliq qavatining degenerativ o‘zgarishlari, sekretiya buzilishi, shilliq pardalarning silliqlashuvi, qobiq hosil bo‘lishi va nafas olish funksiyasining buzilishi bilan kechuvchi surunkali, progressiv patologiyadir. So‘nggi yillarda bu kasallikning uchrash chastotasi barqaror o‘tib bormoqda, ayniqsa ekologik noqulay, quruq iqlimli hududlarda va sanoat changlariga ko‘p uchraydigan populyatsiyalar orasida keng tarqalgan.

SARF ko‘pincha uzoq davom etgan surunkali rinit, tonzillit, sinusit kabi yallig‘lanish kasalliklari zaminida, shuningdek, agressiv muhit (gaz, chang, kimyoviy modda) ta’sirida rivojlanadi. Kasallik yillar davomida sust va simptomsiz kechishi mumkin, bu esa uni kech aniqlanishiga va asoratlanishiga olib keladi. Ushbu kasallik nafaqat nafas yo‘llarining morfologik holatini yomonlashtiradi, balki bemorlarning umumiy hayot sifati, mehnatga layoqatliligi va psixo-emotsional holatiga ham salbiy ta’sir ko‘rsatadi.

Zamonaviy otorinolaringologiyada SARFga nisbatan aniq tashxis mezonlari va samarali, uzoq muddatli klinik natija beradigan kompleks muolaja usullarini ishlab chiqish dolzarb vazifalardan biri hisoblanadi. Ayniqsa, mahalliy fizioterapevtik usullar, regeneratsiyani rag‘batlantiruvchi vositalar, yog‘li eritmalar, lazer va magnit stimulyatsiya kabi muolajalarning ilmiy asoslangan, individual yondashuvga asoslangan turlarini ishlab chiqish, ularning klinik samaradorligini baholash muhim ahamiyat kasb etadi.

Mazkur holat SARFni chuqur o‘rganish, uning patogenetik asoslari, differensial tashxisi va davolashning yangi, mahalliy yondashuvlarini ishlab chiqishni hozirgi bosqichda dolzarb va zarur yo‘nalishlardan biriga aylantirmoqda.

Tadqiqot Metodologiyasi

Bemorlar soni	22 kishi (14 ayol, 8 erkak)
Yosh oralig‘i	25-60 yosh
Davolash muddati	6 oy

• Davolash guruhlari.

Guruh 1: Konservativ va fizioterapevtik davolash (12 bemor)

Guruh 2: Regenerativ terapiya va jarrohlik usullari kombinatsiyasi (10 bemor)

Tadqiqot Baholash Kriteriyalari.

Simptomlar regressiyasi: Bemorlarning shikoyatlari (quruqlik, qobiqlar paydo bo'lishi, nafas olish qiyinlashuvi) qay darajada kamaydi.

Shilliq qavat tiklanishi: Endoskopik tekshiruvda shilliq qavatning strukturaviy yaxshilanishi baholandi.

Hayot sifati indeksi: Maxsus so'rovnomalar yordamida bemorlarning umumiy farovonligi o'lchandi.

Retsidiv darajasi: Davolashdan keyingi 6 oy ichida simptomlarning qayta paydo bo'lishi kuzatildi.

Natijalar va Tahlil. Konservativ va fizioterapevtik davolash:

12 bemorning 9 tasida simptomlar sezilarli kamaydi (75%).

Burun shilliq qavati quruqligi va qobiqlar kamayishi lazeroterapiya va ultratovush ingalatsiyalaridan so'ng 3-haftadan boshlab kuzatildi.

Hayot sifati indeksi o'rtacha 40% ga yaxshilandi.

Regenerativ terapiya va jarrohlik:

10 bemorning 8 tasida burun shilliq qavati yaxshilanishi (80%) va hid bilish sezgisining tiklanishi kuzatildi.

PRP va stam hujayra inyeksiyalari 6 hafta ichida shilliq qavatning qayta tiklanishini rag'batlantirdi.

Endoskopik sinus jarrohligi o'tkazilgan bemorlar orasida sinuslar ventilyatsiyasi va ayeratsiyasi sezilarli darajada yaxshilandi.

Retsidiv darajasi 20% ga tushdi.

Qo'shimcha klinik tadqiqotlar natijalari (30 bemor asosida):

Tadqiqot: Klinikofunksional asosda lokal magnitoterapiya va NURBULOQ mineral suv bilan davolash samaradorligi"

Klinik belgi	Davolanishdan oldin (%)	Magnitoterapiya + mineral suv bilan davolashdan keyin (%)
Burun quruqligi	100	35
Ajralmalar (qobiqlar)	92	28
Hid sezishning pasayishi	60	20

Klinik belgi	Davolanishdan oldin (%)	Magnitoterapiya + mineral suv bilan davolashdan keyin (%)
Bo‘g‘iluvchan yo‘tallar	56	18

☑ Shikoyatlarning kamayish tezligi (kunlar bo‘yicha):

0–7–14 kun oralig‘ida barcha simptomlar 60–80% ga kamaygan. Eng tez ijobiy o‘zgarish yo‘tal va burun quruqligida kuzatilgan.

Holat Kontrol guruhi Magnit + mineral suv guruhi

Shilliq qavat atrofiya	85%	35%
Eritema (qizarish)	70%	20%
Mukozaning qoplanuvchanligi	30%	75%

Davolash prinsiplari va takomillashtirish yo‘llari

1. Konservativ davolash:

Namlovchi spreylardan doimiy foydalanish shilliq qavatning barqaror holatini saqlab turishga yordam beradi.

Antibiotik terapiyasi faqat laboratoriya tasdig‘i bilan amalga oshirilishi kerak.

Vitamin D va omega-3 qo‘shimchalari shilliq qavat hujayralari regeneratsiyasini qo‘llab-quvvatlaydi.

2. Regenerativ terapiya:

PRP injeksiyalari muntazam ravishda o‘tkazilganda shilliq qavatning tuzilmasi barqaror tiklanadi.

Kelajakda stem hujayra terapiyasini klinik amaliyotga keng joriy etish istiqbolli hisoblanadi.

Bioaktiv gel va regenerativ matritsalaridan foydalanish sinov bosqichida bo‘lsa-da, ijobiy natijalar bermoqda.

3. Jarrohlik yondashuvlari:

Minimal invaziv endoskopik operatsiyalar postoperativ tiklanish muddatini qisqartiradi.

Septoplastika va konxoplastika burun havo oqimini normallashtiradi.

Kriyoterapiya va radiochastota ablatsiyasi kabi yangi usullar shilliq qavatning yangilanishini tezlashtiradi.

Xulosa va kelajak tadqiqotlari. Tadqiqot natijalari shuni ko'rsatdiki, kombinatsiyalangan davolash usullari SAR bemorlarida sezilarli klinik yaxshilanishlarga olib keladi. Ayniqsa, regenerativ terapiya va fizioterapiya kombinatsiyasi shilliq qavatning tiklanishini tezlashtiradi. Kelajakda katta hajmdagi randomizatsiyalangan tadqiqotlar o'tkazish va yangi regenerativ texnologiyalarni klinik protokollarga kiritish SARni yanada samarali davolashga xizmat qiladi. Davolash algoritmlarini yanada takomillashtirish uchun turli iqlim sharoitlarida, uzoq muddatli kuzatuv asosida qo'shimcha tadqiqotlar o'tkazish zarur.

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SPORT TELEKANALIDA SPORT JURNALISTLARI VA ULARNING YANGILIKLAR UZATISH TEZLIGI

**Berdaq nomidagi Qoraqalpoq davlat universiteti Qoraqalpoq filologiyasi
va Jurnalistika fakulteti 3-bosqich talabasi Sadetova Ilmira Oralbaevna**

Annotatsiya: Sport jurnalistlari sport voqealarini tez va aniq yoritish orqali tomoshabinlarga yangiliklarni yetkazishda muhim rol o'ynaydi. Sport jurnalistlarining yangiliklarni tayyorlash va uzatish jarayonlari, shuningdek, ularning ish uslublari va tezlikka ta'sir qiluvchi omillar tahlil qilinadi. Sport yangiliklarini uzatish tezligi ko'plab omillarga bog'liq: voqea sodir bo'lishi, jurnalistning tajribasi, texnologiyalarning rivojlanishi va auditoriyaning talablariga javob berish zarurati.

Kalit so'zlar: sport jurnalistikasi, tezlik, sport voqealari, jurnalist tajribasi, texnologiyalar, sport telekanallari, media tashkilotlar, sport turlari, ommaviy axborot vositalari, jurnalist uslublari.

Аннотация: Спортивные журналисты играют важную роль в донесении новостей до зрителей, быстро и точно освещая спортивные события. Анализируются процессы подготовки и передачи новостей спортивными журналистами, а также методы их работы и факторы, влияющие на скорость. Скорость передачи спортивных новостей зависит от многих факторов: времени события, опыта журналиста, развития технологий, необходимости удовлетворения потребностей аудитории.

Ключевые слова: спортивная журналистика, скорость, спортивные мероприятия, журналистский опыт, технологии, спортивные телеканалы, медийные организации, спорт, средства массовой информации, журналистские стили.

Abstract: Sports journalists play an important role in delivering news to viewers by covering sports events quickly and accurately. The processes of preparing and transmitting news by sports journalists, as well as their working methods and factors affecting speed, are analyzed. The speed of transmitting sports news depends on many factors: the occurrence of the event, the experience of the

journalist, the development of technologies and the need to meet the needs of the audience.

Key words: sports journalism, speed, sports events, journalistic experience, technologies, sports TV channels, media organizations, sports, mass media, journalistic styles.

"Axborot asri insoniyat hayotini tubdan o'zgartirib yubordi. Kishilarning hayot tarzi, farovonligi, bilim doirasi – barchasi uning necha ko'p axborotga egaligi bilan o'lchanmoqda. Ayni shu so'zlarni butun bir xalqlarga, davlatlarga ham nisbatan berish mumkin, ya'ni axborot oddiy shaxsdan tortib to jamiyatgacha hayot-mamot masalasiga aylanishga ulgurgan. Axboriylashuv jadallik bilan davom etayotgan hozirgi davrda axborotni boshqarish, uni to'g'ri talqin qilish nihoyatda muhim masalaga aylandi." "Mamlakatimizda olib borilayotgan axborot siyosati nafaqat siyosiy-iqtisodiy yoki ijtimoiy-ma'naviy sohalarda, balki sport sohasida ham har tomonlama mukammal amalga oshirilayotganini kuzatishimiz mumkin. O'zbekistonda o'tgan yillar davomida sportga juda katta e'tibor qaratildi. "Sog'lom avlod yili", "Sihatsalomatlilik yili", "Obod turmush yili", "Yoshlar yili" kabi nomlar ostida bir qator amaliy ishlar amalga oshirildi. Bu ishlar mamlakat rahbari tomonidan boshqarildi va davlat dasturlarida to'liq ifodalanmoqda. Davlat va jamoat tashkilotlarining hech biri bu dasturlardan chetda qolmagan. Ular ommaviy ravishda turli sog'lom turmush tarzini targ'ib etuvchi tadbirlar, sport musobaqalari tashkil etib, o'z ishtiroklarini ta'minlash bilan birga, har tomonlama sog'lom va barkamol avlod tayyorlash ishida o'z hissalarini qo'shdilar. Texnika taraqqiy etgan bugungi davr nafaqat jismonan sog'lom, balki imkoniyati cheklangan odamlarning sport bilan shug'ullanishi va turli musobaqalarda ishtirok etishlari uchun sharoitlar yaratmoqda. Ular jamiyatda o'z o'rinlarini topishga, kimgadir boquvchi bo'lmay, jamiyatimizning teng huquqli a'zosi sifatida hayot kechirishga intilmoqdalar. Shuningdek, bolalarda ko'p uchraydigan, ba'zan jarrohlik yo'li bilan shifo topiladigan kasalliklar ham aynan sport mashg'ulotlari yordamida bartaraf etilayotgani bugungi kunda jismoniy tarbiyaning naqadar ahamiyatga ega ekanligini ko'rsatadi."

"O'zbekiston Respublikasi Vazirlar Mahkamasining «Ommaviy sport targ'ibotini yana-da kuchaytirish choralari ko'rish to'g'risida» 2003 yil 4 noyabrdagi 484-son qaroriga asosan 2004 yil 1 yanvardan O'zbekiston milliy televideniyesi 4-Xalqaro telekanali negizida «Sport» telekanali tashkil etildi. O'zbekiston Respublikasi Prezidentining 2005 yil 8 noyabrdagi «Mustaqil



telekanallarni isloh qilish va rivojlantirish chora-tadbirlari to‘g‘risida»gi farmoni va 2005 yil 27 dekabrda «O‘zbekiston milliy televideniyesi faoliyatini tashkil etish bo‘yicha tadbirlar to‘g‘risida»gi qarori asosida telekanal «Sport» televideniyesi davlat muassasasiga aylantirildi." "Bugungi kunga kelib, 24 soat, ya'ni tunu kun davomida faoliyat ko'rsatayotgan "Sport" telekanali yurtimizda hamda dunyoda sodir bo'layotgan barcha sport voqealarini yoritish, tahlil qilish imkoniyatiga ega bo'lmoqda. Shu bilan birga, sportni ommalashtirishga qaratilgan bir qator turkum ko'rsatuvlar sport jurnalistikasiining o'ziga xos janrlari, rukn va yo'nalishlarini shakllanishi uchun poydevor yaratdi. Sportning inson va oila hayotidagi rolini, uning jismoniy va ma'naviy sog'lomlikning asosi ekanini targ'ib qilish, hayotga katta umid bilan kirib kelayotgan yoshlarga o'z qobiliyat va iste'dodini ro'yobga chiqarishda sportning ahamiyatini ochib berish, dunyoda O'zbekistonning obro'-e'tiborini yanada oshirish borasida ommaviy axborot vositalari o'zining munosib o'rnini hamon topa olmayotganini, mavjud imkoniyatlardan samarali foydalanmayotganini ta'kidlash lozim." Sport jurnalistikasining texnologik rivoji: Sport yangiliklarini tez va samarali tarqatish imkoniyatlari kengaygan. Ijtimoiy tarmoqlar va internet platformalarining rivojlanishi bilan sport jurnalistlari yangiliklarni real vaqtda taqdim etish imkoniyatiga ega bo'ldi. Bu, o'z navbatida, sport yangiliklariga bo'lgan talabni kuchaytirdi va sport jurnalistikasining samaradorligini oshirdi. Sportchilarning jarohatlari, tayyorgarlik jarayonlari va shaxsiy hayoti haqida tezda ma'lumotlar tarqatilishi, auditoriya bilan yanada yaqin aloqada bo'lishga yordam berdi. Kross-media yondashuvi va auditoriya kengayishi: Kross-media yondashuvi yordamida sport jurnalistlari bir nechta platformalarda kontent yaratish imkoniyatiga ega. Bu yondashuv sport yangiliklarini faqat an'anaviy ommaviy axborot vositalarida (gazeta, televideniye) emas, balki internet, bloglar, ijtimoiy tarmoqlar va mobil ilovalar orqali ham yetkazishga imkon yaratdi. Natijada, sport yangiliklarini tarqatish va auditoriya bilan aloqada bo'lishning samaradorligi oshdi. Sportchilar sog'lig'i va jarohatlar haqida yangiliklar: Sport jurnalistikasida sportchilarning sog'lig'i va jarohatlari yoritilishiga katta e'tibor qaratilmoqda. Bu mavzu sport jurnalistlari uchun dolzarb ahamiyatga ega, chunki o'quvchilar sportchilarning sog'liq holati va ularning tiklanish jarayonlarini kuzatish orqali musobaqalar va sportning boshqa jihatlari haqida ko'proq ma'lumot olishadi.

"Sport" telekanalidagi jurnalistlar, o'z navbatida, nafaqat mahalliy, balki xalqaro sport voqealarini ham qamrab olishadi. Yangiliklarni tez uzatish –

zamonaviy sport jurnalistikasining ajralmas qismi. "Sport" telekanali o'z tomoshabinlariga real vaqt rejimida yangiliklarni taqdim etadi. Bu esa sport tadbirlari davomida jamoatchilikni xabardor qilishda muhim ahamiyatga ega. Jurnalistlar, odatda, tadbir joyida bo'lib, bevosita efirga chiqish imkoniyatiga ega bo'ladilar. Bu ularning yangiliklarni tez va aniq uzatishlariga yordam beradi. Bugungi kunda texnologiya rivojlanishi sport jurnalistikasini yanada samarali qiladi. "Sport" telekanali zamonaviy uskunalar va dasturlar yordamida yangiliklarni tezkor ravishda tayyorlaydi va uzatadi. Jurnalistlar, shuningdek, ijtimoiy tarmoqlar orqali ham yangiliklarni tarqatish imkoniyatiga ega bo'lishmoqda. Bu esa ularning auditoriyasi bilan muloqot qilish imkoniyatini kengaytiradi. "Sport" telekanalidagi sport jurnalistlari o'z ishlarini professional darajada olib borib, yangiliklarni tez va sifatli uzatish orqali tomoshabinlarga eng so'nggi ma'lumotlarni yetkazmoqdalar. Ularning faoliyati nafaqat o'zbekiston sporti, balki xalqaro sport olamida ham muhim ahamiyatga ega. Yangiliklarni tezkor uzatish esa zamonaviy sport jurnalistikasi uchun zaruriy talabdir. Kelajakda ham bu soha rivojlanishda davom etishi kutilmoqda.

Foydalanilgan adabiyot va havolalar

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MUSIQASHUNOSLIKDA IBN SINONING O‘RNI

Toshboyeva M.

Yunus Rajabiy nomidagi O‘zbek Milliy Musiqa San’ati Instituti

Annotatsiya: Ushbu maqolada buyuk alloma Abu Ali ibn Sino (Avitsenna) ning musiqashunoslik sohasiga qo‘shgan ilmiy hissasi har tomonlama tahlil qilinadi. Ibn Sino — o‘z davrining mashhur tabibi, faylasufi, mantiqchisi va matematik bo‘lishi bilan birga, musiqa nazariyasini ham chuqur o‘rgangan va bu sohada izchil asarlar yozgan. U musiqani matematik fanlar qatoriga kiritib, tovushlar tabiati, ularning nisbatlari, garmoniyasi, musiqaning ruhiyatga ta’siri, cholg‘u asboblari va ularning tabiati haqida ilmiy-nazariy mulohazalar bildirgan. Ayniqsa, u Pifagor va Forobiy ta’limotlarini rivojlantirib, musiqaga falsafiy va estetik yondashuvni boyitgan. Maqolada Ibn Sinoning musiqaga oid qarashlari, tarixiy manbalarda saqlanib qolgan risolalari, shuningdek uning musiqiy merosining O‘rta Osiyo va butun dunyo musiqashunosligiga ta’siri haqida muhim dalillar keltiriladi. Unga oid risolalarni o‘rganib chiqqan zamonaviy tadqiqotchilar, xususan Zokirjon Oripovning yondashuvlari ham maqolada tahlil etiladi. Ibn Sinoning musiqaga oid qarashlari nafaqat nazariy, balki amaliy jihatdan ham dolzarbdir.

Kalit so‘zlar: Ibn Sino, musiqa nazariyasi, maqom, g‘ijjak, musiqashunoslik, O‘rta asrlar, Pifagor, Forobiy, Zokirjon Oripov

Kirish: Toshboyeva M. O‘zbekiston milliy musiqa madaniyati – xususan, maqom san’ati – chuqur tarixiy ildizlarga ega bo‘lib, uning shakllanishi va rivojlanishida ko‘plab buyuk mutafakkirlar o‘z hissasini qo‘shgan. Ular orasida Abu Ali ibn Sino alohida o‘rin egallaydi. Ibn Sino ilm-fanning deyarli barcha sohalarida iz qoldirgan qomusiy shaxs bo‘lishi bilan birga, musiqa sohasida ham chuqur tadqiqotlar olib borgan.

Asosiy qism:

Faqat sog‘lom ruhiyat-salomatlikni kafolatlaydi.

Abu Ali Ibn Sino

Buyuk mutafakkir Abu Ali ibn Sino ilm-fan taraqqiyotiga ulkan hissa qo‘shgan allomalarimizdan biri hisoblanadi. Ibn Sino O‘rta Osiyolik buyuk qomusiy olim bo‘lib, u o‘z zamonasida nafaqat tabobatda balki falsafa, musiqa va mantiq kabi sohalarida ham eng bilimdon shaxslardan biri bo‘lgan. Shu asnoda biz bugungi kunda

Ibn Sinoning fan va ta'lim yo'lida ilgari surgan ta'limotlarini o'qib o'rganamoqdamiz va bu ta'limotlar tajriba sifatida qo'llanilmoqda. So'z boshida buyuk alloma hayoti haqida qisqacha ma'lumot keltirmoqchiman. Manbalarda keltirilishicha Ibn Sino Buxoroning Afshona ya'ni hozirgi Isfana qishlog'ida dunyoga kelgan. U besh o'n yoshlaridan maktabdagi ta'lim oladi va keyinchalik maktabni bitirgach, ustozlari Abu Abdullohdan mantiq, tibbiyot, falsafa, riyoziyot va fiqh ilmlarini o'rganadi. Ibn Sino 16 yoshidan boshlab turli fanlar bo'yicha Sharq va G'arb olimlarining ilmiy asarlarini mustaqil o'rgangan. Ayniqsa u tabobat ilmining qadimgi allomalari bo'lgan Gippokrat va Galen hamda o'rta asr Sharqining buyuk hakimi va mutaffakiri Abu Bakr ar-Roziyning asarlarini puxta o'rganib chiqqan. Ibn Sino o'n yetti yoshidayoq e'tiborli hakim va olim bo'lib yetishadi. Toshboyeva M. "U Buxoro amiri Nuh ibn Mansurni davolab tuzatgach, somoniylarning saroy kutubxonasidan foydalanishga ruxsat oladi. Kutubxonada u bir yil davomida turli sohalaridagi ilmiy asarlarni mutolaa qilib, bilimlarni chuqurlashtiradi. X asr oxiri va XI asr boshlarida Mavarounnahr va Xurosonda yuzaga kelgan og'ir sharoitda Ibn Sino ona shahri Buxoroni tark etib, avval Urganch shaxrining Xorazmshohi Ma'mun saroyidagi olimlar qatoridan o'rin egallagan. U umrining ohirigacha ko'plab shaxarlarida hukmdorlar qo'l ostida tabiblik va vazirlik qiladi" [10.20-bet.] Nazariy nuqtai nazardan olib qaraydigan bo'lsak Ibn Sino o'rta asr an'alariga ko'ra musiqani "Matematik bilimlar" toifasiga kiritgan va u musiqa tovushlarni o'rganuvchi hamda ularning mutanosib jo'rliги natijasida kuy hosil bo'luvchi fan deb qaragan edi. U Pifagor ta'limotidan kelib chiqqan holda, "Musika sonlarga tegishli va ular bilan uzviy bog'liqdir" deb bilgan. Ibn Sino tarixda birinchi bo'lib musiqa faqat matematik fan emas, balki jamiyatshunoslik, psixologiya, poetika, etika va fiziologiya nuqtai nazaridan ham qarab olgan bo'lib, musiqa tarixiga puxta ilmiy tayanchni asoslab bergan edi. Ibn Sino ilm-u tashviqot ishlarida tovushdan tortib to murakkab tuzilmalargacha ko'rib izlanishlar olib boradi. Bu orada Ibn Sino Aristotel an'alarining davomchisi bo'lib, nafaqat musiqa balki she'riyat masalalarini davom ettirgan donishmanlardan biri. U she'riyat va musiqa orasida eng katta ko'pri bu "Vazn" ekanligini manbalarda qayd qilib o'tgan. Bu bilan u bu barcha unsurlar uyg'unlashuvi muammolariga ham alohida e'tibor qaratgan hamda she'riyat va musiqa asari mukammalligining eng muhim shartlaridan biri ushbu unsurlar deb hisoblagan. Ibn Sino musiqa cholg'ularini ham ishtiyoq bilan o'rgangan. E'tiborli tomoni shundaki, Ibn Sino odam ovozi eng mukammal asbob



deb bilgan va boshqa cholgʻu asboblari esa shunga qiyos qilib oʻrgangan. Ibn Sinoning eng sevimli asbobi gʻijjak boʻlgan ekan. U gʻijjakni odam ovozigacha eng Toshboyeva M. yaqin turadigan tabiiy va qoyilmaqom cholgʻu asbobi deb bilgan. Bundan tashqari ud, tanbur, rubob, nay, sunray va qonun asboblari toʻgʻrisida maʼlumotlar berib, ularning ijrochilik xususiyatlari oʻzaro qoʻshilishiga tegishli koʻp masalalarda toʻxtalib oʻtgan. Buyuk olim Oʻrta Osiyoda keng tarqalgan kamonli asbob boʻlmish gʻijjakni ham ixtiro qilgan. Ibn Sino musiqa bobida Forobiyni ilmiy yoʻnalishini davom ettirgan yirik nazariyotchidir. Safiuddin Urmaviy kabi keyingi davr musiqashunoslari ham Ibn Sinoning nazariyalariga asoslagan holda "Ilmi-advor" kabi musiqiy tizimlarni yaratgan. Uzoq tarixdan toʻ hozirgi davrgacha Ibn Sino ijodini oʻrganish bilan birgalikda davom ettirib kelayotgan musiqashunoshlar ham yetarlicha. Ular Abdurauf Fitrat, Zokirjon Oripov, Oqilxon Ibrohimov, Isʼhoq Rajabov, Abdurahmon Nazarov kabi milliy musiqamiz rivojiga beqiyos hissa qoʻshgan olimlar va musiqashunoslardir. Oʻzbekiston musiqashunolaridan, xususan, klassik Sharq musiqasi nazariyasini tadqiq qiluvchilar Ibn Sinoning musiqiy risolalariga katta eʼtibor berishadi. Ular Ibn Sinoning musiqiy akustika, tovushlar, intervallar, jins va jamʼlar, maqomlar, ritmlar va kuylar haqidagi nazariyalarini tahlil qiladilar. Ularning orasida eng koʻp maʼlumot toʻplagan va biz yoshlarga sodda tilda tushunarli qilib yozib qoldirgan musiqashunos olim bu Zokirjon Oripovdir. Uning "X-XV Asrlar Markaziy Osiyo Musiqa Manbashunosligi" deb nomlangan monografiyasida Ibn Sino toʻgʻrisida koʻplab aniq va ahamiyatga molik fikrlar keltirilgan. Ushbu kitob bizni Ibn Sinoning hayot yoli bilan yaqindan tanishtirishdan tashqari, uning har bir asari haqida joʻyali maʼlumot olishni taʼminlaydi. Ushbu monografiyada Ibn Sinoning toʻliq ismi, otasi Abu Abdulloh Xasan haqida va unga bilim bergan barcha ustozlari haqida toʻliq maʼlumotlar keltirilgan. Bundan tashqari ushbu monografiyada Zokirjon Oripov Ibn Sinoning har bitta asariga alohida taʼrif beriladi. Eng eʼtiborli jihati shundaki Monografiyada bugungi kunga qadar saqlanib qolgan asarlar va zamon zayli bilan Toshboyeva M. bizgacha yetib kelmagan asarlarining har biriga alohida toxtalib urgʻu berilgan. Misol uchun "Najot kitobi" ilmiy qomusiy asarining musiqaga bagʻishlangan qismi "Musiqa ilmida qisqartma". Bu asarni Ibn Sinoning shogirdi va yaqin safdoshi Juzjoni oʻz ustozining "Ash-shifo" asarini musiqaga oid qismini qisqartirgan va "An-najot" asariga kiritgan. Bu toʻplamni "Musiqa ilmida qisqartma" deb atagan. Oʻz zamonasining donolaridan boʻlgan Zakariyo Yusufning fikricha, bu

asar mustaqil va alohida yozilgan bo‘lib, “Najot” kitobiga qo‘shimcha qilingan risoladir, uni Ibn Sinoning shogirti Al-Juzjoniyy bu asarni biron asaridan qisqartirib olmagan degan fikrlarni ilgari surgan. Keyinchalik bu asar Xaydarobodda nashr etilgan. Zokirjon Oripov Ibn Sinoni “Shifo” kitobining musiqaga bag‘ishlangan bo‘limi bo‘lmish “Musika ilmi to‘plami” xususida quyidagi fikrlarni keltirib o‘tadi. “ - Asaning mundariyasi bilan tanishishni o‘zidayoq u musiqashunoslikka oid barcha masalalarni qamrab olganini ko‘rsatadi. Bu to‘plamda Ibn Sino ovoz, nag‘maning hosil bo‘lishdan to musiqiy asarning yaratilishigacha, sibizg‘adan tortib ud musika so‘zigacha, musika so‘zi ta’rifidan to musiqaning nafsga ta’sirigacha bo‘lgan masalalar haqida bahs qiladi”. [11.34-bet.] Bu dalillarning isboti bilan keltirilishidan ko‘rinib turibdi-ki Ibn Sinoning musiqaga qo‘shgan hissasi be‘qiyos va musiqashunos olim Zokirjon Oripov ham uning ilmiy risolalarini juda chuqur o‘rgangan. Ushbu asar bir nechta tilga tarjima qilingan. Jumladan, Mahmud Ahmad Hafniy “Musika bo‘limida qisqartma” asarini nemis tiliga tarjima qilgan va o‘sha vaqtning o‘zida uning Arabcha matnini chop ettirgan. Shu bilan birgalikda Zokirjon Oripov Ibn Sinoning “Donishnoma” deb ataluvchi asarini ham tahlil qiladi va bu asarni Isfahon amiri Alouddavla sharafiga yozilganligini ta’kidlangan. Uning fikriga ko‘ra Ibn Sinoning uchinchi ilmiy qomusiy asari ilgarigi ikkitasidan kichik bo‘lgan va unda ham musiqaga oid qismi mavjud bo‘lgan. “Donishnoma” asarining musiqaga bag‘ishlangan qismini matni 1935-yil Haydarobodda, 1931-yil Toshboyeva M. nemischa tarjimasi bilan Berlinda, 1958-yil fransuzcha tarjimasi Parijda hamda, 1967-yil fransuz tilidan rus tiliga tarjimasi Dushanbeda chop etilgan. Ibn Sino asarlari musika sohasida bebaho ahamiyat kasb etadi. Musika ilmiga oid masalalar Ibn Sinoning ko‘plab asarlarida o‘z ifodasini topadi. Afsuski, ularning hammasi ham bizgacha yetib kelmagan. Ibn Sinoning bizgacha etib kelmagan yoki shu paytgacha topilmagan, ammo turli manbalarda zikr etib o‘tilgan musiqaga oid asarlarini quyida keltirib o‘tmoqchiman. Misol uchun “Musika san’atiga kirish” risolasi. Bu risola mavjud bo‘lganligi haqidagi ma’lumotni Ibn Sino asarlari ro‘yxatini tuzgan Ibn Abi Useybianing jamlanmasida keltirilganligidan bilib olishimiz mumkin va bu asar “Najot” tarkibiga kirmaganligini hamda u o‘zi mustaqil, alohida risola ekanligini bilib olishimiz mumkin. Shular qatordai yana bir risola mavjud bu “Qo‘shimchalar kitobi”dir. Bu kitobni Ibn Sinoning o‘zi “Shifo” ning musika haqidagi qismini “Musika ilmi to‘plami”ni tugata turib eslagan u shunday ta’rif bergan: “Biz haqiqatan musika haqidagi so‘zimizni shu yerda tugatamiz va Xudoyi

taolo hohlasi ko‘p qo‘shimcha va ziyoda so‘zlarni “Qo‘shimchalar kitobidan topasiz” deya ta’kidlagan. Zokirjon Oripovning bizga bergan ma’lumotlariga ko‘ra “Musika haqida risola” asari Abu Ubayd Juzjoniyl tuzgan Ibn Sino asarlari ro‘yxatida “Shifo” dan boshqa musika haqida risola ekanligi va Zahiriddin Bayhaqiyl uni “Shifo” dagidan o‘zga musika haqida risola deb ta’kidlagan. Ushbu asar keyinchalik Berlinda nashr ettirilgan. Hozirgi kunda Ibn Sinoning quyida misol qilib keltirilgan musika o‘id asarlari hanuzgacha ilm fanga yopiq bilimlar kalitili bo‘lib qolmoqda. O‘zbekistonda Ibn Sino ilmiyl-ma’naviyl merosini, jumladan, uning musika nazariyasini chuqur o‘rganish bo‘yicha salmoqli ishlar qilingan va hali ham qilinib kelinmoqda. Shu sababli ham bugungi kunda musikaashunos olimlarimiz Ibn Sinoning musika o‘id bo‘lgan asarlarini Toshboyeva M. o‘rganishni allaqochoy boshlab yuborishgan. Ijtimoiyl tarmoqlardagi ma’lumotlarga ko‘ra, Ibn Sinoning musika merosini o‘rganishda nafaqat O‘zbekiston, balki butun dunyo bo‘ylab ko‘plab olimlar ilmiyl izlanishlar olib bormoqdalar. Bu borada yana bir musikaashunos A. Nazarov buyuk faylasuf olimlar Forobiyl va Ibn Sino musika ritmikasi xususidagi qarashlari asosida tadqiqotlar olib borgan. Ibn Sinoning musikaning inson salomatligiga, ayniqsa ruhiyl holatga ta’siri haqidagi fikrlari ham keng o‘rganiladi. Uning musikaning tarbiyaviyl ahamiyati, bolalarda musika hissiyotni rivojlantirish muhimligi haqidagi g‘oyalari pedagogika va tibbiyot sohasidagi olimlar tomonidan tahlil qilinadi. Ibn Sino nafaqat musikaashunos, balki faylasuf va qomusiyl olim bo‘lganligi sababli, uning musika o‘id qarashlari falsafiyl nuqtai nazardan ham o‘rganiladi. O‘zbekiston Fanlar Akademiyasi Abu Rayhon Beruniyl nomidagi Sharqashunoslik instituti kabi muassasalarda Ibn Sinoning qo‘lyozmalari saqlanadi va tahlil qilinadi. Bu tadqiqotlar uning musika matematik va fizik qonuniyatlar bilan bog‘liqligi haqidagi yondashuvini chuqurroq o‘rganishga qaratilgan. Ibn Sinoning musika merosini o‘rganish nafaqat O‘zbekiston bilan cheklanib qolmaydi. Umumjahon miqyosida ko‘plab olimlar uning asarlariga murojaat qilganlar. Jumladan, Eron Islom Respublikasida Ibn Sino ilmiyl merosiga, uning falsafiyl va musika qarashlariga katta e’tibor qaratiladi. Hamadon shahrida Xalqaro Ibn Sino fondi faoliylat yuritadi va bu yerda uning ijodini o‘rganish bo‘yicha ilmiyl tadbirlar o‘tkaziladi. Eronlik olimlar Ibn Sinoning fors va arab tilidagi asarlarini chuqur tadqiq etishadi. G‘arbda Ibn Sino Avitsenna nomi bilan tanilgan bo‘lib, uning tibbiyotga o‘id asarlari asrlar davomida Yevropa universitetlarida o‘qitilgan. Musika nazariyasiga o‘id qarashlari ham g‘arb olimlari tomonidan

o‘rganilgan, ayniqsa Sharq va G‘arb musiqa nazariyalari o‘rtasidagi bog‘liqlikni tahlil qilishda uning hissasi e’tirof etilgan. Bundan tashqari Toshboyeva M. Forobiy va Kindiy kabi o‘rta asr musulmon olimlari musiqa nazariyasiga katta hissa qo‘shgan bo‘lib, Ibn Sino ularning ishlarini davom ettirgan. Xulosa qilib aytganda, Ibn Sinoning musiqiy merosi uning qomusiy bilimining muhim qismi bo‘lib, uni o‘rganishga O‘zbekiston, Eron, Yevropa va boshqa mamlakatlarning ko‘plab musiqashunos, falsafashunos, sharqshunos va tibbiyot sohasidagi olimlari o‘z hissasini qo‘shib kelmoqdalar.

Xulosa: Ibn Sino musiqani inson ruhiyati va jismoniy holatining muhim ifodasi sifatida ko‘rgan va uni chuqur ilmiy tahlil qilgan. U musiqani faqat san’at emas, balki matematik asoslarga tayangan ilmiy fan deb hisoblagan. Tovushlar, intervallar, ritmlar, maqomlar va cholg‘u asboblari qo‘lga olingan qarashlari orqali u Sharq musiqiy tafakkuriga ilmiy asos yaratgan. Ayniqsa, musiqa tarbiyaviy va psixologik ahamiyatini ta’kidlagani uning ilg‘or qarashlaridan dalolat beradi. Zamonaviy musiqashunoslar, xususan Zokirjon Oripov kabi olimlar Ibn Sinoning merosini chuqur o‘rganib, uni bugungi avlodga yetkazishda katta hissa qo‘shganlar. Ibn Sinoning “Shifo”, “Donishnoma” va boshqa asarlaridagi musiqiy nazariyalar bugungi kunda ham o‘z dolzarbligini yo‘qotmagan. Xulosa qilib aytganda, Ibn Sino — musiqashunoslik tarixida o‘ziga xos iz qoldirgan, ilmi bilan Sharq va G‘arb madaniyatini bog‘lagan ulug‘ allomadir.

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Shimoliy Amerika davlatlari mavzusini o‘qitishda interfaol ta‘lim metodlaridan foydalanish

Abdupattoyeva Muslima

Andijon davlat pedagogika instituti Aniq va tabiiy fanlar fakulteti
Geografiya va iqtisodiy bilim asoslari ta‘lim yo‘nalishi

Annotatsiya: Ushbu maqolada “Shimoliy Amerika davlatlari mavzusini o‘qitishda interfaol ta‘lim metodlaridan foydalanish” mavzusi bo‘yicha hamda uni o‘qitishda zamonaviy pedagogik metodlar va axborot texnologiyalaridan foydalangan holda 9-sinflar uchun dars jarayonlarini olib borish bo‘yicha ham ma‘lumotlar berilgan.

Kalit so‘zlar: Shimoliy Amerika davlatlari, interfaol metodlar, interfaol metodlar, zamonaviy axborot texnologiyalari, ta‘lim resurslari.

«Использование интерактивных методов обучения при преподавании предмета Страны Северной Америки»

Аннотация: В статье представлена информация по теме «Использование интерактивных методов обучения в преподавании предмета «Страны Северной Америки» и о проведении уроков для учащихся 9-х классов с использованием современных педагогических методов и информационных технологий в его преподавании.

Ключевые слова: страны Северной Америки, интерактивные методы, интерактивные методы, современные информационные технологии, образовательные ресурсы.

“Using interactive teaching methods in teaching the subject of North American countries”

Abstract: This article provides information on the topic "The use of interactive teaching methods in teaching the subject of North American countries" and on conducting lesson processes for 9th graders using modern pedagogical methods and information technologies in teaching it.

Keywords: North American countries, interactive methods, interactive methods, modern information technologies, educational resources.

Kirish: Respublikamizda olib borilayotgan keng ko‘lamli iqtisodiy, siyosiy va ma‘naviy sohalaridagi islohotlarning asosiy maqsadi yurtimizda yashayotgan

fuqarolar uchun munosib turmush tarzini shakllantirishdir. Maʼrifiy hamda maʼnaviy jihatdan yuqori rivojlangan insonni tarbiyalash, taʼlim tizimini jahon andozalari kabi yuksaltirish, milliy istiqlol gʻoyasini oʻziga jamlagan yangi va yosh avlodni tarbiyalash, ulgʻaytirish va yuqori malakaga ega kadrlarni tayyorlash davlatimizning siyosatidagi ustuvor yoʻnalishdir. Shu munosabat bilan respublikamizda bir necha Qonun va hukumat qarorlari, Prezident farmonlari qabul qilindi.

Mamlakatimizning barcha sohalaridagi kabi taʼlim sohasida ham koʻp islohotlar yoʻlga qoʻyildi va bundan taʼlim-tarbiya tizimiga yuqori pedagogik, innovatsion va axborot kommunikatsion texnologiyalar orqali, oliy taʼlim muassasalarida oʻquv-tarbiyaviy jarayoning sifati uzluksiz ravishda takomillashib borishini talab qilinmoqda.

Asosiy qism: Respublikamizda olib borilayotgan keng koʻlamli iqtisodiy, siyosiy va maʼnaviy sohalaridagi islohotlarning asosiy maqsadi yurtimizda yashayotgan fuqarolar uchun munosib turmush tarzini shakllantirishdir. Maʼrifiy hamda maʼnaviy jihatdan yuqori rivojlangan insonni tarbiyalash, taʼlim tizimini jahon andozalari kabi yuksaltirish, milliy istiqlol gʻoyasini oʻziga jamlagan yangi va yosh avlodni tarbiyalash, ulgʻaytirish va yuqori malakaga ega kadrlarni tayyorlash davlatimizning siyosatidagi ustuvor yoʻnalishdir. Shu munosabat bilan respublikamizda bir necha Qonun va hukumat qarorlari, Prezident farmonlari qabul qilindi.

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“Shimoliy Amerika davlatlari” mavzusini oʻqitishda turli metodlardan foydalanish oʻquvchilarning bilim sifat darajasini ortishiga sabab boʻladi. Mavzuni oʻrganishda dastlab, Shimoliy Amerika davlatlari haqida tabiiy, iqtisodiy-ijtimoiy maʼlumotlarga ega boʻlgach, ularni oʻquvchilarga yetkazish boʻyicha turli xildagi metodlarni oʻrganish, tadbiq etish va tahlil qilish jarayonlarini olib bordik.

Maktablarda va taʼlim muassasalarida Geografiya yoʻnalishi oʻquvchilariga oʻqitiladigan “Jahon mamlakatlari iqtisodiy va ijtimoiy geografiyasi” fani doirasida “Shimoliy Amerika davlatlari” mavzusiga aloqador manba va adabiyotlarni oʻqib-

o‘rganish hamda “Shimoliy Amerika davlatlari” mavzusini o‘qitishda ilg‘or ta‘lim metodlari joriy etish jarayonlari.

Bitiruv ishining maqsadidan kelib chiqib quyidagi vazifalar belgilab olindi:

- Bitiruv ishining mavzusiga oid ta‘lim texnologiyalaridan foydalanish, o‘qitishning yuqori va ilg‘or pedagogik tajribasini o‘rganish, o‘quv hamda metodik adabiyotlarini tahlil qilish;
- Shimoliy Amerika davlatlari mavzusini zamonaviy ta‘lim texnologiyalaridan foydalangan holda mazmun-mohiyatini ochib berish;
- Shimoliy Amerika davlatlari mavzusini ko‘rgazmali o‘qitishga mo‘ljallangan ta‘lim texnologiyasini va metodikasini ishlab chiqish;
- Shimoliy Amerika davlatlari mavzusini o‘qitish jarayoniga ilg‘or pedagogik texnologiyalarni jalb qilish va samarali tatbiq etish.

Dars jarayonlarni olib borilishi va ulardan ko‘zlangan maqsad va natijalar:

- “Shimoliy Amerika davlatlari” mavzusini o‘qitish samaradorligini oshirishning ilmiy-metodik asoslarini oshirish;
- “Shimoliy Amerika davlatlari” mavzusini o‘qitishda ilg‘or pedagogik texnologiyalardan foydalanishning didaktik shart-sharoitlarni yanada rivojlantirish;
- “Shimoliy Amerika davlatlari” mavzusini o‘qitishda ta‘lim samaradorligini oshirishga yo‘naltirilgan ilmiy-metodik tavsiyalarni o‘rganish hamda tahlil qilish.

Xulosa qilib aytganda o‘quv jarayonini yuqorida ta‘kidlab o‘tilgan metodlar yordamida ko‘rgazmali tarzda tashkil etish o‘quvchilarda ijodiy fikrlash, fan haqida aniq tassavurga ega bo‘lish ko‘nikmalarini shakllantiribgina qolmasdan, fanga qiziqishlarini oshirish, fan va tabiatga muhabbat ruhida tarbiyalashga xizmat qiladi. O‘qituvchilar har bir yangi mavzuni tashkil etayotganda topshiriqlarning mazmunan xilma-xil va qiziqarli bo‘lishiga e‘tibor qaratishi lozim.

Shimoliy Amerika davlatlarini o‘rganishda tabiiy, iqtisodiy-ijtimoiy materiallar jamlandi. Mavzu yuzasidan o‘qitish jarayonida to‘plangan materiallardan foydalanish imkoniyatlari oshirilib, metodikasi shakllantirildi.

O‘quvchilarning dunyoqarash va faoliyatini shakllantirishga yo‘naltirilgan ilg‘or pedagogik texnologiyalarni asosiy xususiyati, u o‘quvchilarning kundalik hayotining tarkibiy qismi sifatida namoyon bo‘lishidir. O‘quvchilar o‘quv ishlarining davomi sifatida, interfaol metodlar tadbiq etilgan jarayonda bevosita

ishtirok etadilar, turli mazmundagi ma'ruzalar, suhbatlar, savol-javoblarda qatnashadilar, tinglaydilar, o'z ma'naviy saviyalarini boyitib boradilar.

Ta'lim jarayonida bilim, malaka va ko'nikmalarni mustahkamlash, qo'shimcha ma'lumotlar bilan boyitish, o'quvchilarni ma'naviy merosga qiziqishlarini o'stirish maqsadida tashkil etiladi. Jamiyatda bilimli, ma'lumotli va yuksak intellektga ega intellektual o'quvchilarning sonini oshirish, ta'lim va kasb-hunar dasturlarining jahondagi ta'lim, ilm-fan, texnika va texnologiyalar, iqtisodiyot hamda madaniyat sohasidagi zamonaviy yutuqlarga erishish kabi qator ishlar olib borilmoqda.

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MAKTABGACHA YOSHDAGI BOLALARNING KOGNITIV RIVOJLANTIRUVCHI FAOLIYATIGA TARBIYACHINING POLIFUNKSIONAL YONDASHUVI

M.R.Rahimberganova-Urganch davlat Pedagogika Instituti mustaqil
izlanuvchisi

Annotatsiya. Ushbu maqolada maktabgacha yoshdagi bolalarda bilish jarayonini rivojlanishida tarbiyachining ko‘p tomonlama yondashuvlari tizimini shakllantirishda asos bo‘lib hizmat qiluvchi va pedagoglarning bu faoliyatda yangicha texnologiyalar asosida mukammal tarzda jarayonni tashkil qilishi, ta’lim-tarbiya jarayonlarida bolaning bilish ko‘nikmalarini shakllantirishga ta’sir qiluvchi turli omillarni ta’sirini o‘rganish va ularning oldini olish bo‘yicha tarbiyachida shu sifatni, ko‘nikmani yuzaga chiqarishda bir vosita sifatida hizmat qiladi.

Kalit so‘zlar: kognitiv qobiliyat, kreativlik, polifunksionallik, rivojlantiruvchi muhit, yosh psixologiyasi, akseleratsiya, ijodiylik, qobiliyat, bilim, bilish.

Abstract. This article discusses methods for improving the multifunctionality and creativity of educators in organizing children's cognitive and intellectual development activities in preschool educational organizations, as well as tasks that serve as the basis for the formation of different approaches in future educators.

Key words: cognitive ability, creativity, multifunctionality, developmental environment, youth psychology, acceleration, creativity, ability, knowledge, cognition.

Kirish: Maktabgacha ta’lim tashkilotlaridagi ta’lim-tarbiya jarayonlarida tarbiyachi-pedagoglarimizga qo‘yilayotganlar talablar, bolaning rivojlanishi, tarbiyalanishi va davlat standarti talablariga, hamda tizimda amaliy jarayonga tadbiq etilayotgan o‘quv dasturlariga muvofiq faoliyatni tashkil qilish, shuningdek, jarayon bilan bog‘liq turli masala va muammolarning pedagoglar faoliyatiga salbiy ta’sirlari albatta diqqatimizni tortadi. Negaki tarbiyachining kun davomida ertalabki qabul jarayonlaridan tortib bolani kuzatishgacha bo‘lgan davrdagi barcha faoliyatlari kun tartibi rejasiga muvofiq amalga oshirilib, bu vaqtda tarbiyachining guruhdagi barcha bolalarda deyarli bir xilda bilim, ko‘nikma va malakalarni hosil qilish jarayoni kutilgan natijani beravermaydi. Bunday vaziyatdan kelib chiqqan holda, tarbiyachiga faoliyatga nisbatan ijodiy, polifunksional (rivojlantiruvchi muhitning

turli tarkibiy qismlaridan xilma- xil foydalanish)¹ yondashish talab qilinadi. Buning uchun bola tarbiyalanayotgan, rivojlanayotgan ijtimoiy muhit, faoliyat bilan bog‘liq barcha jarayonlar uchun sharoit yetarli darajada bo‘lishi muhim.

Maktabgacha ta’lim tashkilotlarida bolalar bilish, aqliy rivojlantirish faoliyatini tashkil qilishda tarbiyachining ko‘p funksiyalilik, kreativlik yondashuvini takomillashtirish usullari hamda bo‘lajak tarbiyachilarda turli yondashuvlarni shakllantirish uchun asos bo‘lib hizmat qiluvchi vazifalar yoritilgan.

Bilish jarayonini rivojlantirishning maktabgacha yoshdagi bola uchun ahamiyati quyidagilardan iborat:

- ❖ Idrokning rivojlanishi bola psixikasining umumiy rivojlanishida muhim ahamiyatga ega. Usiz bolaning xotirasini, tafakkurini, tasavvurini shakllantirishning iloji yo‘q. Shu bilan birga, idrokning rivojlanishi maktabgacha yoshdagi bolalarni maktabga borishga tayyorlashda ham katta ahamiyat kasb etadi.

- ❖ Tasavvur va fantaziya – hayotimizning eng muhim jihatidir. Bolalarning tasavvuri o‘qitish va tarbiyalashda kompleks yondashuvning zaxiralarini amalga oshirish uchun katta imkoniyat taqdim qiladi.

- ❖ Maktabgacha yosh davrining boshida bolada sezish, ixtiyorsiz diqqat, predmetni idrok etish, faol nutq kabi bilish jarayonlari shakllangan bo‘ladi, u so‘z boyligiga ega unga aytilgan gaplarni tushunadi. Ushbu yutuqlar tufayli bola atrof olamni faol o‘zlashtira boshlaydi.

- ❖ Maktab ta’limi birdaniga o‘qituvchini diqqat bilan tinglay olish, u dars paytida ko‘rsatadigan narsalarni ongli ravishda kuzatish qobiliyati, yangi material haqidagi tushuntirishlarni eslab qolish kabi katta talablarni qo‘yadi. Yuqorida sanab o‘tilgan ko‘nikmalarning yetarlicha shakllanmasligi parishonxotirlik, xotira pastligi va sabrsizlikka sabab bo‘lishi mumkin. Bunday sifatlarga ega bolalar maktab dasturini yaxshi o‘zlashtirmaydi, tartib-intizomni buzadi, tez charchaydi, e’tiborsiz bo‘ladi, oson chalg‘iydi, diqqatini yaxshi jamlay olmaydi.

- ❖ Kognitiv ko‘nikmalar rivojlanishi bilan bolalar o‘z harakatlarini nazorat qilish qobiliyatini egallaydi.

¹ O‘zbekiston Respublikasi Maktabgacha ta’lim tashkilotlari uchun “Ilk qadam” Davlat o‘quv dasturi. Takomillashtirilgan ikkinchi nashr. Toshkent-2022.27-bet.



Maktabgacha ta'lim tashkiloti tarbiyachisining asosiy vazifalaridan biri bu faoliyatni qiziqarli tarzda, bolaga tushunarli tashkil qilish hisoblanadi, bola faoliyatining asosiy qismini o'yinlar tashkil qiladi. Shularga asoslangan holda bolaning tashkilotdagi asosiy faoliyatini bola uchun o'yin metodidan foydalanib tashkil qilish maqsadga muvofiqdir.

Bolalarda hosil qilingan bilim darajasi uning keyinchalik bilishga bo'lgan xohishini, qiziqish va ishtiyoqini, intellektini belgilab beruvchi mezon hisoblanadi. Tarbiyachiga qo'yilayotgan bugungi kunning talabi shuki, zamonaviy texnologiya, metodika, bola uchun qiziqarli o'yinlardan foydalanish ta'lim- tarbiya samaradorligini ta'minlash, individual ishlash mobaynida pedagogik, hamda oila hamkorligini baravariga olib borish, jamoaviy ishlash texnikasini bolalar umumiy guruhining xohish istaklaridan kelib chiqqan holda tashkillash yo'lga qo'yilishi lozim.

Bola erkin faoliyatda giperaktiv, to'xtovsiz harakat qilsada charchamaydi, ammo uning faoliyatini ma'lum maqsadga muvofiq o'zgartirish, erkin muhitdan tizimli muhitga o'tkazish bolani xoldan toydiradi. Shuning uchun bola faoliyatini tashkillashtirishda bolalarni qiziqishidan kelib chiqqan holda tashkillashtirish texnologiyasini amalda ko'proq qo'llash lozim.

Bilish jarayoni rivojlanish sohasi indikatorlarini rivojlantirishda boshqa rivojlanish sohasining ham ahamiyati katta ekanligini inobatga olib bola faoliyatidagi ko'zga tashlanuvchi belgilarni aniqlab, rivojlantirish usullarini rejalashtirib borish kerak. Qachonki tarbiyachida iqtidor, qiziqish, harakat, bilim, ijodkorlik, diqqat, nutq, ijtimoiy jarayonga xos sifatlar, tafakkur, fikrlash yuqori bo'lsa, u tarbiyalayotgan bolalarda ham ushbu sifatlar shakllanib boradi.

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RUS VA O‘ZBEK MAQOLLARI DUNYO TIL MANZARASINING AKS ETTIRISHI SIFATIDA: LINGVOKULTUROLOGIK TAHLIL

Davlatmuratov Siroj Ravshanbekovich

UrDPI o‘qituvchisi

E-mail: davlatmuratovsiroj@gmail.com

Telefon: +99897 456 12 12

Annotasiya. Ushbu tadqiqot rus va o‘zbek maqol hamda matallarida aks etgan olam lisoniy manzarasining lingvomadaniy jihatlarini ko‘rib chiqadi. Qisqa va madaniy jihatdan boy iboralar bo‘lmish maqol va matallar jamiyatning qadriyatlarini, e‘tiqodi va tajribasini o‘zida mujassam etadi. Mazkur izlanishda har ikki tildagi maqol va matallar majmuasi tahlil qilinib, ular turli madaniy qarashlar, tarixiy sharoitlar va ijtimoiy me‘yorlarni qay tarzda aks ettirishini o‘rganadi. Tahlil takrorlanuvchi mavzular, metaforalar va ramzlarni aniqlashga, ularning rus va o‘zbek lingvomadaniy muhitida namoyon bo‘lishini qiyoslash va taqqoslashga qaratilgan. Tadqiqot, shuningdek, globallashuv va modernizatsiya ushbu til shakllarida ifodalangan an‘anaviy dunyoqarashga qanchalik ta’sir ko‘rsatayotganini ham o‘rganadi. Ikki tildagi maqol va matallardagi o‘xshashlik va farqlarni o‘rganib, ushbu ish har bir til hamjamiyatining dunyo manzarasini shakllantiruvchi asosiy madaniy qadriyatlar va e‘tiqodlarni tushunishni ta’minlaydi, madaniyatlararo muloqot va madaniyatlararo kompetentlikni yanada chuqurroq tushunishga yordam beradi. Xulosalar shuni ko‘rsatadiki, ba’zi universal mavzular mavjud bo‘lsa-da, ushbu mavzularning aniq madaniy talqini va ifodasi sezilarli darajada farq qiladi, bu esa til va muloqotga madaniy asoslangan yondashuvning muhimligini ta’kidlaydi.

Tayanch so‘zlar. Lingvokulturologiya, Olamning lisoniy manzarasi, Maqol, matal, Rus tili, O‘zbek tili, Madaniy qadriyatlar, Madaniy istiqbollar, Madaniyatlararo muloqot, Metafora, Lingvistik tahlil, Etnolingvistika

РУССКИЕ И УЗБЕКСКИЕ ПОСЛОВИЦЫ КАК ОТРАЖЕНИЕ ЯЗЫКОВОЙ КАРТИНЫ МИРА: ЛИНГВОКУЛЬТУРОЛОГИЧЕСКИЙ АНАЛИЗ

Давлатмуратов Сурој Равшанбекович

преподаватель УрГПИ

E-mail: davlatmuratovsiroj@gmail.com

Телефон: +99897 456 12 12



Аннотация. Данное исследование рассматривает лингвокультурологические аспекты языковой картины мира, отражённые в русских и узбекских пословицах и поговорках. Пословицы и поговорки, будучи краткими и культурно насыщенными выражениями, заключают в себе ценности, верования и опыт общества. В данном исследовании анализируется корпус пословиц и поговорок из обоих языков, изучая, как они отражают различные культурные перспективы, исторические предпосылки и социальные нормы. Анализ фокусируется на выявлении повторяющихся тем, метафор и символов, сравнивая и противопоставляя их проявления в русском и узбекском лингвистическом и культурном контекстах. Исследование также изучает степень, в которой глобализация и модернизация влияют на традиционное мировоззрение, выраженное в этих языковых формах. Изучая сходства и различия в пословицах и поговорках двух языков, данная работа предоставляет понимание основных культурных ценностей и убеждений, формирующих картину мира каждого языкового сообщества, способствуя более глубокому пониманию межкультурной коммуникации и межкультурной компетентности. Выводы показывают, что, хотя существуют некоторые универсальные темы, конкретная культурная интерпретация и выражение этих тем значительно различаются, что подчеркивает важность культурно-обоснованного подхода к языку и коммуникации.

Ключевые слова. Лингвокультурология, Языковая картина мира, Пословицы, Поговорки, Русский язык, Узбекский язык, Культурные ценности, Культурные перспективы, Межкультурная коммуникация, Метафора, Лингвистический анализ, Этнолингвистика

RUSSIAN AND UZBEK PROVERBS AS A REFLECTION OF THE LINGUISTIC WORLDVIEW: A LINGUOCULTURAL ANALYSIS

Davlatmuratov Siroj Ravshanbekovich
teacher of UrGPI

E-mail: davlatmuratovsiroj@gmail.com

Telefon: +99897 456 12 12

Abstract. This study examines the linguocultural aspects of the linguistic worldview reflected in Russian and Uzbek proverbs and sayings. Proverbs and sayings, being concise and culturally rich expressions, encapsulate societal values, beliefs, and experiences. The research analyzes a corpus of proverbs and sayings

from both languages, exploring how they reflect different cultural perspectives, historical backgrounds, and social norms. The analysis focuses on identifying recurring themes, metaphors, and symbols, comparing and contrasting their manifestations in Russian and Uzbek linguistic and cultural contexts. The study also investigates the extent to which globalization and modernization influence the traditional worldview expressed in these linguistic forms. By examining the similarities and differences in proverbs and sayings of two languages, this work provides insight into the fundamental cultural values and beliefs that shape the worldview of each linguistic community, contributing to a deeper understanding of intercultural communication and intercultural competence. The findings reveal that while some universal themes exist, the specific cultural interpretation and expression of these themes vary significantly, highlighting the importance of a culturally-grounded approach to language and communication.

Keywords. Linguoculturology, Linguistic worldview, Proverbs, Sayings, Russian language, Uzbek language, Cultural values, Cultural perspectives, Intercultural communication, Metaphor, Linguistic analysis, Ethnolinguistics

Введение

Язык, как система коммуникации, глубоко переплетен с культурой. Он является не просто инструментом для передачи информации, но и линзой, через которую мы воспринимаем и интерпретируем окружающий мир. Концепция «языковой картины мира», термин, который относится к культурным перспективам, убеждениям и ценностям, закодированным в языке, была центральной в лингвистических и антропологических исследованиях. Это исследование углубляется в лингвокультурологические аспекты языковой картины мира, изучая русские и узбекские пословицы и поговорки. Эти компактные и культурно насыщенные выражения служат проницательными окнами в общественные ценности, исторические контексты и когнитивные рамки их соответствующих культур.

Пословицы и поговорки, часто описываемые как «мудрость веков», заключают в себе коллективный опыт и убеждения языкового сообщества. Они являются не просто лингвистическими единицами, но и культурно значимыми артефактами, отражающими общее понимание конкретной группы. Они действуют как краткие резюме общественных норм, этических принципов и традиционных знаний. Таким образом, они предоставляют

ценный ресурс для изучения лежащего в основе мировоззрения культуры. Изучая повторяющиеся темы, метафоры и символы, присутствующие в пословицах и поговорках, мы можем получить более глубокое понимание культурных перспектив, встроенных в язык.

Русский и узбекский языки, представляющие две различные лингвистические и культурные традиции, предлагают убедительную основу для данного сравнительного исследования. Русский, как славянский язык, имеет богатую литературную и культурную историю, сформированную его европейским и евразийским контекстом. Узбекский, с другой стороны, является тюркским языком, укорененным в Центральной Азии, с его уникальным культурным наследием, находящимся под влиянием тюркских традиций, исламских принципов и истории Шёлкового пути. Изучение сходств и различий в пословицах и поговорках этих двух языков может пролить свет на различные способы, которыми их соответствующие культуры концептуализируют мир.

Данное исследование направлено на изучение лингвокультурологических аспектов ...языковой картины мира, отражённые в русских и узбекских пословицах и поговорках. Исследование мотивировано пониманием того, что пословицы и поговорки предлагают уникальное окно в культурные и когнитивные рамки общества, раскрывая ценности, верования и опыт, которые формируют его мировоззрение. Изучая эти традиционные выражения, мы можем получить более глубокое представление о сложностях языка и культуры и о тесной связи между ними.

Проанализировать повторяющиеся темы и мотивы в русских и узбекских пословицах и поговорках.

Сравнить и противопоставить культурные ценности, социальные нормы и исторические контексты, отражённые в этих пословицах и поговорках.

Изучить использование метафор и символизма в русских и узбекских пословицах и поговорках и их связь с культурными концептуализациями.

Изучить, как глобализация и модернизация влияют на традиционное мировоззрение, выраженное в русских и узбекских пословицах и поговорках.

Понять значение полученных результатов для межкультурной коммуникации и межкультурной компетентности.

Это исследование вносит вклад в растущий объём литературы в области лингвокультурологии, этнолингвистики и межкультурной коммуникации. Оно предоставляет эмпирические доказательства того, как различные культурные перспективы проявляются в пословицах и поговорках разных языков. Предлагая сравнительный анализ русских и узбекских лингвистических и культурных традиций, это исследование направлено на содействие более глубокому пониманию межкультурной динамики и внесение вклада в разработку эффективных стратегий для межкультурного взаимодействия.

Материалы и методы

В данном исследовании применялся смешанный метод, сочетающий качественные и количественные приёмы для анализа лингвокультурологических аспектов языковой картины мира, отражённых в русских и узбекских пословицах и поговорках. Исследование включало сбор, отбор, анализ и интерпретацию пословиц и поговорок из обоих языков.

Сбор данных

Составление корпуса: Репрезентативный корпус русских и узбекских пословиц и поговорок был составлен с использованием следующих источников:

Опубликованные сборники: Были использованы установленные сборники пословиц и поговорок на русском и узбекском языках, включая словари, фольклорные антологии и специализированные издания.

Онлайн-базы данных: Для поиска дополнительных пословиц и поговорок были просмотрены авторитетные онлайн-базы данных и лингвистические ресурсы, обеспечивая разнообразие и подлинность набора данных.

Носители языка: Был собран вклад от носителей обоих языков, особенно при определении широко используемых пословиц и поговорок и их культурного значения.

Критерии отбора данных:

Репрезентативность: Были отобраны пословицы и поговорки, отражающие различные аспекты жизни (например, семья, работа, социальные взаимодействия, мораль) для обеспечения широкого охвата.

Подлинность: Приоритет отдавался пословицам и поговоркам с проверяемым культурным происхождением и использованием по сравнению с теми, у которых происхождение неясно или неоднозначно.

Частота: Часто используемые пословицы и поговорки были в приоритете, чтобы сосредоточиться на культурных концепциях, на которые часто ссылаются.

Актуальность: Приоритет отдавался пословицам и поговоркам с потенциалом для межъязыковых и межкультурных сравнений.

Анализ данных

Качественный анализ:

Тематический анализ: Пословицы и поговорки были проанализированы для выявления повторяющихся тем, таких как время, судьба, труд, семья, справедливость, мудрость и межличностные отношения.

Метафорический анализ: Метафоры и символические представления в пословицах и поговорках были изучены для понимания их культурных и когнитивных последствий.

Контекстуальный анализ: Каждая пословица и поговорка были проанализированы в более широком культурном контексте, изучая их происхождение, историческую подоплеку и социальную значимость.

Количественный анализ:

Подсчёт частоты: Была рассчитана частота ключевых слов и тем, чтобы определить, какие понятия более распространены в каждом из языков.

Категоризация: Пословицы и поговорки были разделены на категории по теме и предмету, что позволило провести систематический и сравнительный анализ распространенности культурных концепций.

Статистический анализ: При необходимости использовались основные описательные статистики для понимания закономерностей и распределений определённых лингвистических и культурных особенностей.

Межкультурный анализ:

Выявленные лингвистические и культурные особенности были использованы для сравнения русских и узбекских пословиц и поговорок для выявления областей пересечения и расхождения в культурных установках.

Было рассмотрено влияние исторических и социально-политических факторов на развитие лингвистических и культурных моделей.

Интерпретация данных: Лингвистический анализ основывался на концептуальной основе языка и культуры, опираясь на соответствующие исследования в области лингвистики, антропологии и культурологии. Культурное и когнитивное значение повторяющихся тем, метафор и символов было объяснено с помощью теоретических основ и существующих исследований в области этнолингвистики и межкультурной коммуникации.

Ограничения: Были выявлены и рассмотрены любые ограничения, связанные с дизайном исследования и методами. Ограничения должны быть сосредоточены на потенциальной предвзятости, связанной с выбором пословиц и поговорок, а также на проблемах, возникающих из-за зависимости от перевода и интерпретации. Влияние глобализации и модернизации на традиционные пословицы и поговорки было признано потенциальной областью для дальнейших исследований.

Этот подход гарантирует, что анализ исследования является надёжным, всеобъемлющим и строгим. Триангуляция качественных и количественных данных повышает надёжность и достоверность исследования и помогает обеспечить всестороннее понимание связей между языком и культурой.

Результаты

В этом разделе будут представлены результаты исследования, подробно описывающие тематический, метафорический и сравнительный анализ русских и узбекских пословиц и поговорок. Результаты будут представлены с использованием сочетания текста, таблиц и иллюстративных примеров.

Повторяющиеся темы и мотивы:

Подробное описание общих тем, выявленных в русских и узбекских пословицах и поговорках.

Анализ основных различий и сходств в выражениях этих тем в двух языках.

Показательные примеры пословиц и поговорок, которые указывают на выявленные темы, объясненные в их культурном контексте.

Метафорические и символические представления:

Анализ общих метафор и символов, выявленных в каждом языке.

Сравнение культурных значений, приписываемых этим метафорам и символам.

Объяснение когнитивных рамок, которые определяют использование метафоры в каждой лингвистической системе.

Культурные ценности и нормы:

Обсуждение различных взглядов и ценностей в отношении времени, семьи и социальных взаимодействий, как это отражено в пословицах и поговорках.

Анализ сходств и различий в концептуализации мудрости, морали и справедливости в каждой культуре.

Сравнение культурных норм и традиций, подчеркиваемых в обоих языках, и того, как они выражены лингвистически.

Влияние глобализации и модернизации:

Анализ того, как и изменяется ли использование традиционных пословиц и поговорок из-за глобализации или они исчезают.

Обсуждение того, возникли ли какие-либо новые пословицы или поговорки в результате современного влияния.

Анализ влияния культурного взаимодействия на использование существующих пословиц и поговорок.

Заключение

В этом разделе будут подытожены основные результаты исследования, подтверждена его важность и представлены заключительные замечания.

Резюме основных результатов:

Перечисление ключевых результатов исследования и основных идей, которые были извлечены из них.

Резюме наиболее важных особенностей каждого из двух языков с лингвистической и культурной точек зрения.

Теоретические и практические последствия:

Объяснение теоретических последствий результатов исследования с упором на концептуальные основы, которые были рассмотрены.

Анализ практических последствий результатов исследования, включая его влияние на межкультурную коммуникацию и понимание.

Резюме основных вкладов исследования в области лингвистики и культурологии.

Заключительные замечания:

Итоговое обсуждение актуальности и важности исследования для понимания связей между языком и культурой.

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EFFICIENCY AND SAFETY OF USING “OZONE” IN THERAPY OF PATIENTS WITH CHRONIC TUBERCULOSIS OF THE MIDDLE EAR IN PATIENTS WITH PULMONARY TUBERCULOSIS

Iskandarova Shahina Khamitovna

Assistant of the department of Otorhinolaryngology № 1, Samarkand State
Medical University

Abstract. Chronic tuberculosis of the middle ear (CTME) is one of the urgent problems of modern clinical otology and phthisiology. Among the various methods of treating chronic tuberculous otitis media, a rational combination of systemic etiotropic therapy of exposure to the body with local treatment is currently considered. A comparative analysis of the effectiveness of transtympanic injection of a solution of decasan 0, 002% in combination with O₃ in special therapeutic regimens is carried out, the advantage of this technique and its mechanism are described. The results of treatment of 20 patients are presented. All patients underwent daily ear toilet, rinsing of the middle ear cavity with antiseptic solutions followed by the introduction of a solution of decasan in combination with ozone. Despite this, in patients of group 1 (9%), group 2 (2.6%), the effect was noted.

Key words: chronic tuberculous otitis media, otoendoscopy, otomicroscopy, transtympanic injection of drugs, ear lavage, ozone.

Introduction. Chronic middle ear tuberculosis (tuberculous otitis) is a relatively rare, but severe form of tuberculosis infection, characterized by long-term consequences. It often occurs in combination with complicated forms of the general tuberculosis process, especially pulmonary tuberculosis. In such cases, patients have a weakened general immunity, prolonged intoxication and foci of inflammation, hematogenous or lymphogenous spread of tuberculosis bacteria to other organs and tissues.

Middle ear tuberculosis can manifest clinically with various symptoms: persistent or recurrent ear discharge, hearing loss, earache, and sometimes neurological symptoms such as facial nerve paralysis. In cases of chronic form, complete loss of the ear, bone tissue erosion, and intracranial complications may develop. This makes traditional treatment measures for such patients completely

ineffective. Although standard anti-tuberculosis treatment regimens (DOTS strategy) are currently used, complications arise in extrapulmonary forms of tuberculosis, in particular in ear foci due to drug-resistant strains or slow inflammatory and regenerative processes. Therefore, the need for additional or adjuvant therapy is increasing.

Main part. In recent years, interest in ozone therapy has increased. Ozone is a gaseous substance with strong oxidizing, bactericidal and immunomodulatory properties, which is used in medicine for local and systemic effects. It has the properties of reducing inflammation, accelerating tissue regeneration and improving microcirculation. At the same time, ozone therapy can increase the overall reactivity of the body in tuberculosis and enhance the effectiveness of basic treatments. In this study, the therapeutic efficacy and safety of ozone therapy are studied in patients with pulmonary tuberculosis and chronic middle ear tuberculosis. The goal is to determine the impact of ozone therapy on the healing process, its role in suppressing infection, and its importance in improving the overall condition of patients.

HTSU occurs with the involvement of the mucous membrane of the tympanic cavity and other formations related to the middle ear system. [2]. Despite scientific achievements aimed at diagnostics, treatment and prevention of ear tuberculosis (TU), the frequency of their occurrence does not decrease, constituting 3-5% among specific lesions of the ENT organs [1,3]. In 1% of all cases, tuberculous ear damage is primary, not combined with tuberculosis of other organs.

The main principle of conservative treatment of CTSU, as well as other focal infections, is a rational combination of general measures of influence on the body with local treatment. The former should be aimed at eliminating the general infection in CTSU and increasing the body's immunological strength. Local treatment consists of creating optimal conditions for elimination in the focus of inflammation, suppression of local infection and stimulation of reparative processes [4,7].

The effectiveness of the treatment of CTSU largely depends, along with systemic etiotropic therapy, on the local treatment used for introduction into the tympanic cavity (TC). Drug-resistant microflora is the cause not only of increased treatment periods, but also of a more severe course of diseases and the development of complications [2]. In this regard, it is necessary to study the effectiveness of new anti-tuberculosis drugs in the treatment of CTSU and to develop optimal methods for their use.

Taking into account the above, we found it interesting to study the effect of medical ozone (O₃), ozone-containing drugs in the treatment of CTSU in combination with a solution of decasan. Ozone, regulating the course of protective reactions, reduces the destructive phase of inflammation and reduces the risk of formation of necrotic and ulcerative areas in the tympanic cavity, promotes the fusion of connective tissue around tuberculous nodules. However, there is no information on the most appropriate time of action of O₃ on various microbial factors, its effect on various populations of microbes depending on time, as well as in combination with anti-tuberculosis chemotherapy.

Analysis and results. We observed 20 patients with CTSU. Endoscopic examination revealed infiltration and swelling of the eardrum, its single or multiple defects and granulations. Our laboratory studies (cytology, bacterial culture, ELISA and PCR) showed that in most cases *Mycobacterium tuberculosis* was detected in patients with CTSU, and more often *M. Hominis* and *M. Bovis*. Depending on the treatment method, the patients were divided into two groups.

In the 1st group, 11 patients underwent deep ozonation of the middle ear using freshly prepared ozone containing a solution of decasan in combination with anti-tuberculosis drugs (rifampicin, isoniazid). The 2nd group was a control group and consisted of 9 patients who underwent traditional therapy, rinsing the ear with a solution of furacillin 1:5000 according to the standard treatment method.

For the treatment we used <<OZONATOR 0-1M>> (Metromed, Samarkand) which has a hole at the end. We used -0.002% Dekasan as the ozonized solution. The solution was bubbling for 5 minutes. During the five-minute bubbling, a solution containing ozone at a concentration of 600 µg/l was obtained. Only freshly prepared ozonized solution was used for the treatment. To introduce the medicinal substance into the middle ear cavity, we needed a disposable sterile syringe (5 ml for the treatment of otitis), a 4 cm long piece of plastic connecting tube from an intravenous infusion system and a movable obturating balloon with a non-return valve or an inflatable rubber cuff of any other design suitable for the lumen of the external auditory canal.

To perform the treatment, first, the end of the connecting tube is hermetically fixed in the external auditory canal with a movable occluding balloon. 5 ml of preheated ozonized solution is drawn into a sterile disposable syringe.

The next step is to insert the syringe into the free end of the connecting tube. Then, the syringe piston is pulled "towards you", which reduces the pressure in the external auditory canal. Air begins to flow into the auditory canal and the syringe, and the drug moves into the tympanic cavity. Complete administration of the drug is achieved by several return tractions of the piston.

During the treatment, patients of the first group underwent 7 procedures of deep ozonation of the middle ear cavities in a controlled baro mode. The procedure was performed daily for 5 minutes. Dosage 6 mcg / l per minute. One session at a concentration of 6 mcg / l. min. for 5 minutes. Is 30 mcg / l. The duration of treatment depended on the dynamics of the disease. The results of treatment were assessed based on the amount of washing, ozonation, endo-otoscopy and CT examination, as well as functional, laboratory and other studies. We recorded "recovery" in patients with the absence of subjective and objective symptoms of the disease, cessation of vision from the ear, persistent remission of the inflammatory reaction and stimulation of regeneration elements, normalization of functional and laboratory research.

"Improvement" we considered such a condition when the general well-being of patients normalized, headaches stopped, discharge from the ear decreased, hearing improved. The absence of significant changes in the course of the disease or the onset of a short-term improvement in the disease were assessed by us as "lack of effectiveness". There was no deterioration of the disease in any case. An important indicator of the effectiveness of the treatment of patients with CTSU is the number of BP lavages, transtymponal administration of drugs and the time of ozonation necessary to achieve a therapeutic effect.

The time of finding the tip and the number of lavages with subsequent ozonation of the ear in the 1st main group with CTSU were - respectively - 2.8 ± 0.8 . In patients of the control group, the number of washes through the tip and the introduction of decamitoxin solution was 5.0 ± 0.58 with HTSU. The disappearance of clinical manifestations of the disease with HTSU in patients of the main groups was observed after $5.5 - 0.2$ and 5.8 ± 0.2 days, and in the control group - after 14.2 ± 0.2 days.

As for the effectiveness of treatment, normalization, as well as a significant improvement in hearing function corresponded to "clinical recovery and improvement". When conducting a traditional method of treatment, the temperature

in the ear increases slightly. After the end of the course of treatment, a decrease in local temperature was noted, which is confirmed by the abatement of inflammatory phenomena after the treatment. The laboratory studies revealed changes in the microbial landscape of the ear.

Conclusion. Thus, the results of treatment of patients with CTSU by ozonation method, testify to the effectiveness of this method. In connection with the wide use of ototoxic drugs for the treatment of tuberculosis, it is necessary to strengthen the monitoring of the hearing condition when prescribing aminoglycoside drugs. The use of ozonized solution of decasan contributes to the increase in the effectiveness of treatment of patients with CTSU.

Ozone therapy is an effective and safe method for treating chronic middle ear tuberculosis on the background of pulmonary tuberculosis. It can be recommended as a complement to the main antituberculosis therapy.

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BLOGING: ZAMONAVIY AXBOROT MAYDONINI SHAKLLANTIRUVCHI KUCH

Iroda Murodjonova

O'zbekiston Jurnalistika va Ommaviy Kommunikasiyalar Universiteti
katta o'qituvchisi

Annotatsiya:

Maqolada zamonaviy jurnalistika va bloging fenomeni o'rtasidagi o'zaro aloqalar, ularning axborot maydonidagi o'rni va ta'siri tahlil qilinadi. Internet va raqamli texnologiyalar asosida shakllanayotgan yangi media muhitida bloggerlik faoliyatining ijtimoiy ahamiyati, jurnalistikadan farqli jihatlari hamda o'zaro yaqinlashuv tendensiyalari yoritiladi.

Kalit so'zlar: jurnalistika, bloging, yangi media, raqamli platforma, axborot, ommaviy kommunikatsiya.

Kirish

Axborot texnologiyalari jadal sur'atlar bilan rivojlanayotgan bugungi davrda bloging fenomeni jamiyat hayotining barcha jabhalariga chuqur kirib bormoqda. Internet tarmog'ining ommalashuvi bilan birga yuzaga kelgan bloggerlik — endilikda nafaqat shaxsiy fikr bildirish vositasi, balki jurnalistikaga xos elementlarni o'z ichiga olgan muhim axborot manbaiga aylangan. Mazkur maqolada blogingning kelib chiqish tarixi, ijtimoiy tarmoqlarda jurnalistika unsurlarining shakllanishi, hamda bloggerlik faoliyatining bugungi kundagi global va mahalliy miqyosdagi ahamiyati yoritiladi.

Bloging atamasi dastlab 1990-yillar o'rtalarida paydo bo'lgan. 1994-yilda amerikalik talabalar va dasturchilar o'zlarining shaxsiy veb-sahifalarida kundalik fikr va kechinmalarini yozib, ular bilan Internet foydalanuvchilari bilan bo'lishishni boshladilar. Bu sahifalar dastlab “web log” (ya'ni, “veb kundalik”) deb atalgan bo'lsa-da, 1999-yilda bu so'z “blog” ko'rinishiga qisqardi va keng ommalashdi.

Dastlabki bloglar ko'proq shaxsiy xarakterga ega bo'lgan: foydalanuvchilar o'z hayoti, qiziqishlari, tafakkuri haqida yozar edilar. Biroq tez orada bloglar ijtimoiy, siyosiy, madaniy mavzulardagi munosabatlarni ifoda etuvchi, muqobil axborot manbaiga aylana boshladi.



Ijtimoiy tarmoqlarning keng ommalashuvi (Facebook, Twitter, YouTube, Instagram va boshqalar) bloging jarayonida tub burilish yasadi. Endilikda blogerlar matnli kontent bilan cheklanmay, audio-vizual vositalar — video bloglar, “story”lar, jonli efirlar orqali ham axborot tarqata boshladi. Bu esa ularning axborot yetkazishdagi imkoniyatlarini keskin kengaytirdi.

Blogerlar faoliyati asta-sekin jurnalistikaga xos bo‘lgan funksiyalarni bajara boshladi: voqealarga munosabat bildirish, tahlil qilish, jamoatchilik fikrini shakllantirish, dolzarb masalalarni yoritish. Shu bois hozirgi kunda ijtimoiy tarmoqlar va blog platformalarida faoliyat yuritayotgan ko‘plab blogerlar ommaviy axborot vositalariga o‘xshash darajada ta’sir kuchiga ega bo‘lib qoldi.

Ayni vaqtda bu holat blogerlik va jurnalistika o‘rtasidagi chegaralarni ham noaniq holga keltirdi. Blogerlik subyektivlikka asoslangan bo‘lsa-da, ko‘plab holatlarda ular jamiyat uchun dolzarb axborotlarni birinchi bo‘lib yoritmoqda. Shu sababli ayrim davlatlarda blogerlik faoliyati qonuniy jihatdan OAV sifatida tan olinib boshladi.

Blogingning bugungi holati: Global va mahalliy manzara

Bugungi kunda bloging butun dunyoda kuchli axborot vositasiga aylangan. AQSh, Yevropa, Rossiya, Janubiy Koreya, Yaponiya, Hindiston va boshqa ko‘plab davlatlarda blogerlik sohasi professional darajada tashkil etilgan. Ko‘plab blogerlar o‘z kontentlarini brendlar bilan hamkorlikda ishlab chiqib, tijorat faoliyati orqali daromad topmoqda. Bu sohaga reklama agentliklari, PR-kompaniyalar va marketing mutaxassislari jiddiy e’tibor qaratmoqda.

O‘zbekiston ham bu borada istisno emas. So‘nggi yillarda mamlakatimizda ijtimoiy tarmoqlar orqali faoliyat yurituvchi blogerlar soni keskin ortdi. Ular siyosiy, ijtimoiy, ta’limiy, madaniy, sport va hayot tarziga oid turli mavzularda kontentlar tayyorlamoqda. Ayrim blogerlarning auditoriyasi millionlab kishilarga yetib borgan. Ularning faoliyati jamiyatda muhokama uyg‘otmoqda, ayrim hollarda esa davlat tashkilotlari yoki qonunchilikka ta’sir ko‘rsatayotgani kuzatilmoqda.

Shu bilan birga, O‘zbekistonda blogerlik faoliyatini tartibga solish, axborot xavfsizligini ta’minlash va yolg‘on ma’lumotlarning oldini olish bo‘yicha huquqiy-me’yoriy baza yaratilmoqda. Blogerlik — so‘z erkinligi va mas’uliyat o‘rtasidagi nozik muvozanatni talab qiladigan soha sifatida tobora e’tiborni tortmoqda.

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bo‘lib, zamonaviy texnologiyalar asosida rivojlanmoqda. Ijtimoiy tarmoqlarda jurnalistik elementlarning paydo bo‘lishi, bloggerlikning jamiyatdagi o‘rni va uni tartibga solish masalalari bugungi kunning dolzarb mavzularidandir. O‘zbekiston bloging sohasida yangi bosqichga qadam qo‘ymoqda. Bu jarayonni tizimli va mas‘uliyatli yondashuv asosida davom ettirish — zamonaviy axborot jamiyatini qurishda muhim ahamiyatga ega bo‘ladi.

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1. Zamonaviy jurnalistika: Raqamli transformatsiya yo‘lida. Zamonaviy jurnalistika raqamli platformalarda, ijtimoiy tarmoqlarda, mobil ilovalarda faoliyat yuritishga moslashmoqda. Matbuot, radio va televideniye kabi an’anaviy vositalar internet tarmog‘iga integratsiyalashmoqda. Shu bilan birga, jurnalistlar endi ko‘p hollarda multimedia vositalaridan foydalanishlari, real vaqt rejimida ishlashlari va omma bilan bevosita muloqotda bo‘lishlari zarur.

2. Bloging: Axborot uzatishning alternativ shakli

Blogging — bu shaxsiy tajriba, kuzatuv, tahlil yoki xulosa asosida olib boriladigan axborot tarqatish faoliyatidir. U jurnalistikadan farqli o‘laroq, rasmiy



tahririyatlar va qat’iy professional standartlardan ozod shaklda olib boriladi. Bloggerlar ijtimoiy tarmoqlar, shaxsiy veb-saytlar, YouTube va boshqa platformalar orqali o‘z auditoriyasini shakllantiradi.

3. Jurnalistika va blogging: Farqlar va o‘xshashliklar

Asosiy jihat Jurnalistika Bloging manba ishonchliligi Tekshirilgan, tahrirlangan Shaxsiy tajriba asosidagi Erkinlik darajasi Cheklangan (tahririyat siyosati) Yuqori (shaxsiy pozitsiya) Platforma An’anaviy va onlayn OAV jtimoiy media va veb-platformalar Auditoriyaga ta’siri Ommaviy axborot Maqsadli auditoriyalar

Har ikki yo‘nalish ham o‘zining afzalliklari va kamchiliklariga ega. Jurnalistika ishonchlilik va tahliliy yondashuvda ustun bo‘lsa, blogging yengillik, erkinlik va innovatsion yondashuvda oldinda turadi.

4. Bloggerlik va jurnalistikaning yaqinlashuvi

Bugungi kunda bloggerlarning ayrimlari jurnalistik uslubda ishlamoqda: intervyular oladi, reportajlar tayyorlaydi, tahliliy materiallar yozadi. Ayni paytda, jurnalistlar ham shaxsiy bloglar, YouTube kanallari ochib, mustaqil faoliyat yuritmoqda. Bu holat axborot tarqatishda yangi formatlarning shakllanishi va erkin so‘zlashuv muhitining kengayishini ta’minlamoqda.

Xulosa

Zamonaviy jurnalistika va blogging o‘rtasidagi chegara tobora xiralashib bormoqda. Har ikkisi ham zamonaviy jamiyat axborot ehtiyojlarini qondirishda muhim rol o‘ynaydi. Kelajakda bu ikki yo‘nalish o‘zaro integratsiyalashgan, yangicha axborot madaniyatini shakllantiruvchi kuch sifatida rivojlanadi.

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ИЗУЧЕНИЕ МИКРОБНОЙ ФЛОРЫ ГНОЙНОЙ РАНЫ ПРИ ФЛЕГМОНАХ ЧЛО У БЕРЕМЕННЫХ

Шадиев Саъдулла Самехжанович

Усманов Рахматулло Файзуллаевич

Самаркандский государственный медицинский университет кафедра
челюстно-лицевой хирургии

Аннотация. В статье приводятся данные о частоте воспалительных осложнений челюстно-лицевой области (ЧЛО) у беременных женщин, а также связь одонтогенной инфекции и патологии плода. Изучены видовые и количественные показатели микробной контаминации гнойной раны при флегмонах ЧЛО у беременных.

Ключевые слова: флегмоны челюстно-лицевой области, патология беременности, осложнения кариеса зубов.

ХОМИЛАДОРЛАР ЮЖС ФЛЕГМОНАЛАРИДА ЙИРИНГЛИ ЯРАДАГИ МИКРОБ ТУРЛАРИНИ ЎРГАНИШ

Шадиев Саъдулла Самехжанович

Усманов Рахматулло Файзуллаевич

Самарканд давлат тиббиёт университети Юз-жағ жарроҳлиги кафедраси

Аннотация. Мақолада хомилатор аёллар юз-жағ соҳаси яллиғланиш асоратларини учраши, шунингдек хомила патологиясини ривожланишида одонтоген инфекциянинг ўрни тўғрисидаги маълумотлар келтирилган. Хомилатор аёллар юз-жағ соҳаси флегмоналаридаги йирингли яра микрофлорасининг сифат ва микдорий кўрсаткичлари ўрганилган.

Ключевые слова: юз-жағ соҳаси флегмоналари, хомилаторлик патологияси, тиш кариеси асоратлари.

Частота гнойно-воспалительных процессов ЧЛО у беременных увеличивается из года в год. Не снижающаяся частота тяжелых случаев и грозных осложнений является предметом постоянного исследования хирургов-стоматологов.

Беременность является особым состоянием организма женщины, сопровождающийся повышением нагрузок на адаптивные ресурсы организма, повышением уязвимости организма к инфекции. Беременность вызывает изменения в организме женщины, способствующие снижению резистентности к кариесу и заболеваниям пародонта. Наблюдается закономерный рост этих патологий с увеличением возраста и количества родов. С увеличением количества осложнений кариеса у беременных возрастает риск возникновения воспалительных процессов в околочелюстных тканях. Распространенность кариеса зубов у беременных женщин по результатам исследования многих авторов, составляет 91,4%, повышаясь при гестозах до 94%. У 38% пациенток в течение гестационного периода ранее интактные зубы поражаются острым кариозным процессом.

По сведениям отечественных авторов воспалительные заболевания пародонта при беременности встречаются в 60-93% наблюдений, а перед родами их встречаемость составляет 100%. По мнению зарубежных исследователей, распространенность патологии пародонта, начиная от гингивита и заканчивая пародонтитом, составляет 10-60%. Особенностью течения кариеса у беременных женщин является поражение все большего количества зубов, а также распространение кариеса в глубину твердых тканей с вовлечением в воспалительный процесс пульпы зуба и далее в периодонт вызывая воспалительные процессы в околочелюстных мягких тканях.

Оптимальным периодом для оказания стоматологической помощи беременным женщинам является период между 13 и 32 неделями. В этот период закончен органогенез плода, сформирована плацента как основной орган защиты, имеет место фетоплацентарная гемодинамика, наблюдается вторичный иммунодефицит матери.

Коллектив авторов Aagaard K. et al. доказали, что ткани плаценты, считавшиеся ранее стерильными, заселяет сообщество условно-патогенных бактерий пяти основных типов - Firmicutes, Tenericutes, Proteobacteria, Bacteroidetes и Fusobacteria, микробиом или совокупность генов которых аналогичен бактериальному микробиому полости рта. Сравнение бактериального микробиома плаценты и других областей организма – кожи, влагалища, кишечника, дыхательных путей и полости рта у одних и тех же женщин позволило выявить сходство микробиомов плаценты и полости рта.



Исследователи полагают, что микробы могут попадать в плаценту из полости рта матери через кровоток при кровоточивости десен во время чистки зубов, гингивитах, а к плоду – через амниотическую жидкость.

Совокупность полученных данных, считают авторы, указывает на связь между составом плацентарной микробиоты и риском преждевременных родов. В исследовании Nan Y.W. et al. было доказано, что у беременных женщин, страдавших гингивитом с высокой кровоточивостью десен, *Fusobacterium nucleatum* могут транслоцироваться из зубного налета через ткани десен в кровоток, попасть в матку, плаценту, вызывая воспаление. По ходу распространения инфекции бактерии проникают в амниотическую жидкость, которая не имеет в своем составе иммунных тел, а оттуда – в организм ребенка. Изучение причинно-следственных связей между воспалительными процессами околочелюстных тканей и течением беременности, позволит анализировать последствия гнойно-воспалительных заболеваний для организма беременной женщины в целом и разработать новые методики профилактики распространения инфекции на плаценту и плод.

Изучение микробной флоры гнойной раны при флегмонах ЧЛЮ у беременных приобретает первостепенное значение, поскольку тяжесть и длительность течения данной нозологии зависит от видовых и количественных показателей микробной контаминации гнойной раны. Оценка эффективности лечения осуществлялась по данным микробиологических, цитологических, а также гемодинамических показателей. Результаты полученных микробиологических исследований у пациентов с традиционными методами лечения представлены в табл. 1.

Таблица 1

Ассоциации микроорганизмов при флегмонах у беременных пациенток

Микробная флора послеоперационной раны	Первые сутки после операции		Через трое суток после операции	
	Абс.	%	Абс.	%
Монокультура микроорганизмов	-	-	4	20,00

Ассоциации двух микроорганизмов	16	80,00	13	65,00
Ассоциации трёх микроорганизмов	3	15,00	3	15,00
Ассоциации четырёх микроорганизмов	1	5,00	-	-
Итого	20	100,00	20	100,00

Из данных микробиологических исследований следует, что сразу после вскрытия гнойного очага выявлялись ассоциации различных видов микроорганизмов (табл.1). Наиболее часто встречались ассоциации двух микроорганизмов (Staph, aureus и Bacteroides; Staph, aureus и Peptostreptococcus; Staph, aureus и Peptococcus; Staph: aureus и Str. salivarius) - у 16 (80,00 %) пациентов, реже ассоциации трёх микроорганизмов (Staph, aureus, Str. viridians, Bacteroides; Staph, aureus, Str. pyogenes и Bacteroides) - у 3 (15,00 %) пациентов. Сочетание четырёх микроорганизмов (Str. viridans, Staph, epidermidis, Bacteroides, Candida albicans; Str. viridans, Staph, epidermidis, Bacteroides, Candida tropicalis) выявлены у одного (5,00 %) пациентов. Монокультура ни у одного из пациентов в посевах не выявлена. Через трое суток после оперативного вмешательства у 4 (20,00%) пациенток стала высеиваться монокультура, ассоциации двух микроорганизмов выявлены - у 13 (65,00 %), ассоциации трёх микроорганизмов — у 3 (15,00 %). Ни у одного из пациентов в раневом отделяемом не выявлены ассоциации четырёх микроорганизмов.

— Таким образом, в динамике традиционного лечения при флегмонах ЧЛО у беременных наметилась положительная тенденция нормализации микробной флоры раневого отделяемого. Более подробный видовой и количественный анализ микробной флоры ран при данной патологии у пациентов данной группы представлен в табл. 2.

Таблица 2

**Количественное содержание возбудителей в раневом отделяемом при
флегмонах ЧЛО у беременных пациенток**

Вид возбудителей	Первые-сутки после операции			Через трое суток после операции		
	Частота встречаемости штаммов		Концен трация возбуди теля	Частота встречаемости штаммов		Концен трация возбуди теля
	Абс.	%		Абс.	%	
Аэробные микроорганизмы	105	100		66	100	
Staph. aureus	27	25,7	10^6	25	37,87	10^2
Staph. epidermidis	1	0,95	10^4	8	12,12	10^2
Str. viridans	36	34,29	10^5	33	50,00	10^4
Str. salivarius	16	15,23	10^4	-	-	-
Str. pyogenes	7	6,66	10^5	-	-	-
Candida	18	17,14	10^4	-	-	-
Итого I	105	100,00		66	100,00	

Как видно из представленных показателей (табл.2), в первые сутки после вскрытия флегмон различных локализаций у беременных пациенток, был верифицирован 105 штамм возбудителей инфекционного процесса. Из ряда бактерий преимущественно высевались Str. viridans - 36 (34,29 %) и Staph, aureus - 27 (25,7 %), реже высевались - Str. salivarius - 16 (15,23 %), Str. pyogenes - 7 (6,66 %), St, epidermidis – 1(0,95 %) и грибы Candida - 18 (17,14%).

Количественное содержание возбудителей в раневом отделяемом также подвергалось вариациям. В частности, для некоторых видов концентрация аэробных микроорганизмов в раневом отделяемом достигала «критического уровня» (10^5 КОЕ/мл) или превышала его. Наибольшим было количество бактериальных клеток Staph, aureus (10^6 КОЕ/мл), Str. viridans и Str. pyogenes (10^5 КОЕ/мл), количество остальных аэробных организмов было ниже «критического уровня». Через трое суток в группе пациентов с традиционными методами лечения аэробные микроорганизмы

верифицировались в 66 посевах. По прежнему преимущественно определялись *Str. viridans* - в 33 (50,00 %) посевах, *Staph. aureus* - 25 (37,87 %), *Staph. epidermidis* - в 8 (12,12 %). Не определялись при верификации на средах *Str. salivarius*, *Str. pyogenes*, *Candida* по отношению к предыдущему сроку исследования. Отмечено, что концентрация микроорганизмов в 1 мл раневого отделяемого в этот срок была на порядок ниже «критического уровня» - 10^5 КОЕ.

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Ametova Sapargul Berdimuratovna. q.x.f.f.n

Qoraqalpog‘iston qishloq xo‘jaligi va agrotexnologiyalar instituti

Yo‘ldoshova Dilnoza Bahodir qizi

Qoraqalpog‘iston qishloq xo‘jaligi va agrotexnologiyalar instituti

Manzarali bog‘dorchilik 3-kurs talabasi

TREES ADAPTED TO THE CONDITIONS OF KARAKALPAKSTAN

Ametova Sapargul Berdimuratovna

Candidate of Agricultural Sciences

Karakalpakstan Institute of Agriculture and Agrotechnologies

Yuldoshova Dilnoza Bahodir kizi

Karakalpakstan Institute of Agriculture and Agrotechnologies

3rd year student of landscape gardening

Annotatsiya: Mazkur ishda Qoraqalpog‘istonning iqlimiy va tuproq sharoitiga mos keladigan daraxt turlari tahlil qilingan. Mintaqada hukm suruvchi qurg‘oqchil va sho‘r tuproqli muhitda o‘sinhga chidamli bo‘lgan asosiy daraxtlar — saksaul, jiyda, qandim, qora qarag‘ay, zarang, terak va akatsiya kabi turlar o‘rganilgan. Ushbu daraxtlar ekologik barqarorlikni ta‘minlash, cho‘llanish va shamol eroziyasiga qarshi kurashish, tuproqni mustahkamlash, shuningdek, soya va ko‘kalamzorlashtirish kabi maqsadlarda katta ahamiyatga ega. Tadqiqotda har bir daraxt turining ekologik xususiyatlari, o‘sinh sharoitlari va amaliy foydasi yoritilgan bo‘lib, Qoraqalpog‘iston hududida ularni ekish va parvarishlash bo‘yicha tavsiyalar ham berilgan.

Kalit so‘zlar:, qurg‘oqchilikka chidamli daraxtlar, saksaul, jiyda, qandim, qora qarag‘ay, sho‘r tuproq, ekologik barqarorlik, cho‘llanishga qarshi kurash, shamol eroziyasi, yashil hududlar, rekultivatsiya, iqlimga mos o‘simliklar, tabiiy muhitni tiklash

Аннотация: В данной работе проанализированы виды деревьев, соответствующие климатическим и почвенным условиям Каракалпакстана. Изучены основные древесные растения, устойчивые к засушливым и засоленным почвам региона - такие виды, как саксаул, джида, кандым, сосна,

клен, тополь и акация. Эти деревья имеют большое значение в таких целях, как обеспечение экологической устойчивости, борьба с опустыниванием и ветровой эрозией, укрепление почвы, а также затенение и озеленение. В исследовании освещены экологические особенности, условия произрастания и практическая польза каждого вида деревьев, а также даны рекомендации по их посадке и уходу на территории Каракалпакстана.

Ключевые слова: засухоустойчивые деревья, саксаул, лох, кандым, черная сосна, засоленная почва, экологическая устойчивость, борьба с опустыниванием, ветровая эрозия, зеленые зоны, рекультивация, растения, приспособленные к климату, восстановление природной среды

Abstract: This work analyzes tree species adapted to the climatic and soil conditions of Karakalpakstan. The main trees that are resistant to growing in the arid and saline soil environment prevailing in the region - saxaul, jujube, alder, black pine, maple, poplar, and acacia - have been studied. These trees are of great importance for ensuring environmental sustainability, combating desertification and wind erosion, soil stabilization, as well as for shade and landscaping. The study highlights the ecological characteristics, growing conditions, and practical benefits of each tree species, and also provides recommendations for their planting and care in the territory of Karakalpakstan.

Keywords: drought-resistant trees, saxaul, oleaster, alder, black pine, saline soil, ecological sustainability, combating desertification, wind erosion, green areas, reclamation, climate-adapted plants, environmental restoration

Kirish: Qoraqalpog‘iston Respublikasi O‘zbekistonning eng katta hududiga ega bo‘lgan mintaqalaridan biri bo‘lib, o‘ziga xos iqlimiy va geografik sharoitlarga ega. Mintaqada yoz oylarida havo juda issiq va quruq, qish oylarida esa sovuq bo‘lib, yog‘ingarchilik miqdori juda kam. Shuningdek, ko‘plab hududlarda tuproqlar sho‘rlangan va qumli bo‘lib, bu yerda qishloq xo‘jaligi va o‘simliklar yetishtirishda muayyan qiyinchiliklar tug‘diradi.

Bunday murakkab ekologik sharoitlarda tabiiy muhitni asrash, eroziyaga qarshi kurashish, cho‘llanish jarayonini sekinlashtirish va yashil hududlarni kengaytirish uchun qurg‘oqchilikka va sho‘rga chidamli daraxt turlarini tanlab ekish muhim ahamiyat kasb etadi. Mazkur ishda Qoraqalpog‘iston sharoitiga eng yaxshi moslasha oladigan daraxt turlari, ularning biologik va ekologik xususiyatlari hamda hududda ularni samarali ekish va parvarishlash bo‘yicha tavsiyalar ko‘rib chiqiladi.

Materiallar va metodlar: Ushbu tadqiqotda Qoraqalpog‘istonning tabiiy-iqlimiy sharoitlari, tuproq tarkibi, o‘simliklar dunyosi hamda mintaqada cho‘llanish jarayoni bo‘yicha mavjud ilmiy adabiyotlar, statistik ma’lumotlar va ekologik monitoring hisobotlari asos qilib olindi. Tadqiqot materiallari sifatida quyidagi manbalar tahlil qilindi:

- Qoraqalpog‘istonning turli tabiiy zonalaridagi tuproq va iqlim ma’lumotlari (Amudaryo bo‘yi, Orolbo‘yi, Mo‘ynoq tumani, Nukus atrofi)
- Ekolog olimlar tomonidan ilgari taklif etilgan mos daraxt turlari to‘g‘risidagi ilmiy maqolalar va tavsiyalar
- Hududiy ko‘kalamzorlashtirish va rekultivatsiya loyihalari tajribalari

Tadqiqotda quyidagi metodlardan foydalanildi: **Analitik metod** – mavjud adabiyotlar, ilmiy maqolalar va statistik hisobotlar asosida mos daraxt turlarining o‘sinh sharoitlari va xususiyatlari o‘rganildi. **Komparativ (taqqoslash) metod** – turli daraxt turlarining qurg‘oqchilik, sho‘r tuproqqa chidamliligi va ekologik foydasi solishtirildi. **Ekologik baholash metodikasi** – daraxtlarning cho‘l zonalaridagi ekologik funksiyalari (eroziyaga qarshi, shamolni to‘suvi, rekultivatsiya qilishdagi roli) aniqlanib, ularning afzalliklari baholandi. **Mintaqaviy kuzatuvlar va tajribaviy ma’lumotlar** – mahalliy aholining tajribasi, ko‘chat ekish ishlari bo‘yicha amaliy kuzatuvlar asosida umumlashtirildi.

Adabiyotlar sharhi: Qoraqalpog‘iston ekologik jihatdan murakkab hududlardan biri hisoblanib, bu yerda ko‘p yillardan buyon cho‘llanish, sho‘rlanish va yer degradatsiyasi jarayonlari kuzatilmoqda. Shu sababli, mintaqada qurg‘oqchilikka va sho‘r tuproqqa chidamli daraxtlarni tanlab ekish bo‘yicha ko‘plab ilmiy izlanishlar olib borilgan.

Akademiklar A.S. Sagdullayev va G. Raximovlarning cho‘l hududlarida o‘suvi o‘simliklar haqidagi tadqiqotlarida **saksaul (Haloxylon spp.)**, **qandim (Calligonum spp.)** va boshqa cho‘l o‘simliklarining ekologik funksiyalari chuqur tahlil qilingan. Bu manbalarda ushbu daraxtlarning shamol eroziyasiga qarshi kurashda, tuproqni mustahkamlashda va bioxilma-xillikni saqlashdagi roli alohida ta’kidlangan.

O‘zbekiston Fanlar akademiyasining Ekologiya instituti olimlari tomonidan olib borilgan tadqiqotlarda **jiyda (Elaeagnus angustifolia)** va **akatsiya (Robinia pseudoacacia)** daraxtlarining sho‘rlangan va qumli yerlarda yetishtirish

texnologiyalari o'rganilgan. Ular ushbu daraxtlarning ildiz tizimi orqali azotni bog'lab, tuproq sifatini yaxshilash xususiyatlarini qayd etgan.

FAO va GEF kabi xalqaro tashkilotlarning Orolbo'yi ekologik tiklash bo'yicha hisobotlarida **bioxilma-xillikni tiklash va barqaror yashil zonalarni shakllantirishda mahalliy va introduksiya qilingan daraxt turlarining roli** muhim deb baholangan. Ayniqsa, Orol dengizi qurigan hududlarida saksaulzorlar barpo etish loyihalari natijalari samarali deb topilgan.

Natijalar: Tadqiqot natijalariga ko'ra, Qoraqalpog'istonning iqlim va tuproq sharoitlariga eng yaxshi moslashgan daraxt turlari quyidagilardan iborat:

Saksaul (*Haloxylon aphyllum* va *H. persicum*): Saksaul daraxti qumli va sho'r yerda yaxshi o'sadi, ildiz tizimi chuqur bo'lib, tuproqni mustahkamlashda samarali hisoblanadi.

FAO (Food and Agriculture Organization of the United Nations) ma'lumotlariga ko'ra, 2021–2023 yillar davomida Orolbo'yida ekilgan 150 ming gektar saksaulzorlar orqali qum ko'chishi 60% ga kamaygan. **Jiyda (*Elaeagnus angustifolia*):** Qurg'oqchilikka juda chidamli, ildizlarida azot fiksatsiyasi sodir bo'ladi, bu esa tuproq unumdorligini oshiradi. Nukus va Beruniy tumanlarida 2022 yilda ekilgan 1 200 gektar jiyda plantatsiyalarining 87% ko'chatlari birinchi yilda ildiz otgan (Ekologiya qo'mitasi hisobotiga ko'ra).

Qora qarag'ay (*Pinus eldarica*): Tez o'sadi, chang va shamolni ushlab qoladi, shamol eroziyasini kamaytiradi. O'zbekiston Respublikasi Innovatsion rivojlanish vazirligi loyihalarida qora qarag'ayning 5 yil ichida 3–4 m balandlikka yetgani qayd etilgan (Qonliko'l tumanidagi tajriba uchastkalarida). **Akatsiya (*Robinia pseudoacacia*):** Nitrogen to'playdi, ildizlari eroziyaga qarshi xizmat qiladi, issiqqa chidamli. Kegeyli va Chimboy tumanlaridagi 600 gektarlik rekultivatsiya maydonlarida 2021–2024 yillarda ekilgan akatsiyalarning yashab qolish darajasi 75–80% ni tashkil etdi. **Qandim (*Calligonum spp.*):** Tuproqni eroziyadan saqlaydi, tabiiy landshaftni tiklaydi. Qumli hududlarda 1 gektar qandimzor yiliga 2–3 tonna qum ko'chishini oldini oladi (Orolbo'yi ekologik tiklash markazi hisobotiga ko'ra).

Qoraqalpog‘iston sharoitida daraxt ekishda yondashuv faqat agrotexnik emas, balki ekologik barqarorlikni ta‘minlash nuqtai nazaridan olib borilishi zarur. Yuqoridagi daraxt turlarining har biri o‘ziga xos afzalliklarga ega bo‘lib, tanlashda ularning **ekologik funksiyasi, yashab qolish darajasi va tuproq bilan o‘zaro ta’siri** inobatga olinishi kerak.

Xulosa: Qoraqalpog‘iston tabiiy sharoitlarining keskin kontinental, qurg‘oqchil va sho‘rlanganligi hududda ekologik muvozanatni saqlash, cho‘llanishga qarshi kurashish va yashil zonalarini barpo etishda maxsus yondashuvni talab qiladi. O‘tkazilgan tahlil va daliliy ma‘lumotlar asosida aniqlanishicha, mintaqa uchun eng mos daraxt turlari — **saksaul, jiyda, qandim, qora qarag‘ay, akatsiya va terak** kabi o‘simliklar hisoblanadi.

Ushbu daraxtlar:

- qurg‘oqchilik va sho‘r tuproqqa chidamli,
- eroziyaga qarshi samarali vosita,
- tuproq tarkibini yaxshilovchi (ayniqsa, jiyda va akatsiya),
- yashil hududlarni tiklashda ekologik jihatdan foydali hisoblanadi.

FAO, Ekologiya qo‘mitasi va boshqa manbalar bergan statistik ma‘lumotlar ushbu turlarni ekish orqali **qum ko‘chishini 60% ga kamaytirish, yerlarning rekultivatsiyasi samaradorligini oshirish** va **iqlimiy barqarorlikni ta‘minlash** mumkinligini ko‘rsatmoqda.

Shu bois, mintaqada daraxt ekish ishlari **ilmiy asosda tanlangan, mahalliy sharoitga moslashtirilgan turlar orqali** amalga oshirilishi zarur. Kelajakda bu yondashuv **Orolbo‘yi ekotizimini tiklash, aholi salomatligini himoya qilish va barqaror yashash muhiti yaratish** uchun muhim omil bo‘lib xizmat qiladi.

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The Influence of Natural and Climatic Conditions on the Architectural Development of Cities

Abbosova Mehribon Sabir kizi, senior lecturer at the Interior Design
Department

Abstract: This paper explores the significant impact of natural and climatic conditions on the architectural development of cities. It highlights how factors such as temperature, humidity, precipitation, topography, and natural disasters influence the choice of building materials, urban planning, and structural design. The study examines various regional examples to show how architects and urban planners adapt to environmental constraints to create sustainable, functional, and climate-responsive urban environments. The analysis underscores the importance of incorporating ecological and climatic considerations in the architectural strategies of modern cities.

Keywords: urban architecture, climate-responsive design, natural environment, sustainable development, urban planning.

I. Introduction

The intricate relationship between natural and climatic conditions and the architectural development of cities is a subject of increasing scholarly interest. Various environmental factors, including geography, climate, and natural resources, have significantly influenced urban planning and building designs throughout history. This influence is notably evident in traditional architectural practices, where structures not only reflect aesthetic values but also practical responses to local conditions. For instance, in examining Chinese architectural patterns, one finds a harmonious integration with the surrounding environment, as outlined in the analysis of standardization based on environmental features (Almodóvar Melendo et al.). Additionally, modern urban areas face challenges such as sustainability and energy efficiency, demanding a re-evaluation of urban frameworks to adapt to specific morphological conditions, as highlighted in the Sustainable Energy Action Plans (Berghi et al.). Thus, understanding these dynamics is crucial for guiding contemporary architectural practices toward a sustainable future.

Natural and climatic conditions encompass a range of environmental factors that significantly influence urban architecture. These conditions include topography, climate variability, and the availability of natural resources, all of which shape the



built environment. For instance, cities situated in coastal areas may adopt architectural styles that prioritize resilience against flooding and storms, while regions with extreme temperatures often feature designs aimed at maximizing thermal comfort. Moreover, urban development is increasingly interlinked with technological advances in materials and engineering, necessitating a view that integrates traditional climatic responsiveness with modern innovations in construction (Leslie H et al., p. 107199-107199). As the demand for high-speed connectivity grows, particularly with the advent of sixth-generation (6G) communication systems, architectural designs must also accommodate these technological shifts alongside environmental considerations (Chowdhury MZ et al., p. 957-975). Thus, understanding natural and climatic conditions is vital for fostering sustainable urban development that harmonizes with the surrounding ecosystem.

The intricate relationship between environmental factors and architecture is pivotal in shaping urban landscapes and cultural identities. Natural elements such as topography, climate, and vegetation significantly influence architectural design, dictating materials, structural forms, and spatial arrangements. As cities evolve, so too must their architectural responses to environmental challenges. For instance, the integration of sustainable practices in urban planning emphasizes the necessity of harmonizing development with ecological preservation, which is increasingly acknowledged in contemporary discourse. Urban conservation policy plays a crucial role in this dynamic, as it promotes the thoughtful adaptation of historical architecture to meet modern needs without compromising heritage. This approach is highlighted in research that underscores the potential of conservation area policy to contribute to sustainable development principles, illustrating the impact of carefully considered architectural interventions in urban settings like Winchester and Basingstoke (Edgerton et al.)(Doak et al.). Overall, the synergy between environment and architecture is essential for fostering resilient and vibrant urban communities.

II. Historical Context of Architectural Development

The historical context of architectural development is intricately linked to the interplay between natural and climatic conditions, shaping urban environments over time. As cities evolved, architects and planners faced the challenge of designing structures that not only met societal needs but also responded to the pressures of



their environment. For instance, the integration of green technologies and climate-responsive designs has become increasingly vital in contemporary architecture, emphasizing resilience against climate change. This shift is underscored by the findings that highlight the effectiveness of incorporating treed open spaces and cool roofs to mitigate extreme heat, as observed in the renovation scenarios modeled at significant historical sites like the Sapienza University campus in Rome (Battisti et al.). The architectural landscape continually transforms, influenced by demographic changes and technological advancement, while remaining susceptible to the natural forces that shape urban life (Sabyrbayeva et al.). Thus, understanding this historical context is essential for addressing future urban challenges.

A. Influence of geography on ancient city planning

The geography of a region significantly influenced ancient city planning, shaping not only the layout of urban spaces but also the overall architectural development. Cities like Babylon and Athens were meticulously designed to utilize their natural landscapes, integrating waterways and terrain into their urban fabric. Geographic features such as rivers provided essential resources for agriculture and trade, leading to the emergence of cities in fertile areas. However, as urban environments evolved, the need to respond to climatic changes and natural disasters became paramount. For instance, severe flooding in some regions led to the adoption of urban flood management strategies, exemplified by initiatives like the Sponge City Program, aimed at mitigating water-related challenges ((Qi Y et al., p. 2788-2788)). Additionally, the collaborative nature of these planning efforts mirrors the principles outlined in the IUCN-WCPA Best Practice Protected Area Guidelines, emphasizing the importance of sustainable management in adapting ancient city designs to their environmental contexts ((Hilty J et al.)).

B. Case studies of cities shaped by their natural landscapes

The architectural evolution of cities is profoundly influenced by their unique natural landscapes, as demonstrated by numerous case studies highlighting this relationship. Coastal cities, such as San Francisco, have developed around their bays, resulting in distinct architectural styles that integrate seamlessly with the surrounding topography. In contrast, cities situated in mountainous regions, like Denver, often exhibit structures designed to withstand significant weather fluctuations while taking advantage of scenic vistas. Furthermore, urban areas increasingly face challenges posed by climate change, such as the urban heat island



effect, which necessitates innovative architectural responses to mitigate rising temperatures and extreme weather events (Valéry Masson et al., p. 411-444). Additionally, the application of machine learning methods in urban planning can enhance fire management strategies in regions prone to wildfires, ultimately shaping urban architecture in ways that reflect environmental realities (Jain P et al., p. 478-505). Thus, the interaction between natural landscapes and architectural development remains a critical area of study in understanding urban environments.

III. Climate and Building Materials

The interplay between climate and building materials significantly shapes urban architectural development, particularly as cities confront ongoing environmental challenges. Innovative building materials, such as high albedo surfaces and permeable pavements, reflect an increasing awareness of the need for sustainable design practices in response to rising urban temperatures. For instance, research indicates that implementing cool roofs and vegetation can effectively mitigate summer heatwaves, enhancing outdoor thermal comfort in urban spaces, as demonstrated by the study centered on the Sapienza University campus in Rome (Battisti et al.). Furthermore, as architectural education evolves, a new generation of practitioners in regions like South Africa is poised to integrate social and cultural imperatives with climate-responsive designs, addressing stark material contrasts in society while reinforcing community resilience to climatic shifts (Biermann et al.). Thus, the convergence of climate considerations and building material innovations is essential for fostering adaptive and sustainable urban environments.

A. Adaptation of materials to local climatic conditions

The adaptation of materials to local climatic conditions is crucial in shaping architectural responses to environmental challenges. This practice not only enhances the sustainability of structures but also contributes to the thermal comfort and resilience of urban spaces. For instance, utilizing high albedo materials can significantly mitigate heat absorption in urban areas, particularly during summer heatwaves, as highlighted in studies that emphasize the integration of vegetation and such materials in urban design (Battisti et al.). Additionally, the implementation of passive strategies, such as advanced facade designs that optimize sunlight and airflow, can reduce reliance on energy-intensive air conditioning systems. This approach fosters an architectural sensibility that harmonizes built environments with natural conditions, allowing for buildings that promote comfort with a minimal



environmental footprint (Napier et al.). Ultimately, these adaptations underscore the importance of embracing local climatic factors as integral to architectural development in urban settings.

B. Examples of sustainable architecture in response to climate

In addressing the pressing challenges posed by climate change, several examples of sustainable architecture illustrate innovative responses to evolving environmental conditions. One notable approach involves the adaptive reuse of existing structures, such as the transformation of outdated department stores into vertical farms, which not only revitalizes urban spaces but also enhances food security and minimizes carbon footprints. For instance, a recent case study highlights a repurposed department store in Wuppertal, Germany, demonstrating how its unique structural conditions support vertical farming initiatives, thus integrating agricultural practices into the urban environment and promoting sustainability (Bonek Hämper). Additionally, successful architectural interventions focus on creating environments that prioritize natural light and energy efficiency, addressing comfort ratings within urban planning frameworks. Such strategies reflect the importance of harmonizing built environments with natural elements, which is essential for enhancing the quality of life in cities while mitigating the effects of climate change (Puchkov M et al.).

IV. Urban Design and Natural Disasters

In the context of urban design, the threat of natural disasters necessitates a proactive and strategic approach to architectural development, as cities increasingly face the realities of climate change and environmental degradation. Effective urban design incorporates resilience principles that enable cities to withstand and recover from hazards, such as flooding, earthquakes, and storms. For instance, the International Principles and Standards for the Practice of Ecological Restoration provide frameworks for integrating natural systems into urban planning, promoting biodiversity that can mitigate disaster impacts (George D Gann et al.). Furthermore, recent studies highlight the importance of measuring urban disaster resilience through comprehensive assessments that consider social, economic, and infrastructural dimensions (Moghadas M et al., p. 101069-101069). By understanding these complexities, urban designers can create spaces that not only address immediate structural needs but also foster community engagement and



ensure long-term sustainability, ultimately leading to cities that are better equipped to adapt to an increasingly unpredictable climate.

A. Impact of natural disasters on architectural resilience

Natural disasters significantly influence architectural resilience, compelling urban planners and architects to reconsider design principles and material choices. As cities increasingly confront the repercussions of climate change, including more severe storms and flooding, the integration of sustainable practices becomes imperative. The application of artificial intelligence, for instance, could enhance the resilience of urban infrastructures by optimizing energy efficiency and facilitating better forecasting of extreme weather events (Chen L et al., p. 2525-2557). This technological shift not only aids in reducing energy consumption but also plays a critical role in the management of natural resources essential for building resilient cities. Furthermore, as evidenced in recent studies, creating a sustainable energy landscape is crucial for mitigating the impacts of disasters on urban architecture (Kabeyi MJB et al.). Thus, the architectural response to natural disasters serves as a reflection of a city's commitment to sustainability and resilience, ultimately shaping its developmental trajectory amidst ever-changing climatic conditions.

B. Strategies for disaster preparedness in urban planning

Effective disaster preparedness strategies in urban planning are crucial for mitigating the impacts of climate change and ensuring the resilience of cities. As urban areas increasingly face challenges due to their geographical and climatic conditions, integrating advanced technologies becomes essential. The deployment of Artificial Intelligence (AI) and Machine Learning (ML) can enhance urban infrastructure planning by providing predictive analytics for disaster events, allowing for better resource allocation during emergencies (Kushwaha AK et al.). Furthermore, collaboration between urban planners and climate scientists enables the development of tailored solutions that consider local environmental factors. In places like Uzbekistan, strategic planning must address the rapid urbanization and population growth that necessitate the establishment of community-centric services while also reinforcing the need for disaster-responsive architectures (Eshatov I et al.). By incorporating these strategies, cities can not only enhance their disaster preparedness but also promote sustainable development in alignment with their unique climatic conditions.



V. Conclusion

In conclusion, the architectural evolution of cities is inextricably linked to the natural and climatic conditions that shape their environments. As cities strive for sustainable development amidst the challenges posed by climate change, it becomes essential to adopt architectural practices that prioritize environmental integration and resilience. The implementation of policies such as the Covenant of Mayors (CoM) illustrates the need for strategic frameworks that guide local authorities in their efforts towards sustainability, as well as the necessity for innovative solutions that consider geographical constraints (Berghi et al.). Moreover, the relationship between architecture and environmental thinking underscores the importance of basic principles in design, promoting passive strategies that reduce energy consumption while enhancing comfort within buildings. Embracing this dual focus on environmental stewardship and architectural ingenuity will not only address contemporary challenges but will also pave the way for future urban landscapes (Napier et al.).

A. Summary of key points discussed

An exploration of the intersection between natural and climatic conditions and architectural development underscores several pivotal themes. First, the adaptability of architectural styles to suit specific environmental contexts, as seen in traditional Chinese architecture, reflects a profound harmony with nature, wherein urban layouts are optimized for comfort and energy efficiency, underscoring the necessity of sustainability in modern practices (Almodóvar Melendo et al.). Furthermore, the evolution of new materials, such as fabric membranes, illustrates how advancements can enhance building performance; however, their widespread acceptance is impeded by insufficient understanding of their environmental behaviors (Chilton et al.). Consequently, recognizing the integration of climate-responsive design not only informs cultural identity but also propels innovation in sustainable building techniques. These discussions collectively highlight the need for a broader appreciation of the ways in which climatic factors shape architectural choices, ultimately advocating for a future that marries aesthetic value with ecological responsibility.

B. Future implications for architecture in the context of climate change

As climate change intensifies, the future of architecture must pivot towards sustainability, necessitating innovative design practices that harmonize with natural



ecosystems. One crucial implication is the integration of ecological restoration principles in urban environments, ensuring that architectural developments enhance biodiversity and support ecosystem services. This approach prioritizes designs that mitigate habitat loss and promote resilience against climate impacts, thereby reflecting the urgent need for adaptive strategies outlined in the SER Standards (Cardoso P et al., p. 108426-108426). Furthermore, as communities confront the realities of climate-induced displacement and resource scarcity, architecture must draw upon diverse knowledge systems, including local and traditional practices, to create spaces that foster both human and ecological health. By aligning architectural practices with the goals of sustainable management and restoration, future urban landscapes can evolve into self-sustaining ecosystems, ultimately contributing to the resilience of both built environments and natural systems (George D Gann et al.).

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Accessible Furniture and Interior Design: What to Consider

**Kurbanova Maksuda Karshiyevna Teacher, Samarkand State University of
Architecture and Construction, Department of Interior Design**

Annotation: The concept of accessible furniture and interior design focuses on creating inclusive environments that accommodate people of all abilities, including those with physical, sensory, and cognitive impairments. This approach ensures that interior spaces are functional, comfortable, and aesthetically pleasing for everyone, regardless of age or disability. Key considerations include ergonomic furniture, appropriate spatial layout, barrier-free access, visual and tactile cues, and adaptive technology. By integrating universal design principles, designers can foster independence, safety, and social inclusion. This paper explores the essential elements to consider when planning accessible interiors in both residential and public settings.

Keywords: accessible design, universal design, ergonomic furniture, inclusive interiors, barrier-free environment

Introduction

The significance of accessible furniture and interior design has increasingly emerged as a crucial consideration in creating functional environments for diverse populations. As society becomes more aware of the needs of individuals with varying abilities, including children in residential care, the demand for thoughtfully designed spaces grows (Docherty et al.). Accessibility in design not only enhances usability but also fosters an inclusive atmosphere, thereby transforming experiences for users. Aligned with this perspective, modern educational settings require innovative learning spaces that inspire creativity and enhance engagement for all learners. Research indicates that well-designed environments can significantly impact motivation and overall experiences, bridging the gap between educational institutions and the community (Elnokaly et al.). Thus, as we delve into the intricate aspects of accessible furniture and interior design, it becomes essential to examine the implications of these choices on user well-being and societal integration.

Definition of accessible furniture and interior design

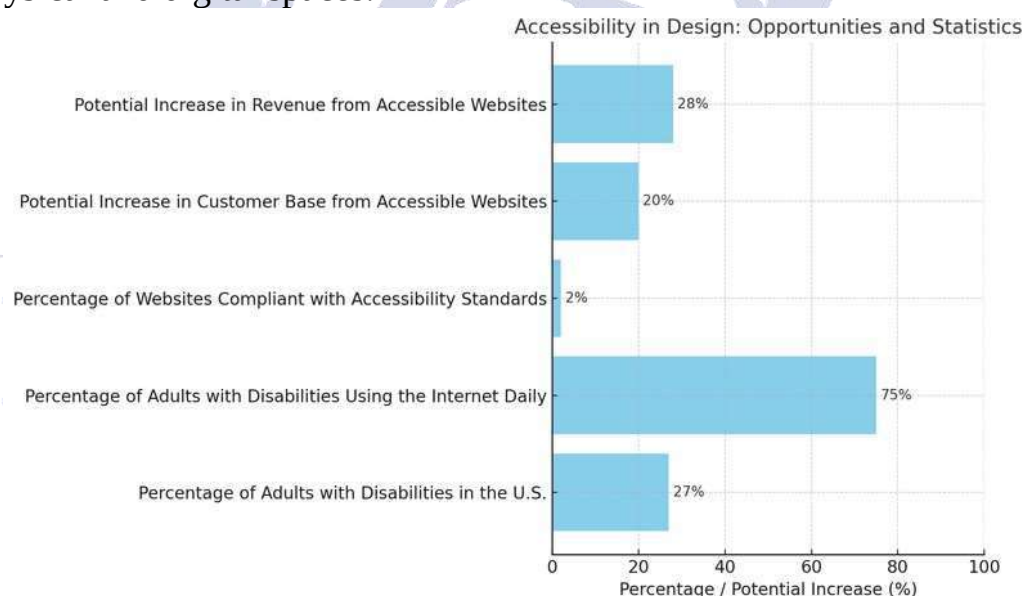
Accessible furniture and interior design encompass a range of practices aimed at creating spaces that are usable and welcoming for individuals of all abilities. This inclusive approach not only addresses physical disabilities but also considers cognitive and sensory impairments, ensuring that environments can be navigated and enjoyed by everyone. Essential features of accessible furniture include



adjustable heights, ergonomic designs, and clear pathways that accommodate mobility aids. Furthermore, the design process must involve diverse stakeholders through co-design methods, as seen in the participatory project described, which brought together designers, care professionals, and community members to collaboratively develop an intergenerational community center (Biamonti et al.). Events like the biennial conference held at the RCA showcase innovative strategies in accessible design (Bichard et al.), emphasizing the importance of integrating user input to foster environments that promote independence and social interaction among all demographics.

Importance of inclusivity in design for diverse populations

Inclusivity in design is paramount for addressing the diverse needs of populations, especially within the context of accessible furniture and interior design. An effective design goes beyond aesthetic appeal; it must ensure that individuals with varying abilities can navigate and utilize spaces effectively. For instance, a participatory co-design process that engages community members, including those with disabilities, can lead to environments that foster intergenerational interaction and cater to individuals with physical or mental disabilities, as exemplified by the model community center described in (Biamonti et al.). Furthermore, creating accessible environments not only supports engagement but also promotes independence for people with disabilities, as reiterated in (FRANGULEA et al.). By embracing inclusive design principles, we can enrich the lives of a broader spectrum of individuals, enhancing their overall quality of life and ensuring equitable access to physical and digital spaces.



This chart presents various statistics related to adults with disabilities in the U.S. It shows that 27% of adults have disabilities, while 75% of those use the internet daily. However, only 2% of websites adhere to accessibility standards. The potential increase in customer base and revenue from implementing accessible website design is significant, with estimates of 20% and 28% respectively. This data underscores the critical need for more inclusive web design to tap into a largely underserved population.

Understanding Accessibility Needs

In order to create environments that are genuinely inclusive, it is essential to understand the diverse accessibility needs of individuals. Accessibility transcends mere compliance with regulations; it encompasses a commitment to fostering equitable spaces that meet the requirements of all users, regardless of physical ability or age. Effective design should aim to accommodate a variety of functional requirements while promoting independence and comfort. For instance, the integration of universal design principles encourages the creation of furniture and interior spaces that offer equal usability, mitigating the need for stigmatizing solutions that isolate specific populations (Aslaksen et al.). Furthermore, as noted in contemporary studies, learning spaces optimized for accessibility can significantly enhance engagement and motivation, demonstrating that well-designed environments inspire creativity and productivity (Elnokaly et al.). Thus, a holistic understanding of accessibility not only improves user experience but also contributes to a more sustainable and inclusive society.

Overview of different disabilities and their impact on design

Designing accessible furniture and interior spaces necessitates a comprehensive understanding of the diverse range of disabilities and their specific implications for usability. Disabilities can vary widely, encompassing physical limitations, sensory impairments, cognitive challenges, and mental health issues. For instance, individuals with mobility impairments may require furniture that is adjustable and easy to navigate, while those with visual impairments benefit from tactile or auditory cues integrated into the design. Additionally, cognitive disabilities may necessitate simplified layouts and clear signage to enhance navigation and understanding. The complexities of these varying needs underscore the importance of inclusive design principles that consider the spectrum of disabilities to create environments that are both functional and aesthetically pleasing. As noted by the National Endowment for the Art, fostering accessible design not only improves usability but also enriches the overall experience for all users (Evans-Cowley et al.). Events like Include help facilitate dialogue among designers about these critical considerations (Bichard et al.).



Disability Type	Design Considerations
Visual Impairments	Ensure uniform lighting to minimize shadows and glare; incorporate task lighting in work areas; use adjustable lighting to accommodate sensitivities; install motion-activated lighting in corridors for ease of navigation.
Mobility Impairments	Provide wide doorways and hallways; include zero-step entrances; ensure accessible bathrooms and kitchens; use lever-style door handles; install well-placed lighting to enhance visibility.
Cognitive Disabilities	Use simple and intuitive layouts; provide clear signage; incorporate consistent color schemes; minimize visual distractions to aid orientation and reduce confusion.
Hearing Impairments	Install visual alarms and indicators; ensure good acoustics to reduce background noise; provide written instructions and information; use vibrating devices for alerts.
Developmental Disabilities	Create spaces that support social interaction; use calming colors and textures; provide sensory-friendly areas; ensure safety features are in place to prevent accidents.

Impact of Disabilities on Interior Design Considerations

Legal standards and guidelines for accessibility in furniture

Understanding the legal standards and guidelines for accessibility in furniture is crucial for fostering inclusive environments that accommodate diverse needs. The Americans with Disabilities Act (ADA) serves as a foundational framework, mandating that public spaces, including their furnishings, be accessible to individuals with disabilities. This includes specific requirements for dimensions, clearances, and usability, ensuring that furniture design is not only functional but also welcoming. Additionally, studies such as the one conducted by Farm7 and the Scottish Institute for Residential Child Care underscore the significance of designing furniture that transcends institutional aesthetics, promoting a more therapeutic and



engaging environment for all users, particularly in care settings. The ongoing evolution of these design guidelines, informed by participatory research, highlights the necessity of integrating accessibility considerations into furniture design processes, as supported by funding agencies like the National Endowment for the Arts. By adhering to these standards, designers can significantly enhance user experiences.

Standard/ Guideline	Description
2010 ADA Standards for Accessible Design	Sets minimum requirements for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. Applicable to furniture and interior design elements. ([ada.gov](https://www.ada.gov/law-and-regs/design-standards/2010-stds/?utm_source=openai))
Fair Housing Act (FHA)	Requires that multifamily housing built for first occupancy after March 13, 1991, meet specific design and construction requirements to ensure accessibility for individuals with disabilities. Relevant to furniture and interior design in housing contexts. ([hud.gov](https://www.hud.gov/program_offices/fair_housing_equal_opp/physical_accessibility?utm_source=openai))
Architectural Barriers Act (ABA)	Mandates that facilities designed, built, altered, or leased with federal funds be accessible to the public, including requirements for accessible furniture and interior design elements. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Architectural_Barriers_Act_of_1968?utm_source=openai))
Section 508 of the Rehabilitation Act of 1973	Requires federal agencies to make their electronic and information technology accessible to people with disabilities, which can include accessible furniture and interior design in federal facilities. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Section_508_Amendment_to_the_Rehabilitation_Act_of_1973?utm_source=openai))

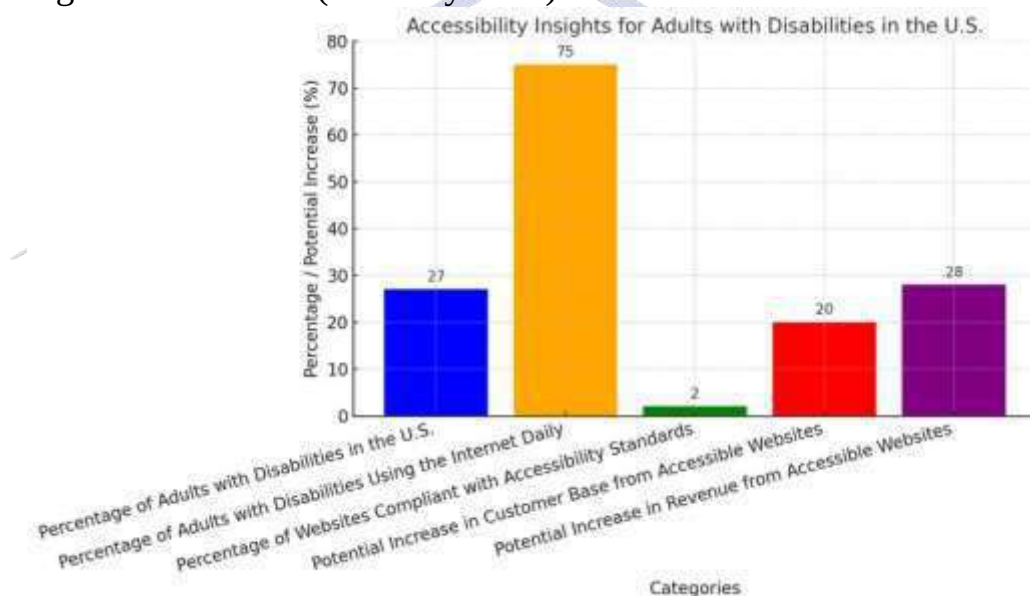
Legal Standards and Guidelines for Accessibility in Furniture

Key Features of Accessible Furniture

Accessible furniture is characterized by several key features that enhance usability and ensure that environments cater to a diverse range of physical abilities. Primarily, height-adjustable tables and chairs are essential, allowing users to customize their seating arrangements for optimal comfort and accessibility. Additionally, materials and finishes should be selected for their tactile qualities, enhancing sensory engagement for individuals with visual impairments.



Incorporating modular designs can further promote adaptability and flexibility, accommodating various user needs and activities. The significance of aesthetic appeal must also not be overlooked, as well-designed spaces can positively affect the well-being of individuals, particularly in care environments, where thoughtful design can improve the experience of users (Docherty et al.). Furthermore, creating inclusive spaces requires an ecological approach to design, ensuring that furniture supports a sustainable environment while fostering an inviting atmosphere for learning and interaction (Elnokaly et al.).



This bar chart illustrates key statistics regarding adults with disabilities in the U.S. It shows that 27% of adults have disabilities, with 75% of them using the internet daily. However, only 2% of websites meet accessibility standards. There is significant potential for growth, as accessible websites could increase the customer base by 20% and revenues by 28%. This highlights the importance of inclusivity in web design for both social and economic benefits.

Ergonomic design principles for comfort and usability

The implementation of ergonomic design principles is essential for enhancing comfort and usability in accessible furniture and interior design. By prioritizing the physical interactions between users and their environment, designers can create spaces that accommodate diverse needs, particularly for individuals with disabilities. For example, applying the EMFASIS framework, which emphasizes Extended Modularity and Functional Accessibility, guides the development of adaptable pieces like adjustable overbed tables that cater to a variety of user requirements (AOUSSAT et al.). Additionally, events such as the Ergotrip Design conference highlight the significance of interdisciplinary collaboration in the fields of design,



ergonomics, and human-computer interaction, which can further refine approaches to usability (Gomes et al.). Ultimately, by integrating these ergonomic principles, designers not only improve the comfort of users but also foster a more inclusive environment that encourages engagement and participation across all demographics.

Adaptable furniture solutions for various needs and spaces

In contemporary interior design, the emphasis on adaptable furniture solutions reflects a growing recognition of the diverse needs of users across various settings. These solutions not only cater to functional requirements but also promote inclusivity and comfort, essential for fostering positive environments. For instance, versatile pieces such as modular seating and adjustable tables can transform a space to support different activities, from collaborative learning to quiet reflection. The role of furniture in educational contexts is particularly critical, as studies indicate that well-designed learning environments can significantly enhance students engagement and success (Elnokaly et al.). Moreover, incorporating elements tailored to children with specific learning disabilities promotes equal opportunities for all learners, thereby addressing the broader goal of reducing achievement gaps (Alrumayh et al.). Thus, prioritizing adaptable furniture in design not only maximizes spatial utility but also contributes to the overall accessibility and functionality of interior spaces.

Interior Design Considerations

In the realm of interior design, particularly when addressing accessibility, several critical considerations must be emphasized to foster an inclusive environment. First, furniture should facilitate ease of use for all individuals, which aligns with the principles of universal design that advocate for equitable access to shared spaces and resources for everyone, regardless of their physical abilities (Aslaksen et al.). Moreover, the physical layout of interiors plays a substantial role in promoting safety and functionality; spaces must be flexible to support various activities while incorporating elements that enhance comfort and creativity, as noted in the discussion about well-designed learning spaces (Elnokaly et al.). This holistic approach not only improves user experience but also cultivates an inviting atmosphere that acknowledges the diverse needs of its inhabitants, ultimately leading to environments that inspire and promote well-being.

Space planning for mobility and ease of access

Effective space planning is crucial for ensuring mobility and ease of access within interior environments, particularly when accommodating diverse user needs. Thoughtful design can greatly enhance usability and foster an inclusive atmosphere. For instance, ensuring that pathways are wide enough for wheelchairs, that furniture is arranged to allow free movement, and that there are clear, navigable routes can



significantly improve accessibility. Furthermore, integrating adjustable furniture options ensures that users of varying heights and physical abilities can engage comfortably with their surroundings. The impact of spatial design extends beyond mere aesthetics; it serves a functional role in promoting well-being. Research indicates that environments tailored to reduce stress, such as those with calming features, can enhance the overall experience of users, as highlighted in studies on birth room design (Evans-Cowley et al.)(Jenkinson et al.). Therefore, prioritizing accessibility in space planning not only meets regulatory standards but also enriches the user experience.

Color and material choices that enhance visibility and safety

Incorporating thoughtful color and material choices in interior design is crucial for enhancing visibility and safety, particularly in spaces intended for vulnerable populations, such as shelters and healthcare facilities. The use of high-contrast color schemes can significantly aid individuals with visual impairments in navigating environments safely, allowing for clearer differentiation between walls, furniture, and flooring. Materials that are tactile, durable, and easy to clean not only improve safety but also contribute to a sense of well-being among users. For instance, trauma-informed design principles suggest that incorporating calming colors and non-reflective surfaces can create a more therapeutic atmosphere, thus supporting emotional recovery in spaces like transitional housing for women and children affected by domestic violence(Rakes et al.). Moreover, as emphasized in wellness design research, enhancing safety and security remains paramount, influencing design decisions that prioritize user experience in environments such as healthcare facilities(Cho et al.).

Conclusion

In conclusion, the integration of accessible furniture within interior design is essential for creating environments that cater to the diverse needs of all users. As the importance of adaptability becomes increasingly recognized, designers must prioritize functionalities that promote inclusivity and comfort. Accessible furniture not only enhances the user experience but also aligns with contemporary educational principles, as noted in the growing emphasis on innovative spaces that foster collaboration and creativity in learning environments. This can be particularly vital in developing contexts, where the establishment of well-designed spaces is fundamental to enriching the overall quality of life and educational outcomes (Elnokaly et al.). By recognizing the significance of aesthetic appeal alongside functionality, interior design can contribute to building environments that are not just livable but also capable of inspiring users to engage actively with their



surroundings (Carroll et al.). Thus, the commitment to accessible design is not merely a trend but a necessary evolution in the field.

Summary of the importance of accessible design

The significance of accessible design extends beyond mere compliance with regulations; it embodies a commitment to inclusivity that enhances the quality of life for all individuals. By applying principles of universal design, as highlighted in contemporary discussions, designers can create environments that are functional and aesthetically pleasing for everyone, regardless of ability or age (Aslaksen et al.). This approach not only eliminates the stigma associated with specialized solutions but also promotes equal status among users. Furthermore, the importance of well-designed spaces is evident in various contexts, such as educational settings where engaging and flexible environments can significantly impact learning outcomes. Acknowledging the need for innovative, adaptable spaces that inspire creativity and collaboration ultimately supports the development of socially and environmentally responsible communities (Elnokaly et al.). Therefore, embracing accessible design is crucial for fostering an inclusive society that prioritizes the well-being of all its members.

Call to action for designers and consumers to prioritize accessibility

As the demand for inclusive design continues to rise, it is imperative that both designers and consumers recognize the significance of prioritizing accessibility in furniture and interior design. Designers must actively engage with user-centered design principles that address the diverse needs of individuals, particularly those with disabilities or age-related limitations. This approach will not only enhance user satisfaction but also foster a sense of belonging and independence in living spaces. Simultaneously, consumers play a crucial role by advocating for products that reflect these accessible design standards, thereby influencing market trends and encouraging innovation within the industry. By championing accessible design, stakeholders can create environments that promote equity and usability for all, ensuring that the emotional and functional needs of individuals are met comprehensively. Ultimately, embracing accessibility in design can lead to richer, more meaningful experiences in everyday life (Evans-Cowley et al.)(Jonsson et al.).

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**Research Science and
Innovation House**

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MAKHALLA - THE DISAPPEARING HISTORICAL APPEARANCE OF OLD TASHKENT

Sereyeva Guljazira Adilbaevna

Associate Professor of the Department of Urban Planning,
Tashkent University of Architecture and Construction.

**The neighborhood is the foundation of our eternal value,
rich past and bright future.**

Abstract: In this article, many people think that Tashkent is too Europeanized, but not everyone knows that in the very center of the city today there are national, colorful, charming neighborhoods - traditional Uzbek neighborhoods, where there are generous one- and two-story houses that have stood here for more than a hundred years...

New houses are emerging today in place of the destroyed neighborhoods. The residents of the neighborhoods will probably live in them more comfortably, but soon, unfortunately, there will be no trace of the unique appearance of old Tashkent.

Key words: city, city center, neighborhood, tradition, mosque, madrasa, people and state, market, personal self-government bodies

The experience of state structure and management in the Asian continent and the Muslim East has its own characteristics and traditions. A neighborhood that existed before the Arab conquest and the conversion to Islam existed as an association of people living in a certain small area, bound not only by good neighborly relations, but also by internal rules of conduct. spiritual and moral standards, customs and traditions formed over the centuries. This type of socio-economic harmony of the population changes at each stage of historical development. Socio-political, cultural and economic changes came to most traditional Uzbek families through the neighborhood.

Tashkent, in the minds of many, is a completely Europeanized capital of Uzbekistan with wide avenues, green parks and beautiful high-rises built in recent



years. However, not everyone knows that almost in the very center of the city, charming corners of national color have been preserved to this day - traditional Uzbek mahalla quarters, adobe one- and two-story houses of which have been standing here for more than a hundred years...

In Tashkent, not far from the Chorsu market, there is a circus. It is no coincidence that this place is located this way: it was here that the center of the old city was once located. Since the Middle Ages, ancient mosques and madrassas have been preserved here, such as, for example, the famous Kukeldash, here was the Tashkent shakhristan - a part of the city with residential areas inside the fortress wall.

Not many tourists today reach the Zarkaynar district, located behind the circus, but it is here that you can still see the unique adobe houses of local mahallas, which now look the same as they did 100-150 years ago.



These are old Uzbek quarters of 5-7 streets and several hundred residents, where there is a mosque, a small market, a teahouse and tiny mahalla committee offices headed by their elder. Completely different people live here than in the modern microdistricts of Tashkent, and for tourists who have come here, the medieval appearance of these streets complements the "ethnographic" appearance of Tashkent.

In the mahalla, every resident knows not only all of their closest neighbors, but also Aunt Khadicha from the Sagban dead end, who cooks the most delicious pilaf in the mahalla, and the hairdresser Baykhtiyer, who gets all the men in the quarter cut off. Here, children calmly ride their bikes through the streets, just like we did in



our Soviet childhood. And the neighboring grandmothers treat them to samsa or flatbreads, just taken out of the oven.

Even today, you can easily see chickens, rams or goats in the courtyards of old adobe houses - and this is actually in the center of the capital of Uzbekistan! Tashkent, in the minds of many, is a completely Europeanized capital of Uzbekistan with wide avenues, green parks and beautiful high-rises built in recent years.



Tashkent Kukeldash: people studied, prayed, and maintained a caravanserai here.

However, not everyone knows that almost in the very center of the city, charming corners of national color have been preserved to this day - traditional Uzbek mahalla neighborhoods, whose adobe one- and two-story houses have been standing here for over a hundred years...

Local boys also like to run to the Khazrati Imam religious complex located next to the mahalla, where on the square between the ancient mosque of the same name and two madrassas - Barakhan and Muyi Muborak, they launch kites into the sky, just like their fathers and grandfathers did 30-50 years ago...





Tourists who come to see this stunningly beautiful architectural ensemble love to stare at the kites soaring in the blue sky, and the kids who are especially skilled at this craft sometimes get a few sums for pocket money...

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Now you can see the Khazrati Imam Complex and the Zarkaynar mahalla nearby. Of course, not everywhere here today is so relatively welcoming and calm: part of the quarter has been under reconstruction, which has been going on for ten years, and the old houses there are being torn down, and the residents are being evicted to modern high-rise buildings.



Some of them still continue to live in half-ruined adobe houses, which are separated from the modern microdistricts of the city by a high fence - like some kind of reservation of local "Indians". I think that the attitude of Tashkent residents to the residents of the mahalla is something else - as to third-class people, because who else would live in such slums in our time...

By the way, houses in the mahalla are still being built using old Uzbek technology, which saved many buildings in its time from the strongest earthquake of 1966, which greatly destroyed Tashkent.

Houses are built using natural materials: an internal wooden frame is installed from the trunks of young pyramidal poplars, which makes the entire structure strong and earthquake-resistant. Bricks are partially laid inside the frame, but mostly guval - pellets of unbaked clay. The walls of houses in the mahalla are usually made blind on three sides. And inside the clay duval there is an internal courtyard with a garden and outbuildings.

When building houses, as a rule, not a single nail is used, since the wooden parts fit perfectly to each other.

On the facade of the house there are one or two windows with carved wooden frames, the entrance gates are usually also wooden, often carved.



Water and gas pipes do not run underground in the mahalla, but hang along the streets, along with electrical wires.

INNOVATION HOUSE



Back in 2012, former President of Uzbekistan Islam Karimov signed a decree on the reconstruction, improvement and development of the old city in Tashkent,



during which, in addition to the restoration of mosques and madrassas, the dilapidated adobe buildings that were erected in Tashkent even before Tsarist Russia conquered Central Asia in the 19th century were to be demolished!

Since then, many mahalla buildings have been demolished, and some are still awaiting this fate, because next to the religious complex of Hazrati Imam in 2017, the new President Shavkat Mirziyoyev laid the symbolic stone of the future giant building of the Center for Islamic Civilization. Passing by it, we could not help but look at the construction site, which is in full swing. A grand mosque will soon appear there, the dome of which is in no way inferior in beauty to ancient monuments. And nearby, on an area of 482 hectares, including the Chorsu market, the streets of the mahallas "Zarkaynar", "Sagbon", "Sebzor", "Karasaray", "Guzalbob" and others, it is planned to create a tourist, commercial and entertainment space - the so-called open-air museum, where craft workshops and shops, teahouses, hotels, small museums will be organized, in general, all the necessary infrastructure for tourists.



New houses are appearing today on the site of the demolished neighborhoods. The former residents of the mahallas will live in them, perhaps, more comfortably, but soon, unfortunately, there will be no trace left of the unique appearance of old Tashkent.

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Research Science and Innovation House



O‘zbek teatri san’ati va dramaturgiyasining shakllanishida Abdulhamid Sulaymon o‘g‘li Cho‘lponning o‘rni.

O‘zbekiston Davlat Konservatoriyasi huzuridagi
Botir Zokirov nomidagi Milliy estrada san’ati instituti
Professional ta’lim: Vokal san’ati (estrada xonandaligi)
2-bosqich talabasi **Shavkatov Sardor Xurshid o‘g‘li**

Annotatsiya: Mazkur maqola buyuk jadic, tarjimon, dramaturg, yozuvchi, shoir, san’atshunos, Abdulhamid Sulaymon o‘g‘li Cho‘lponning o‘zbek teatr san’ati va dramaturgiyasiga qo‘shgan ulkan hissi haqida gap boradi.

Аннотация: В статье рассматривается большой вклад молодого поэта, переводчика, драматурга, писателя, поэта, искусствоведа Абдулхамид Сулаймона Огли Чолпона в узбекское театральное искусство и драматургию.

Abstract: This article discusses the great contribution of the young poet, translator, playwright, writer, poet, art critic, Abdulhamid Sulaymon Ugli Cholpon to Uzbek theater art and dramaturgy.

Kalit so‘zlar: Yorqinoy, Halil Farang, kompazitsiya, tomosha, an’ana, mumtoz, sahna, sistema, maktab, aktyor, rejissyor, senariy, dramaturg, shart-sharoit, butafor, pedagog, rassom, teatr, libos, ijod, tovush, chiroq, dekaratsiya, san’at, professional, tasavvur, spektakl, timsol, zamonaviy, ashula, musiqa, raqs, sinkret, jest, pantomime, marionetka, qo‘girchoq, plastika, neverbal, maska, delarte, garmonik.

Ключевые слова: Ёркиной, Халиль Фаранг, композиция, зрелище, традиция, классика, сцена, система, школа, актер, режиссер, сценарий, драматург, условия, реквизит, учитель, художник, театр, костюм, творчество, звук, лампа, декорация, искусство, профессионал, воображение, представление, символ, современный, песня, музыка, танец, синкрет, жест, пантомима, марионетка, кукла, пластика, невербальный, маска, деларте, гармонический.

Keywords: Yorqinoy, Halil Farang, composition, spectacle, tradition, classic, stage, system, school, actor, director, script, playwright, conditions, props, teacher, artist, theater, costume, creativity, sound, lamp, decoration, art, professional,

imagination, performance, symbol, modern, song, music, dance, syncret, gesture, pantomime, marionette, puppet, plastic, nonverbal, mask, delarte, harmonic.

Cho'lpon (1898-1938) — o'zbek dramaturgiyasining emas, umum o'zbek sahna san'ati madaniyatining rivojiga ham bebaho hissa qo'shgan ijodkor, o'zbek teatrini jahon dramaturgiyasining mumtoz asarlariga oshno qilgan tengsiz tarjimon. «Turon» davlat teatrida kechgan ijodiy jarayonning faol ishtirokchisi, 1921-yildan ma'lum muddat direktori, Mannon Uyg'ur qatorida Moskvadagi o'zbek drama studiyasi mashg'ulotlarida murabbiy, repertuaridagi asarlarning mualliflaridan. Truppaning adabiy emakdoshi, Mirmulla Shermuhamedov, G'ozir Yunus bilan barobar teatr tanqidchiligini professionalizm bosqichiga ko'targan siymo va ayni vaqtda o'zbek sahnasi yutuqlarining targ'ibotchisi.

Dramaturgiya janrida Cho'lponning o'nga yaqin pyesalar yozgani ma'lum bo'lsa-da, ulardan «Xalil Farang», «Yorqinoy» (1921), «Cho'rining isyoni», «Yana uylanaman» (Yusuf qiziq asari asosi-da, 1926), «Mushtumzo'r», «O'rtoq Qarshiboyev», «Xujum» (V.Yan bilan hamkorlikda, 1928) pyesalari ma'lum va ularning hammasi hozirgi O'zbek milliy akademik drama teatrida sahnalashtirilgan.

«Xalil Farang» pyesasining mazmuni matbuotda e'lon qilingan manbalar asosida tiklangan bo'lishiga qaramay, matni saqlanmagan.

«Yorqinoy» esa avvaliga ikki pardali bo'lib, 1921-yili ilk bor sahna yuzini ko'rgan. 1921-1927-yillar orasidagi muddatda dramani qayta ishlab, hajmini kengaytirib, janrini olti pardali «afsonaviy tomosha» deb belgilagan. Pyesaning boshlanishiga yozib qo'yilgan ikki bag'ishlov (epigraf) drama mohiyatini to'g'ri anglashga ishoradek tuyuladi:

“Yorqinoy” o'zbek teatri sahnasida musiqali drama janrida sahnalashtirilgan «Farhod va Shirin», «Layli va Majnun» bilan oldinma-keyin dostonchilik an'anasining sahna san'atiga ham ko'chishiga sababchi bo'lgan asardir. Biroq «Farhod va Shirin», «Layli va Majnun»dan farqli o'laroq, bu asarda sodir bo'ladigan voqealarni real hayotga yaqinlashtirish mayllari mutlaqo o'zgachadir. «Yorqinoy»da asar bosh qahramoni sohibjamol bo'lishi bilan barobar, tengsiz jasorat, mohir qilich sohibi ham. U avvalo ahdiga sodiq ma'shuqa. Uning Po'latga bo'lgan ishq «vodiya vaxdat haqiqat»ini anglab yetish yo'lida qiynoqli sinovni boshidan kechiradi. Yorkinoy bu sinovga bardosh beribgina qolmay, ishqda murodiga yetish barobarida mamlakatda adolatni ham qaror toptirib, jabrdiyda sevgilisi, xalqparvar Po'latning podsholik taxtini egallashiga yo'l ochib beradi. Ana

chin muhabbatning imkoni! Pyesa ana shu muhabbat, ishqning sinovlari bilan boshlanadi. Yorqinoy, Po‘latdan farqli o‘laroq, yalangoyoq xizmatkorni bor vujudi, aql-idroki bilan sevadi. Uni bu yo‘ldan hech narsa na naslu nasabi, na rasmu odat, qaytara oladi, u sevgisini «umidsiz sevgi» ekanini bilsa ham, Po‘latdan voz kechmaydi, Po‘lat bo‘lsa, boshqacha. U ham Yorqinoyni sevadi. Biroq uning vasliga yetish haqiqatdan yiroq ekanini his etgan Po‘lat, Yorqinoydan uzoqlashib ota-onasi, qarindosh-urug‘larining qotili bo‘lgan O‘lmas botir (Yorqinoyning otasi)ga va xalqqa bitmas-tuganmas zulm o‘tkazayotgan xon saroyiga qarshi ko‘tarilajak qo‘zg‘olonga rahnamolik qilishni afzal biladi.

Pyesaning boshida Po‘lat o‘zining keyingi xatti-harakatlarini bunday belgilab oladi: «Yorqinoy poshsha, Yorqin poshsha. Yorqin poshshadan shu kunlarda bir umr ajralmoq kerak! Bu mening uchun ko‘p og‘ir bo‘lsa-da, men ko‘nglimni boshqa yoqlarga bura olaman. Mening boshimda yana boshqa dardlar ham bor; u dardlar meni mana bu yaxshi ko‘rish dardlaridan qutqarib ketadi...»

Po‘latning boshidagi «boshqa dardlar» bu ota-ona, qarindosh urug‘lar uchun olinadigan qasos, qolaversa xalq qo‘zg‘oloniga bosh bo‘lish burchi. Ana shu ikki qarama-qarshi istak Yorqinoyga bo‘lgan muhabbat va o‘zi anglab yetgan burch orasidagi kurashda so‘nggisi g‘olib kelib, Po‘lat O‘lmas botir xonadonini va Yorqinoyni tark etadi.

Otasining siru asroridan xabar topgan Yorqinoy uchun naslu nasab, rasmu odat o‘z qadrini yo‘qotadi. Po‘latda muhabbat hissidan burch ustun kelayotganining fahmiga yetgan Yorqinoy ishq tuyg‘usi bilan burch egizak ekanligini qalban sezib, aqlan idrok etib, haqiqatni o‘z qismatida qaror toptirish yo‘lida oxirigacha kurash olib boradi va murodiga yetadi.

Pyesada Yorqinoy va Po‘latdan tashqari, O‘lmas botir, Kal, Nishabsoy begi, Novcha polvon, Qumri, Momo xotin singari murakkab qahramonlar harakat qiladi. Muallif ularning har birini bir olam, bir-biriga mutlaqo o‘xshamaydigan badiiy tiplar darajasida chizib beradi. Masalan, saroyda xondan keyingi ikkinchi shaxs, saltanatning tayanchi O‘lmas botir turadi. Undan keyin Nishabsoy begi. O‘lmas botir murakkab shaxs: bir tomondan, jinoyatchi, jallod; ayni vaqtda ro‘y bergan hodisaga ochiq ko‘z bilan qarab, haqiqatni tan ola biladigan mard ham. Xotiniga sadoqatli, yolg‘iz farzandi Yorqinoyga esa mexribon ota. U o‘zi singari erkak zotidan farqli o‘laroq yakka xotin bilan umr o‘tkazgan. Zavjasi yoshligidayoq vafot

etib, uning o‘limidan keyin qizim Yorqinoy o‘ksiklik bo‘lmasin, o‘gay o‘gayligini qiladi degan xayol bilan uylanmagan.

Ko‘zining oq-qorasi farzandini ham qiz, ham o‘g‘il o‘rnini bosadigan jasur, o‘zidan ham abjir qilichboz qilib o‘stirgan. Buning ustiga qizi orqali oilasining xonlik taxtiga to‘gridan-to‘g‘ri vorisligini ta‘minlash niyatida xonzodani kuyov qilishni ham oldindan rejalashtirib qo‘ygan. Ammo bunga qizining na munosabati, na ko‘nglidan kechayotgan mulohazayu istaklari bilan hisoblashishni xayoliga ham keltirmaydi. O‘lmas botir fojialarining bosh sababi shunda. U asarning beshinchi pardasidagi Yorqinoyning o‘g‘irlanishida Po‘latdan gumondor. Botir jang maydonini tashlab, oq bayroq bilan uning huzuriga kelib qilgan suhbatida masala oydinlashadi:

Po‘lat - Qizingizni Xonzoda o‘g‘irlatgan bo‘lsa nima deysiz?

Botir (xotirjam). Xonzoda o‘g‘irlatmaydir, Xonzodaga o‘g‘irlatish lozim emas, o‘zim bermakchi bo‘lganman. (Noumid) Sening ishingni tugatib bo‘lgandan keyin to‘y bo‘lmoqchi edi.

Po‘lat - Qizingiz unarmidi?

Botir - Nega unamasin? Men uni senga o‘xshash yalangoyoqqa berib yotibmanmi?

Po‘lat – Bo‘lmasa... Bo‘lmasa qizingizni ko‘nglini bilmas ekansiz... Qizingizni bilmasdan, tanimasdan sevar ekansiz. Bu sevgi emas!

Botir - Qizimni tanimasam tanimasman, uning ko‘nglini bilmasam bilmasman... Lekin uni sevaman, u uchun har narsadan kechaman!

O‘lmas botir ana shu ko‘r-ko‘rona sevgisining achchiq sabog‘idan xulosa chiqaribmi, yo boshqa sabablar tufaylimi saroy va xondan ko‘ngli qolib, o‘z qilmishlariga pushaymon, Nishabsoy begidan o‘ch olish bahonasi bilan jang maydonini tashlab, asar konfliktining yechimi toju-taxt taqdirining hal bo‘lishiyu, qizi bilan Po‘lat munosabatlarini yakun topishida ham ishtirok etmaydi.

O‘lmas botir mag‘lubiyat nimaligini bilmagan xonning orqa tog‘i, chinakamiga botir, saroy muhitiga xiyonat qilmagan kimsa bo‘lsa, Nishabsoy begi o‘ta munofiq, shaxsiy manfaatini, hirsini qondirish uchun chegara bilmaydigan, qotilliklarga qo‘l urishga tayyor iblis, tuban maxluq. U jinoyatlari izini yo‘qotish uchun Yorqinoyga nikoh o‘qigan Imom domlani qo‘rg‘onidan chiqarmay, o‘ldiradi, qizni aldov bilan o‘g‘irlab olib kelib bergan Kalni, hamma narsadan xabardor xizmatkor Momo kampirni, ishongan yigitlaridan Novcha polvon, sirli kechada darvozaga qorovullik qiladigan Bo‘ronboyni shu kechaning o‘zida tonggacha

o'ldirish, nihoyat Yorqinoyga qo'shilib olgach, O'lmas botirning nafasini ichiga tushirish rejalarini tuzadi.

Kal dramada o'ta tagdor, murakkab obrazdir. Sahnada ijro uchun esa nihoyat qiyin, u aktyordan alohida layoqat, mas'uliyat talab etadigan rol. Unda dostonchi baxshilarga xos xalqqa dardmandlik ham, ertaklardagi ayyor kallarga xos quvlik, topqirlik, suvdan quruq chiqib keta olish sifatleri ham mavjud. Ana shu alomatlarini e'tiborga olgan Cho'lpon Kal misolida butunlay yangi, hayratomuz badiiy obraz kashf etdi.

Hamma narsadan xabardor, har yerda hoziru nozir, xolis niyatli Kal vaziyat taqozosi bilan asarning boshidan oxirigacha yuz beradigan hayot-mamot kurashi, ming xil sinoatli to'qnashuv, kurashlardan Yorqinoyni eson-omon olib o'tadi.

Yorqinoyni aldagani, o'g'irlagani, xiyonat qilgani, shu bilan Nishabsoy begiga bergan va'dasining ustidan chiqib, bir o'q bilan ikki nishonni mo'ljalga olganiga kelsak, bu asosan badiiy to'qima bo'lib, birinchidan, Yorqinoyning kurashchanlik imkoni, irodasini sinovdan o'tkazish, qolaversa asarning tomoshaviyligini oshirish, shuningdek, dostonchilik janriga xos sifatlarini bo'rttirish uchun qo'llanilgan tadbiridir.

«Mushtumzo'r», «O'rtoq Qarshiboyev», «Hujum» ijtimoiy buyurtma tarzida yozilgan asarlar bo'lib, ulardan faqat «Hujum»ninggina matni saqlanib qolgan. «Eshonlar turmushidan olinib yozilgan besh pardali buf-drama» deb atalgan. «Hujum» mavjud nusxasi sahnalashtirilib teatrning rejissura va ijrochiligida katta ahamiyat kasb etgan, jamoatchilik va matbuotda shov-shuvlarga sabab bo'lgan spektakldan anchagina farq qiladi. Bu spektaklning matni saqlanmagan bo'lsa-da, uning pardama-parda mazmuni, janri, ishtirokchi va ijrochilarning ism-shariflari 1930-yili Butun ittifoq teatrlari Festivalida namoyish etish uchun tayyorlab chop etilgan libretto va dasturlar to'plamida to'liq ko'rsatilgan. Bundan tashqari, 1981-yili spektaklda Tursun va Tabib rollarining ijrochilari S.Eshonto'rayeva va S.Tabibullayev bilan o'tkazilgan suhbatlar ham.

Pyesaning qo'lyozma matnida ishtirokchilar quyidagicha ko'rsatilgan: Tursun (Hujum), Eshon, Tabib, Oyjamol, Guljamol, Muallima, Ahmadjon, Tolibjon, Ijroqo'm-1, Ijroqo'm-2, kotib, Dehqon, A'zam og'a, Qadoqchi, Boy, Melisa, Muridlar, Chapanlar, xotinlar, 6ta ko'cha bolalari va qizlar. Spektakl dasturida esa quyidagilarning guvohi bo'lamiz.

Agar asarning mavjud matni bilan Cho‘lpon qayta ishlagan matnining librettoda pardama-parda ta’rifi berilgan bayonini solishtirsak, asarni «buf drama»dan kulgili musiqali buffonada janriga ko‘chirilib, kompozitsion qurilmasi ravonlashtirilgani, nihoyat, obrazlar toifalarga ajratilib, bir necha barobar oshirilganini ko‘ramiz.

Bulardan tashqari, S.Eshonto‘rayeva bilan S.Tabibullayevning shahodat berishlaricha, spektakl tayyorlash jarayonining barcha mashqlarida Cho‘lpon qo‘lida matn bilan o‘tirgan. M.Uyg‘ur doim: «Pyesadagi so‘zlarni harakat va holatlarni e’tiborda tutib qayta ko‘ring, kerak joyda o‘zgartiring, imoli, tagdor bo‘lsin! Spektaklning jon tomirini belgilaydigan omil hayotni aynan ko‘rsatish emas, uni mazax qilish belgilaydi. Mazax qilganda ham maroq bilan, ayniqsa, tesha tegmagan, yengil ijro omillari bilan», deb uqdirar ekan.

Bu ko‘rsatmaga, ayniqsa, artistlar kim oshdiga musobaqa bilan ish ko‘rishibdi. Masalan, Tabib rolining ijrochisi S. Tabibullayev avvaliga ko‘ylagining har yer, har yeriga dorilarning nomini yozib qo‘ygan bo‘lsa, keyin sanoqsiz cho‘ntaklar tikib yopishtirib, dorilarning nomi yozilgan qog‘ozlarni cho‘ntaklarga solib qo‘yib, kerak bo‘lganda ularni topolmay shu bahona g‘aroyib mizansahnalar o‘ylab topgan ekan.

Qishloq soveti raisi rolini o‘ynagan M.Miroqilovning pakana qorinboy qahramonining egnida ochiq jigarrang kitel, galife shim va etik, boshida katta soyabonli shlyapa, ko‘kragida katta budilnik soat osig‘liq bo‘lib, dam o‘tmay jiringlar, unga egilib qarolmagan rais, ergashtirib yurgan sekretari (Sh.Qayumov)ga «qarachi, necha bo‘ldi ekan» degani degan. Yoki ikkinchi militsioner rolining ijrochisi O.Jalilov M.Miroqilovga zid o‘laroq novcha, egnida boshqacha kitel va qizil hoshiyali galife shim, boshida chaqaloqnikiga qiyos qalpoqcha, og‘zida militsiya hushtagi o‘rnida bolalar surnayini chalib, bir to‘da bolalarni quvlab sahnaga chiqadida rais atrofida girdikapalak bo‘lib, valine‘matini qo‘riqlab yuradi.

Spektaklda boshqa rollarning ijrosi va Cho‘lponning «Xujum»da mualliflik darajasini aniqlashda Cho‘lponning o‘zidan odilroq hakamni topish qiyin. Mazkur satrlarning muallifi topib saqlab yurgan, vaqti-zamoni yetgach matbuotda e‘lon qilgan Cho‘lponning «Men sevgan azamatlar» (1934-yil, dekabr) maqolasining dastxatida quyidagi iqrorni o‘qiymiz: «Hujum»ni Yan va men bilan birga Lutfilla (Nazrullayev) yaratgan, desam xato bo‘lmaydi.

Lutfullaning Eshoni turmushdagi eshonlardan emas. «Xujum»ning o‘z qo‘yilmasi ham turmushdan nusxa olmaydi. U turmushdan kuladi, turmushning



yomon taraflarini masxara qiladi. Shu qarashdan qaraganda Lutfullaning Eshoni tengsiz asarlardan. Boshqa bir fursatda Lutfullaga bir ikki bet bag‘ishlaydurg‘on joyim bor. Shu uchun uni faqat zikr qilibgina o‘taman.

Sa‘dixonning jiddiy roli «Tergovchi»da Bobchinskiy edi. Keyin «Portfelli kishi»da katta bir rol oldi. Ikkala rolni ham Sa‘dixon berilib, astoydil o‘ynadi. Faqat uning yulduziga to‘g‘ri kelgan asar yana «Hujum» bo‘ldi. Sa‘dixonning tabibi (ayniqsa mastlik sahnasi) butun va mukammal asardir. Uning boshqa birov tarafidan takror qilinishi mumkin emas. Bu obraz yaxshi iqlim singari Sa‘dixonga yaqin va uning mahoratlarini ochib beradi. Tabib obrazi bilan sahnemiz, Sa‘dixon ham o‘z shuhratini o‘sha obraz bilan topgan. («Guliston» jurnali 2001-yil 2-son).

Keltirilgan dalillardan tashqari, asar kompozitsion tuzilishining qayta ko‘rib chiqilganligini librettoda bayon etilgan beshinchi pardaning mazmuni ham tasdiqlaydi. Unga ko‘ra Eshon bilan Tabib qamoqqa olinsa, qishloq sovetining muttaham raisini poraxo‘r sekretari va militsioneriga qo‘shib shu final sahnada rayon vakili vazifalaridan chetlashtiradi. Fosiq Eshonning mol-mulki musodara qilinib, kambag‘allarga, shu jumladan, Guljamolning otasi Ahmadjonga ham bo‘lib beriladi. Jadid adabiyoti va sahnasida o‘z aksini topgan eskicha yashash tarziga qarshi, xotin-qizlar ozodligi uchun kurash g‘oyasi «Hujum» kompaniyasi, tufayli katta qurbonlar evaziga bo‘lsa ham, hayotda g‘alaba qiladi. Bu g‘alaba yangi ma‘rifatparvarlar, shu jumladan, Cho‘lpon qarashlariga ham hamohang edi.

Cho‘lpon ijodida uning teatr tanqidchisi va targ‘ibotchisi sifatidagi faoliyati alohida o‘rin tutadi. U drama, rejissura va sahna talqin sirlarini ichidan biladigan, qalbi bilan his eta oladigan mutaxassisligi bilan ajralib turgan. Buning sababi shundaki, u Davlat truppasining 1920-1937-yillar orasidagi ish jarayonining guvohi bo‘lgan ko‘pgina spektakllarini tayyorlanishida Uyg‘ur qatorida shaxsan ishtirok etgan, ularni matbuot orqali targ‘ib qilish jonbozlik ko‘rsatgan. Shuning oqibati o‘laroq Cho‘lponning teatr tanqidchisi sifatidagi qalami charxlanib, kamol topgan.

Tanqidchilik faoliyatini boshlanish davridanoq Cho‘lpon teatrning, xususan spektaklning «jon tomiri» aktyor ekanini ta’kidlaydi.

«Nima desa desinlar, deb yozadi u, parda ochilgach, sahnada aktyordan boshqa hech kim qolmaydi. Muharrirlar (mualliflar demoqchi) birinchi qatorda, quyuvchi (rejissyor) direksiya lojasida, rassom kulis ketida qoladi. Sahnaga aktyor chiqib, tomoshachiga aktyor ko‘rinadi. Tomoshachi asarni aktyordan oladi».



Shuning uchun ham Cho‘lpon aktyor ijro etgan rolning mahorat darajasiga qarab uni hatto tugal asar qatoriga qo‘yadi, pyesa muallifi bilan tenglashtiradi. Biz yuqorida guvohi bo‘lganimizdek L.Nazrullayevning Eshon, S.Tabibullayevning Tabib rollari talqinlarini baholagani kabi.

Cho‘lpon tanqidchilik faoliyatining yana bir qirradi teatr san‘atida dramaturg, rejissyor, aktyorlarning izlanishlariga hakam emas, ularga hamdard, yutuqlaridan boshi osmonga yetgan, kamchiliklaridan hijolat chekadigan shaxs. Shularning hammasini jamoatchilikka savodli tushuntirishni tanqidchining burchi, deb biladi, u, Cho‘lpon nazarida, tanqidchilik ur-kaltakdan mutlaqo yiroq, M.Behbudiyning «tanqid saralamoq» aqidasiga yaqin savodli, jonkuyar hamkasb-murabbiyning sa‘i-harakati darajasida bo‘lmog‘i kerak. Ana shu savodlilikni Cho‘lpon teatr jamoasidan tortib sahna asarlari haqida fikr bayon etuvchi muhbiru, tanqidchi, jamoatchilik bilan tomoshabinlardan ham talab qiladi. Uning «Teatr tanqidlariga ahamiyat» sarlavhali maqolasida quyidagi muhim fikrning guvohi bo‘lamiz:.. Biz sahnada ancha o‘sdik (qaytarib aytaman: sahnada!) Faqat tanqid jihatimiz, teatrimiz bilan birga bora olmay yotibdir. Tanqidchilarimiz nima uchundir, teatr san‘atini yaqindan anglamayotgan holda maydonga chiqadirlar. Buning sababini nimadan axtaramiz? Menimcha, sahnemiz, uning o‘z ichiga kirganlar tomonidan zo‘r g‘ayrat bilan ilgari olib borilmoqda, o‘sha sahna xizmatchilarining faoliyati bilan yuksaltirilmakdadir. Ammo sahna ahli, sahnani sevganlar va sevdim deganlar (demak, hatto ayrim sahna ahliyu, san‘atni sevganlar) o‘yin o‘ynolg‘on kuni bir tomoshachi qatorida zalga kirib o‘ltirib, o‘yin bitgach o‘sha kunlik taassurotni ko‘tarib, mubohosa yo‘li bilan uyga qaytadirlar. Erta bilan uxlab turg‘onlarida kechagi taassurotlaridan hech narsa qolmaydir.

Men, demak, istaymankim, teatr tanqidchilari ham haligi «muxbirlar» va ahllar orasidan chiqadir, shu uchun tanqidimiz o‘yinimiz (spektakllarimiz)dan keyinga qolib boradir. Tanqidni, boshqa bir ta‘bir bilan aytsak, yalang «rubaru kelgan» («sluchayniy») kishilar yozarlar. Tabiiy, bundan sahnaning yuksalish va tuzilishiga foyda emas, zarargina keladir».

Demak, teatr tanqidchiligi har kimning sahna san‘atiga shaydo muhiblar u yoqda tursin, hatto ko‘pchilik muxbirlarning ham vazifasi emas. Teatr tanqidchiligi maxsus maktab ko‘rib ko‘zi pishgan mutaxassislarning ishi bo‘lishi kerak demoqchi Cho‘lpon.

Cho'lpon sahna san'ati, uning jonkuyar va murabbiylaridan bo'lishi lozim teatr tanqidchiligini bundan keyingi rivoji, kamol topishiga jahon teatri tarixiga yaxshi oshnolik, unda o'tmishda va hozir sodir bo'lgan va bo'layotgan jarayon, mavjud oqim, ijod maktablari, o'sha maktablarning buyuk siymolari faoliyatini yaqindan o'rganmay, bu sohada savodli bo'lmay turib erishib bo'lmashligini yaxshi tushingan. Shuning uchun ham teatr tanqidchiligiga aloqador qirqqa yaqin maqola, taqriz, ijodiy portret va esselar singari bitiklarida bu masalaga katta ahamiyat beradi. Agar Cho'lponning birgina «So'z, so'z, so'z!» sarlavhali uncha katta bo'lmagan maqolasidan misol tariqasida quyidagi jummalarni keltirsak hech bir ta'rifga o'rin qolmaydi: «Klassik fojia navislikning eng ulug' kishisi, olamshumul teatr muharriri Shekspir eng yuksak asari bo'lg'on «Hamlet»da bosh qahramonning tili bilan yuqoridagi jumlaning aytdiradi. Chinakam, u dohining hamma asarlari gaplashish (dialog)ning, umuman, so'z san'atining klassik eng mukammal nusxasidir. O'rtog'imiz bo'lg'on rus sahnasi ham bir zamonlar so'z bobida eng ulug' kuchlarni yetishtirdi. Shchepkin, Mochalov, Sadovskiy (Maliy teatr)ning ustunlari) o'z vaqtida tomoshachini so'z bilan o'zlariga band etkan kishilar edi. Shekspirning so'z nusxasi asarlari o'shalarining tillarida jonlanib, zalni seskantirdi. Hozir ham «Birinchi badiiy teatr»ning Kachalov, Moskvini, «Korsh» teatrning Blyumental-Tamarinasi badiiy so'zning katta eran (siymo)laridandurlar».

Qayd etilgan fikr-mulohazalar bilan Cho'lpon jahon, Moskva teatrlarida, va yuqorida tilga olingan jamoalarda ham keyingi yillarda yaxshi an'analarga «eksperimental teatr», «rejissyor tajribalari» yo'li bilan rahna solinayotganidan jamoatchilikni xabardor qiladi: «So'nggi yillarda teatrchilik san'ati tajriba (eksperiment) ko'chalari ko'prak urib (kirib) ketib, so'zni (va shu sababli aktyorni ham) orqadaroq qoldirib keldi. Bu narsa («rejissyor tajribachiligi») (ya'ni rejissyorning tajribalari uchun kengroq maydon qo'yish) yo'lini tutqon yangi teatrlarda emas, so'zni o'zlarining «ko'z qoralari» qilib olg'on eski teatrlarda («maliy teatr») ham ko'rildi».

Bu singari keng qamrovli fikr va mulohaza, aniq xulosalar Cho'lpon maqolalarida istagancha topiladi. U o'zbek teatr tanqidchiligini professional bosqichga ko'targan benazir alloma yangi teatr tanqidchilar avlodiga yo'lchi yulduz bo'lib qoldi.



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Психолого-педагогические основы мотивации к изучению русского языка

Касимова Камила Махаммаджоновна
Стажёр-преподаватель НамГУ

Аннотация: В данной статье рассматриваются психолого-педагогические основы мотивации к изучению русского языка. Анализируются различные подходы к определению мотивации, выделяются внутренние и внешние факторы, влияющие на формирование мотивации к изучению русского языка, а также предлагаются практические рекомендации по повышению мотивации учащихся.

Ключевые слова: мотивация, русский язык, психология, педагогика, внутренние факторы, внешние факторы, учебная деятельность, мотивационные стратегии.

В современном мире владение русским языком открывает широкие возможности для общения, образования, карьеры и культурного обогащения. Однако, многие учащиеся испытывают трудности в изучении русского языка и теряют интерес к нему. Проблема формирования и поддержания мотивации к изучению русского языка является одной из актуальных задач современной педагогики.

Мотивация – это побуждение к действию, психофизиологический процесс, управляющий поведением человека, определяющий его направленность, организованность, активность и устойчивость. Существует множество подходов к определению мотивации.

- **Потребностный подход:** Мотивация возникает на основе потребностей человека. Удовлетворение потребности ведет к формированию положительной мотивации.

- **Когнитивный подход:** Мотивация связана с познавательными процессами, такими как ожидания, цели, ценности и убеждения.

- **Социально-психологический подход:** Мотивация определяется социальными факторами, такими как влияние окружения, социальные нормы и ценности.

В контексте изучения русского языка мотивация может быть **внутренней** и **внешней**.

- **Внутренняя мотивация** возникает из личного интереса к языку, желания узнавать новое о культуре и истории, стремления к саморазвитию.

- **Внешняя мотивация** связана с внешними факторами, такими как хорошие оценки, похвала учителей и родителей, перспективы карьерного роста.

Психологические факторы, влияющие на мотивацию к изучению русского языка

- **Познавательный интерес:** Увлекательное содержание учебного материала, использование интерактивных методов обучения, включение элементов игры и творчества способствуют развитию познавательного интереса к русскому языку.

- **Чувство компетентности:** Успешное выполнение учебных заданий, получение положительных результатов повышают уверенность в своих силах и формируют положительное отношение к изучению языка.

- **Самооценка:** Адекватная самооценка своих способностей и возможностей играет важную роль в формировании мотивации. Учащиеся с высокой самооценкой более уверены в своих силах и готовы к преодолению трудностей.

- **Эмоциональный фон:** Позитивная атмосфера на уроке, доброжелательное отношение учителя, поддержка со стороны одноклассников создают благоприятный эмоциональный фон, способствующий повышению мотивации.

- **Личностная значимость:** Осознание учащимися практической ценности русского языка для достижения личных целей, таких как общение с носителями языка, чтение книг и просмотр фильмов в оригинале, повышает мотивацию к его изучению.

Педагогические факторы, влияющие на мотивацию к изучению русского языка

- **Методика преподавания:** Использование современных, интерактивных методов обучения, таких как проектная деятельность, кейс-стади, работа в группах, игровые технологии, способствует повышению интереса к предмету.

• **Содержание учебного материала:** Актуальное, интересное и личностно значимое содержание учебного материала, связанное с жизнью учащихся, их интересами и потребностями, формирует положительное отношение к изучению русского языка.

• **Стиль общения учителя:** Авторитетный, но при этом доброжелательный и поддерживающий стиль общения учителя создает атмосферу доверия и сотрудничества, способствует повышению мотивации учащихся.

• **Оценивание:** Объективное и справедливое оценивание достижений учащихся, акцент на положительных результатах, использование формирующего оценивания стимулируют дальнейшее развитие и повышение мотивации.

• **Использование информационно-коммуникационных технологий (ИКТ):** Применение ИКТ на уроках русского языка делает обучение более наглядным, интерактивным и увлекательным, что способствует повышению мотивации учащихся.

Практические рекомендации по повышению мотивации к изучению русского языка

• **Создание положительного эмоционального фона на уроке:** Использовать юмор, поощрять позитивное общение между учащимися, создавать атмосферу доверия и поддержки.

• **Использование интерактивных методов обучения:** Внедрять проектную деятельность, кейс-стади, работу в группах, игровые технологии, дебаты, дискуссии.

• **Персонализация обучения:** Учитывать индивидуальные особенности и интересы учащихся при выборе учебного материала и заданий.

• **Использование ИКТ:** Применять мультимедийные презентации, онлайн-игры, обучающие видео, интерактивные упражнения.

• **Акцент на практическом применении знаний:** Предоставлять учащимся возможность использовать русский язык в реальных ситуациях общения, например, в ролевых играх, проектах, посвященных культуре и истории России.

• **Поощрение и признание достижений:** Хвалить учащихся за успехи, отмечать их прогресс, организовывать выставки работ, конкурсы и олимпиады.

• **Развитие познавательного интереса:** Использовать увлекательные тексты, интересные факты, необычные задания, знакомить учащихся с русской культурой и историей.

• **Вовлечение учащихся в процесс целеполагания:** Обсуждать с учащимися цели обучения, помогать им осознать значимость русского языка для достижения личных целей.

• **Организация внеурочной деятельности:** Проводить факультативы, кружки, экскурсии, посвященные русскому языку и культуре.

• **Сотрудничество с родителями:** Информировать родителей о достижениях учащихся, давать рекомендации по поддержке их интереса к изучению русского языка.

Примеры упражнений для повышения мотивации к изучению русского языка

1. Творческие проекты

Предложите учащимся создать мини-проекты, связанные с русским языком, например:

- написать рассказ или стихотворение на заданную тему,
- подготовить презентацию о любимом писателе,
- создать словарь новых слов с иллюстрациями.

Это позволяет проявить индивидуальность и видеть практическую ценность языка.

2. Ролевые игры и драматизации

Используйте ролевые игры, инсценировки отрывков из произведений или диалогов. Это способствует развитию речевых навыков и повышает интерес к уроку.

3. Групповые дискуссии и дебаты

Организуйте обсуждения актуальных или творческих тем на русском языке. Это помогает развивать умение выражать мысли и учиться слушать других.

4. Самооценка и рефлексия

В конце урока предложите ученикам оценить свои успехи и поставить цели на следующий урок. Это формирует ответственность и внутреннюю мотивацию.

5. Использование ИКТ

Внедрение интерактивных приложений, мультимедийных презентаций и онлайн-игр повышает вовлечённость и интерес к изучению языка.

Рабочий лист 1

Творческое письмо: «Мой любимый сезон»

Инструкция:

1. Подумай, какой сезон года тебе нравится больше всего.
2. Напиши короткий рассказ (5–7 предложений) о своём любимом сезоне.
3. Используй как можно больше описательных слов (прилагательных), чтобы рассказ был ярким и интересным.
4. Попробуй включить в рассказ новые слова, которые мы изучали на уроке.

Полезные вопросы для размышления:

- Почему тебе нравится этот сезон?
- Какие события или праздники связаны с этим временем года?
- Что ты любишь делать в этот сезон?
- Какие звуки, запахи, цвета ты ассоциируешь с ним?

Пример начала:

«Мой любимый сезон — осень. В это время года листья на деревьях становятся золотистыми и красными...»

Рабочий лист 2

Ролевая игра: «Обсуждаем книгу»

Инструкция:

1. Ваша группа выбирает одного героя из книги, которую вы недавно читали.
2. Подготовьте короткий диалог, в котором вы расскажете о своём герое: кто он, какие у него черты характера, почему он вам нравится или не нравится.
3. Используйте вопросы и ответы, чтобы сделать разговор живым.
4. Практикуйтесь в произношении и выразительном чтении.

Полезные фразы для диалога:

- Кто твой любимый герой? Почему?
- Какие качества характера у этого героя?
- Какие поступки героя тебе запомнились?
- Согласен ли ты с поступками героя? Почему?

Пример диалога:

- Кто твой любимый герой из книги?
- Мне нравится Иван. Он смелый и честный.
- А мне больше нравится Мария, она очень умная и добрая.

Таким образом, формирование и поддержание мотивации к изучению русского языка – сложный и многогранный процесс, требующий комплексного подхода, учета психологических и педагогических факторов. Успешное решение этой задачи позволит повысить качество обучения русскому языку, сформировать у учащихся положительное отношение к предмету и подготовить их к успешной реализации в современном мире. Применение предложенных в статье практических рекомендаций может способствовать повышению мотивации учащихся к изучению русского языка и достижению высоких результатов.

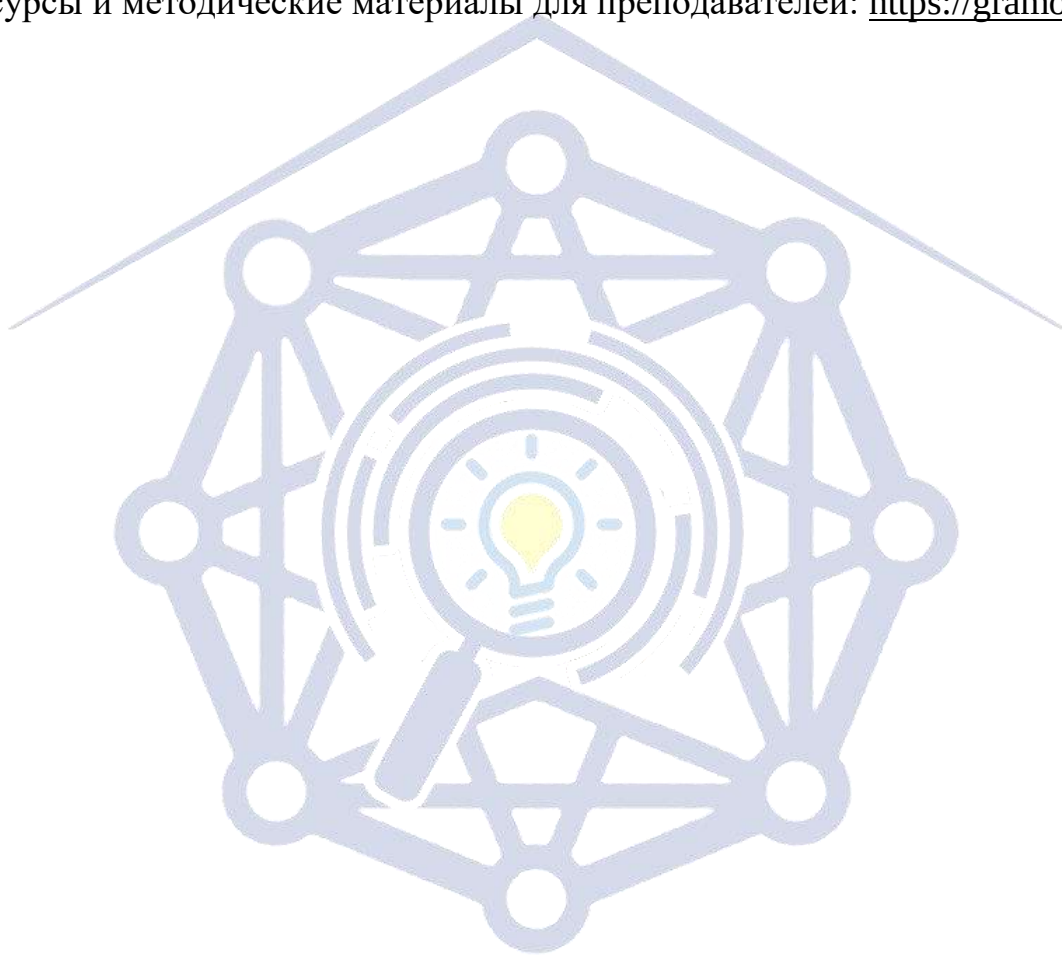
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GLOBAL PROBLEMS IN THE TEXTILE INDUSTRY AND THEIR SOLUTIONS

Assistant, Rakhimjonov Azizbek Ravshanbek ugli

raximjonovazizbek15@gmail.com

Abstract: The textile industry faces several global challenges. Firstly, environmental issues, including water and air pollution, as well as waste management, are pressing concerns. Secondly, social problems related to labor conditions and workers' rights persist. Thirdly, from an economic perspective, maintaining competitiveness and implementing innovations are necessary. Addressing these challenges requires the use of eco-friendly materials, enhancing energy efficiency, adopting renewable energy sources, applying circular economy principles, and effective waste management strategies. Additionally, obtaining certifications that meet international standards and improving labor conditions can resolve social issues.

Keywords: sustainability, textile industry, eco-friendly materials, energy efficiency, renewable energy, circular economy, waste management, challenges, opportunities, future prospects.

LITERATURE ANALYSIS AND METHODOLOGY

The textile industry faces environmental, social and economic challenges on a global scale. Various studies and analyzes have been conducted to solve these problems. For example, the article of Ibrahimova Gulira'no Rustamjon's daughter studied the international terms used in the modern textile industry, which are important for understanding and finding solutions to problems in this field.

Karimov, I. A. (2015). Uzbekistan's unique development path. The book talks about Uzbekistan's economic development strategy, including reforms in the textile industry.

"Uzbekistan textile industry: development prospects" (2018). Journal of Economics and Innovative Technologies, No. 4. The article analyzes the development trends and prospects of the textile industry in Uzbekistan.

"Innovations and their effectiveness in the textile industry" (2019). Economic Bulletin of Uzbekistan, No. 2. This article provides information about the innovations introduced in the textile industry and their effectiveness.

"Current issues of modernization of the textile industry in Uzbekistan" (2020). Journal of National Economy, No. 3. The article discusses the problems in the process of modernization of the textile industry and their solutions.

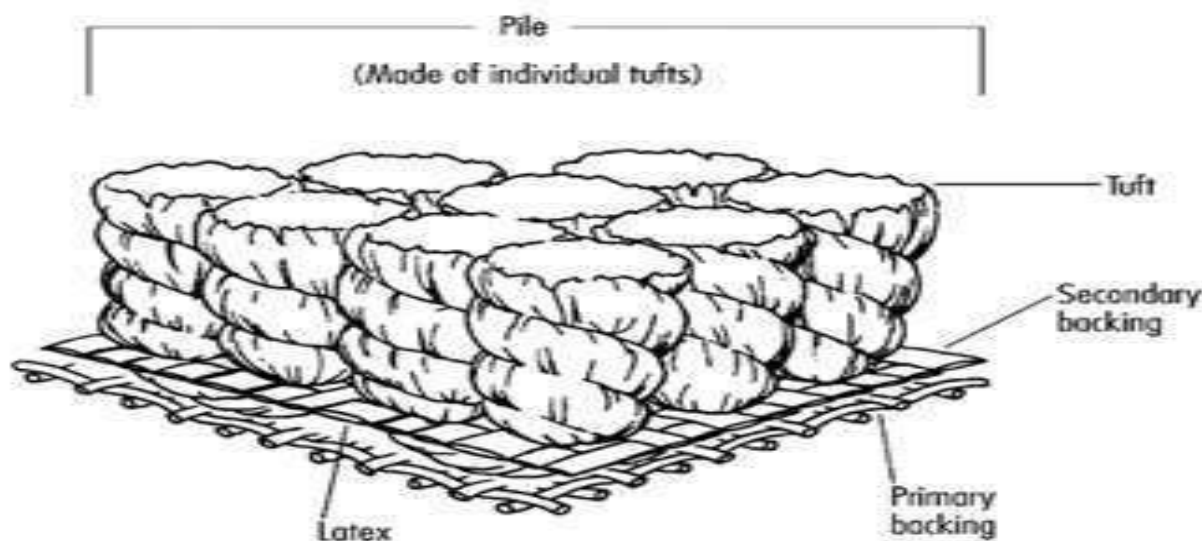
Analysis of foreign literature:

Fletcher, K. (2008). "Sustainable Fashion and Textiles: Design Journeys". In this book, the author explores ways to ensure sustainability in the fashion and textile industry, focusing on environmental issues and their solutions.

Allwood, J. M. (2006). "Well Dressed? "This report analyzes the current and future sustainability of the UK clothing and textile industry.

Kozlowski, A. (2012). "Environmental Impacts in the Fashion Industry: A Life-cycle and Stakeholder Framework". The article examines the environmental impact of the fashion industry and strategies to improve sustainability in collaboration with stakeholders.

These literatures serve as an important resource for the in-depth study of global and local problems in the textile industry and for finding their solutions.



Methodology

The following methodological approaches are used to study global problems in the textile industry and find their solutions:

1. Literature analysis: Existing scientific articles, reports and books are studied, and a general idea of the problems in the field and their solutions is formed.



2. Interviews with industry experts: Interviews with representatives of the textile industry are conducted to gather information about practical problems and their solutions.

3. Empirical research: Case studies are conducted to identify problems in the field and test their solutions.

4. Data analysis: Statistical data is collected and analyzed to identify problems and their causes.

These methodological approaches help in deeper study of global problems in the textile industry and development of effective solutions.

DISCUSSION AND RESULTS

The textile industry is facing a number of challenges globally. First, there is a high dependence on raw materials, particularly cotton and chemical fibers, whose prices fluctuate due to climate change and geopolitical factors. Second, resource-intensive industries and environmental pollution, along with increasing environmental regulations, are putting enormous pressure on companies. Third, changes in the international trade environment, including increasing trade protectionism, increase market uncertainty and have a negative impact on exports.

In addition, insufficient implementation of innovative technologies in production processes reduces efficiency. There are problems related to working conditions and workers' rights, which raises issues of social responsibility, high consumption of energy and water resources poses a threat to sustainable development, there is a need to improve product quality and adapt to international standards to increase competitiveness. .

Consumer demand for environmentally friendly and sustainable products is increasing, forcing companies to rethink their production processes.

The following solutions are recommended to solve global problems in the textile industry:

1. Stability in the supply of raw materials: In order to reduce the impact of climate change and geopolitical factors, companies should diversify the sources of raw materials, that is, use different sources. It is also important to use renewable and environmentally friendly materials.

2. Reducing the impact on the environment: In order to reduce resource demand and comply with environmental regulations, it is necessary to introduce energy-



efficient technologies, use water conservation methods and implement waste recycling systems.

3. Adaptation of international trade strategies: In order to counter trade protectionism and market uncertainty, companies should expand export markets, explore new markets and adapt to international trade regulations.

4. Implementation of innovative technologies: It is important to use digital technologies, automation and advanced manufacturing methods to increase production efficiency and ensure competitiveness.

5. Improving working conditions: In order to protect the rights of workers and increase social responsibility, it is necessary to create safe working conditions, introduce a fair wage system and focus on improving the skills of workers.

6. Effective use of resources: In order to save energy and use water resources wisely, it is necessary to use environmentally friendly technologies, use renewable energy sources and introduce water treatment systems.

7. Improving product quality and conforming to standards: It is important to strengthen quality control systems and focus on certification processes to increase competitiveness by producing products that meet international standards.

8. Transition to sustainable products: In order to meet the demand of consumers for environmentally friendly products, it is necessary to implement the concept of sustainable fashion, use environmentally friendly materials and apply zero-waste production methods.

By implementing these solutions, the textile industry can overcome global challenges and ensure sustainable development.

CONCLUSION

In summary, the Textile Industry is facing a number of challenges globally. First, environmental problems, including water and air pollution, waste management issues are urgent. Secondly, there are social issues, in particular, problems related to working conditions and rights of workers. Thirdly, economically, there is a need to maintain competitiveness and introduce innovations. In order to solve these problems, it is important to use environmentally friendly materials, increase energy efficiency, introduce renewable energy sources, apply the principles of circular economy, and effectively manage waste.

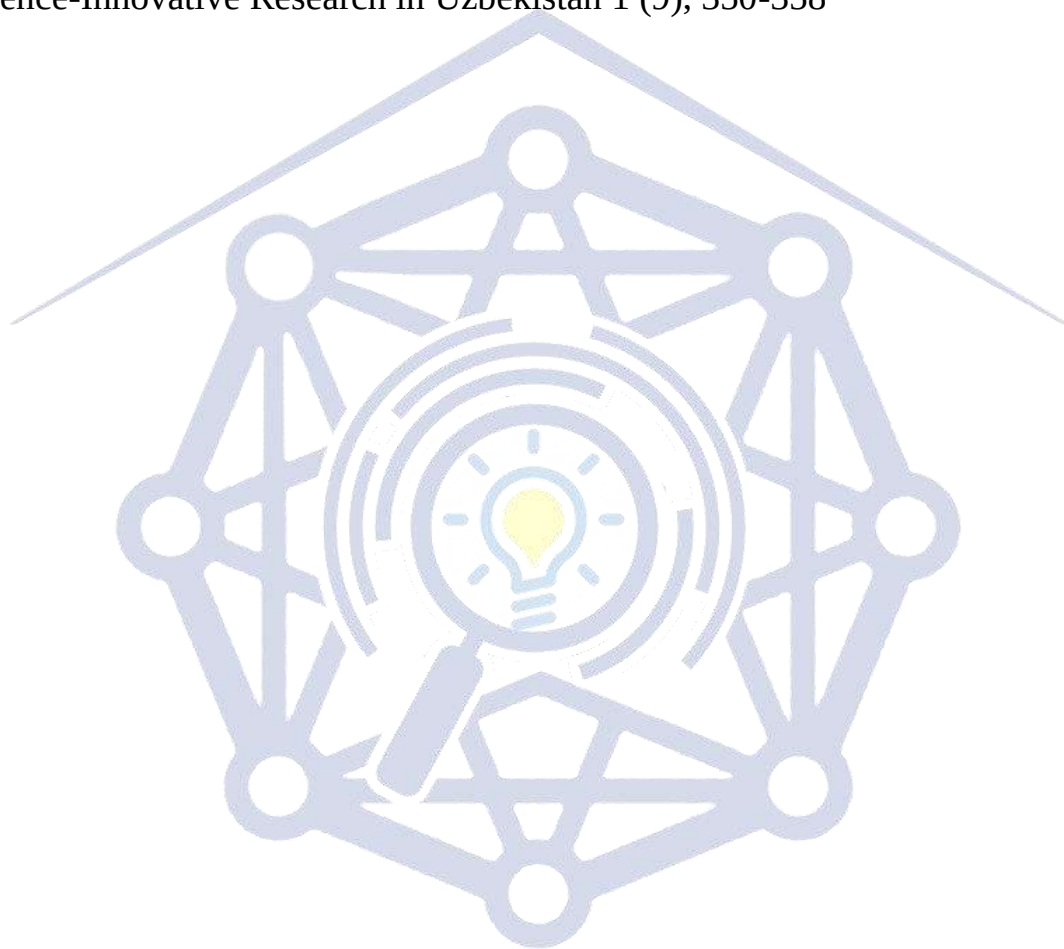
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THEORETICAL ANALYSIS OF THE FACTORS AFFECTING THE TENSION OF TANDA THREADS

Assistant, Rakhimjonov Azizbek Ravshanbek ugli

raximjonovazizbek15@gmail.com

Abstract: In this article, you will discuss the tension of body threads, why it is necessary, the mechanisms that affect them, the mechanisms that maintain the tension of body threads, and the types of these mechanisms.

Key words: tanda threads, tension, mechanism, tanda adjuster, positive, negative, tanda brakes.

The tension of the threads is one of the most important factors for creating a fabric. Because the lack of tension causes many errors in the weaving process. That is, the tension of the threads of the body becomes loose, the threads of the rope do not fall correctly, which in turn leads to a violation of tissue rapport. Many factors affect the tension of the threads. These include the weight of the threads on the bobbin, the good performance of the branches, and the theft of the raw fabric being prepared.

One of the main requirements for the picking process is to create a tension that is equal in value to all flats. When the tension increases, the properties of the threads deteriorate, and when the tension decreases, the density of the resulting package decreases. In the case of uneven tension, the surface of the package is damaged. that is, there are bulges and depressions on its surface. As a result, there are more breaks in the loom.

A sharp change in the tension of the thread is especially evident in the processing of chemical fibers. Because a "longitudinal unevenness" defect is formed in the tissue. This defect is the result of different dyeing of yarn. This, in turn, is created as a result of the thread being wound in different tensions during the process of spinning. Tension devices are used to maintain and change the tension of all threads coming out of the body frame.

The tensioning device is one of the main parts of the body frame and mainly determines its quality.

Currently, various tensioning devices are used. There are highly automated and mechanized body stretchers. But the price of these tensioning devices is very

high. Therefore, it is necessary to take into account the economic efficiency of replacing existing tensioning devices with modern ones. In some cases, it is appropriate to use simple tensioning devices. The following requirements are imposed on tensioning devices:

1. Simple structure, quick tension adjustment and even grip standing
2. That there is an opportunity to create different tension.
3. The possibility of self-cleaning.
4. Prevention of slippage of elementary thread, which is chemical and baked threads are important in picking.
5. The use of wear-resistant threading elements.
6. Centrally adjust all tensioners opportunity.
7. Reliability during use.

Technical and technological requirements for transmission and tensioning mechanisms:

- keeping the thread tension constant as the diameter of the winding on the weaving reel decreases,
- during the process, maintaining the stability of the saturating tension from the working cycle to the cycle;
- control of internal cycle tension;
- maintaining the tension of the body and the constant state of the tissue edge in order to reduce the defects (treadmill) formed during short-term stress-stopping;
- constant maintenance of the machine's tread line as the winding diameter decreases;
- delivery of a specific length of thread to the zone of tissue formation.

In the preparation department, the tanda threads are wound on special large weaving reels and brought to the weaving department. Weaving spools are basically cylindrical metal tubes with flanges on both sides. The number of warp threads wound on the weaving bobbins, the length of the loom and the density of the winding depend on the structure and composition of the fabric to be woven.

The weaving reel is the main part of the transmission and tensioning mechanism. the quality of the threads wrapped in it, the good condition of the parts of the reel are of great importance in increasing the productivity. Threads should be

wound on the reel in the form of a strict cylinder, there should be no crushed or protruding places in the windings.

From the weaving reel placed on the loom, the thread used to produce one element of the fabric is stretched at medium tension. The thread tension on the body is different depending on the type of fabric, and its value is determined by experience. If the tension of the thread is not enough, the density of thin threads in the fabric may not be enough. The tension level of the thread has a direct effect on the breakage of the thread: the reason for the increase in the number of breakages can be the increase or decrease of the tension.

If the tension is reduced, during the process of forming the hamuz, the tanda threads of different branches can be broken due to the fact that they are tied in the same plane due to the influence of the rope throwers; if the tension increases, the threads may break under the influence of tension.

With the consumption of threads on the weaving reel, the diameter of the package decreases, as a result, the tension can change and affect the quality of the fabric. If the tension increases, the density of the threads in the fabric increases, if the tension decreases, the structure and composition of the fabric may be uneven.

As technologies developed, mechanisms were invented to maintain the tension of the threads. The transmission and tensioning mechanisms (TUTM) perform the task of transferring the threads of the fabric, which are used up with the formation of the fabric, in a certain tension. Transmission and tension mechanisms are divided into positive and negative types.

In negative TUTMs, the body thread is released from the weaving reel in accordance with the frictional forces in the system (body brakes).

In positive TUTMs, a fixed amount of thread length is transferred by turning the weaving reel at a fixed tension (tanda adjusters). If the tension on the body increases - more, if it decreases - less, the thread on the body is released.

According to the principle of operation, these mechanisms are divided into body adjusters and body brakes.

In the loom adjusters, movement is transmitted to the weaving reel from one of the moving parts of the loom. The tension of the loom is created using a special device.

Tanda brakes - on some looms, the task of transferring and tensioning the tanda threads is performed by the tanda brake. Under the influence of the tension of the

thread of the thread created as a result of pulling the fabric on weaving machines with a thread brake, the weaving reel is rotated, and threads of the desired length are transferred to the weaving zone.

Body brakes can be friction, load, spring and mixed according to the method of resistance. In friction body brakes, the traction of the weaving reel is resisted by the friction force, while in load and spring brakes, the load and spring forces resist.

In the case of positive threading and tensioning mechanisms (TUTM), the weaving bobbin releases threads of a predetermined length ($/ = \text{const}$) with the help of a separate mechanism, and the tension of the thread is separately controlled.

Ensuring a constant warp thread tension and the required thread length in the process of forming a fabric element is carried out in each working cycle of the machine. For this, the angular speed of the weaving reel is required to increase as the diameter of the reel decreases. In the mechanisms of positive body transmission and tension, the scale receives body tension and acts as a sensor.

The tension of the threads directly depends on the quality of the woven fabric. An increase or decrease in tension will drastically affect the quality of the fabric being prepared. That is, as a result of a decrease in the tension of the warp thread, it shows that the warp thread falls to the wrong width in the finished fabric, which is clearly visible on the surface of the finished fabric. As a result of the increased tension of the tanda threads, it is observed that the tanda threads are broken. If 1 thread breaks, a straight line will be visible on the surface of the finished fabric. If several threads break, it will cause a lot of damage.

Mechanism of transmission and tensioning of the thread of the negative body

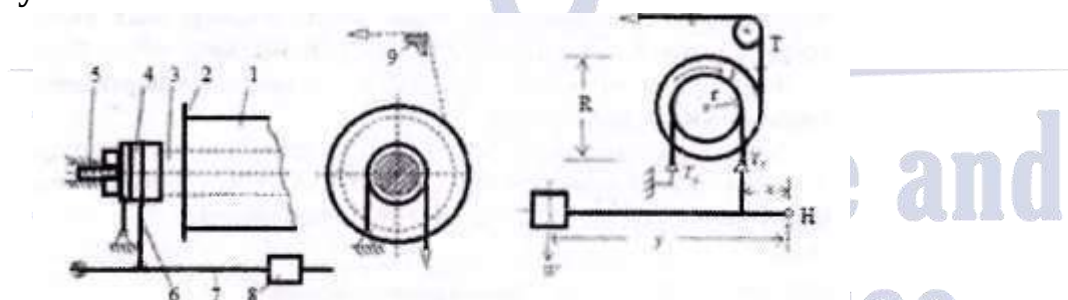


Figure 1.

1- weaving reel; 2nd molar; 3rd core; 4th drum; 5th axis; 6th chain; 7th lever; 8th burden; 9th scale.

Figure 1 shows the principle scheme of the transmission and tensioning mechanism in the negative body. The tape is wrapped around the drum, which is installed on the core of the weaving reel. One end of the strap is tied to the frame of the loom, and the other end to the handle. One end of the lever is fixed to the machine, and the other end is free, and a load is hung on the end. The transfer of thread from the weaving reel to the body is carried out due to the change in the frictional force between the drum and the belt. When the thread tension is greater than the friction force, the thread is released from the weaving reel, and on the contrary, it is braked. In this mechanism, the tension of the string on the body is calculated by changing the force of friction.

Tanda brakes - in some looms, the task of transferring and tensioning the tanda threads is performed by the tanda brake. In looms equipped with a loom brake, under the influence of the tension of the loom thread, which is created as a result of pulling the fabric, the weaving reel rotates, and the loom threads of the required length are transferred to the weaving zone.

Consulion. Many factors affect the tension of the threads. Additional devices are being devised to maintain tension. Because the tension of the warp threads is the most important factor for the fabric to come out correctly. Therefore, it is always necessary to maintain tension. Also, the transmission of tanda threads using tanda brakes is also used. This makes it possible to maintain regular tension in the body.

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Kalsiy elementining miqdori o'zgarishi natijasida kelib chiqadigan kasalliklar.

Dilmurodov Fuzayljon Gulmurod o'g'li¹ dilmurodovfuzayl@gmail.com

Toshkent tibbiyot akademiyasi 1-son davolash ishi fakultetining 1-bosqich talabasi

Dilmurodova Fayoz Gulmurod qizi² dilmurodovafayoz@gmail.com

Toshkent tibbiyot akademiyasi assistent o'qtuvchisi

Annotatsiya

Ushbu maqolada organizmda uchraydigan va ko'pgina metabolitik jarayonlarni boshqarishda ishtirok etadigan element kalsiy elementi va kalsiy almashinuvi natijasida kelib chiqadigan o'zgarishlar, turli kasalliklar, ularga qarshi chora tadbirlar, Kelajakda kalsiy almashinuvi bilan bog'liq bo'lishi mumkin bo'lgan matabalitik o'zgarishlarning oldini, ularga qarshi chora tadbirlar olib borish, hozirgi kunda olib borilayotgan tadqiqotlar kabi muommolar bayon qilinadi. Men bu maqolani yozishimdan maqsad tirik jon organizmida juda ahamiyatga ega bo'lgan kalsiy elementi bilan bog'liq kasalliklarining oldini olish va ularga qarshi birgalikda kurash olib borish.

Kalit so'zlar: Kalsiy elementi, osteoporoz, giperkalsemiya, gipokalsemiya, kalsiy balansi, gipertenziv kasallik.

Asosiy qism

Kalsiy – bu biz ko'p eshitadigan element, bu hayot uchun ajralmasdir. Bu tabiatdagi eng keng tarqalgan elementlardan biridir. Kimyoviy belgisi: Ca Kalsiy mikrobiogen element bo'lib, hujayra tashqi kationidir. Kalsiy ishqoriy yer metallar elementlaridan biridir. Yer qobig'ida eng ko'p tarqalgan beshinchi element – metallar orasida uchinchi metall. Tabiatdagi eng keng tarqalgan ohaktosh shakllanishida uchraydi. Pamukkale, Denizli tabiiy travertinlari kalsiydan iborat Odam organizmining kalsiyga boy ehtiyoji ozuqa va sut mahsulotlari orqali o'zlashtiriladi. U 1808 yilda kashf qilingunga qadar yillar davomida ishlatilgan, ammo aniqlanmagan.. Odam organizmi gomeostaz holatini ta'minlab turish uchun unda har 24 soat davomida 1g Ca²⁺ ionlari o'zlashtirilishi kerak. Kalsiy ionlarining o'zlashtirilishi ingichka ichaklarning kislotalik tabiati yuqori bo'limlarida sodir bo'ladi. U odamlar, hayvonlar va o'simliklar uchun muhim element. Suyak va

tishlarda ko'p miqdorda kalsiy mavjud. Odamning ichak sistemasida kalsiy kationini bog'lovchi oqsil modda bo'ladi. Bu moddaning hosil bo'lishi D vitamini kamaysa, oqsil kam sintezlanadi, demak Ca^{2+} oz miqdorda o'zlashtiriladi. Bu esa suyaklarning mexanik barqarorligini kamaytiradiva deformatsiyalanishiga olib keladi. Buning asosiy sababi kalsiy suyakning mustahkamligini ta'minlovchi asosiy element bo'lib, u suyak tarkibida ion holda emas murakkab kompleks birikmalar ($3\text{Ca}_3(\text{PO}_4)_2 \cdot \text{Ca}(\text{OH})_2$) ko'rinishida bo'ladi. Odamning biologik suyuqliklari tarkibida Ca^{2+} ionlarining nisbatan kata miqdori qon zardobida va eritrotsit sitoplazmasida saqlanadi. Qon zardobidagi kalsiy ionining 60% i erkin ion holda, qolganlari oqsil, uglevodlar va boshqa moddalar bilan bog'langan holda saqlanadi. Erkin holdagi kalsiy ioni qonning ivish jarayonida ishtirok etadi ya'ni protrombinni trombinga aylantiradi. Shuni ham takidlab o'tish kerakki, kalsiy mushaklarning bo'shashib, qisqarishini ta'minlaydi. Shuning uchun biz ko'nglimiz aynib qayd qilganimizda organizmdagi barcha kalsiy ionlari quyuq massa bilan tashqariga chiqib ketadi natijada organizmimizda holsizlik, mushaklarimizda og'riqlarni kuzatamiz. Bundan tashqari yana og'ir hollarda spazmofiliya, nefroz, o'tkir pankreatit kasalliklari bilan davom etishi mumkin. Undan tashqari yana suyaklardagi kalsiy miqdori kamayganda yosh bolalarda raxit kasalligi kelib chiqadi. Bundan tashqari yana kalsiy yetishmaganda gipokalsemiya, chimchilashga o'xshash sanchiq, mushaklar harakatsizligi, osteoporoz kabi kasalliklar kelib chiqadi.

Kalsiy yetishmaganda kelib chiqadigan asosiy kasalliklar:

Osteoporoz- suyak to'qimasi kasalligi bo'lib, kalsiy yo'qolib ketishi bilan ta'riflanadi, bu suyaklarning mo'rtligiga olib keladi. Natijada suyaklarning sinish havfi ortadi. Bu kasallikda barcha suyaklar zararlanadi. Lekin asosan umurtqa pog'onasi, bilak va son suyagi boshchasi sinishi ko'proq kuzatiladi. Bu kasallikning eng yomon tomoni shundaki, kasallik asta-sekin uzoq yillar davomida hech qanday belgilarisiz rivojlanib boradi.

Bu kasallikning qo'shimcha belgilari :

Beldagi ogriq , opka tiriklik sigimi pasayishi ishtaha yoqolishi va uyqusizlik kiradi. Dunyo bo'yicha 200 millionga yaqin odam ushbu kasallikdan aziyat chekadi. Shundan 2,5 mln. Ga yaqin bemorlarda kasallik suyak sinishi bilan kuzatiladi. Osteoporozning oldini olish quyidagilarni o'z ichiga oladi:

- Vitamin va mineral komplekslarni qabul qilish
- Chekish va alkogoldan voz kechish
- To‘g‘ri muvozanatli ovqatlanish
- Surunkali kasalliklarni davolash
- D vitamini ishlab chiqarish uchun quyoshda yetarlicha bo‘lish
- Muntazam jismoniy faollik hamda mehnat va dam olish tartibiga rioya qilish
- Tana vazni kamligiga qarshi kurash

Bu kasallikni davolashda asosan tarkibida kalsiy elementi bor bo‘lgan dori-darmonlar buyiriladi. Ovqat ratsioniga kalsiyga boy mahsulotlar qo‘shib beriladi.

Giperkalsemiya — bu qon plazmasidagi kalsiy konsentratsiyasining oshib ketishi bilan xarakterlanadi. **Giperkalsemiyaning** asosiy sabablari organizmda paratiroid gormonining ortiqcha bo‘lishi (giperparatiroidizm), onkologiya va kaltsiy qo‘shimchalarini uzoq muddat ishlatish. Kasallikning alomatlar tananing asosiy tizimlarida namoyon bo‘ladi: asab, mushak, ovqat hazm qilish, siydik, yurak -qon tomir, ko‘z va teri kasalliklari. Bemorning xotirasi yomonlashadi, letargiya, uyquchanlik, depressiv holatlar, mushaklardagi ojizlik va og‘riq, tunda bezovta oyoq sindromi, ishtahaning yo‘qolishi, ich qotishi, ko‘ngil aynishi, gag refleksi va belching paydo bo‘ladi. Pankreatit, o‘t pufagi kasalligi, yuqori kislotalilik bilan oshqozon yarasi fonida vazn yo‘qotish mumkin. Artrit va artroz, podagra rivojlanadi. Bu kasallikning oldini olish uchun organizmdagi kalsiy miqdorini nazorat qilib turish kerak. Kalsiy miqdorini normada ushlab turish kerak. Bu kasallikni davolashda organizmdagi ortiqcha miqdordagi kalsiyni chiqarib tashlash va kalsiyga boy mahsulotlarni kamroq iste‘mol qilish zarur. Bu kabi kalsiy almashinuvi bilan bogliq bolgan kasalliklar yetarli darajada. Yuqoridagi kasalliklar esa eng ahamiyatli kasalliklardan hisoblanadi. Hozirgi kunda kalsiy almashinuvi bilan bogliq turli kasalliklarning oldini olish va havfini kamaytirish borasida tadqiqotlar olib borilmoqda jumladan. Kalsiy va ichak saratoni xavfini kamaytirish:

Oksford universiteti tomonidan olib borilgan tadqiqotga ko‘ra, kuniga 300 mg kalsiy iste‘mol qilish (taxminan bir stakan sut) ayollarda ichak saratoni rivojlanish xavfini 17% ga kamaytirishi mumkin. Bu himoya ta'siri sut mahsulotlari va boshqa kalsiy manbalaridan olinadigan kalsiyga ham tegishli.

Tadqiqot shuningdek, spirtli ichimliklar va qayta ishlangan go'sht iste'moli ichak saratoni xavfini oshirishi mumkinligini ko'rsatdi. Yaqinda o'tkazilgan tadqiqotlar shuni ko'rsatdiki, kalsiyni ertalabki ovqatlanish vaqtida iste'mol qilish yurak-qon tomir kasalliklari xavfini kamaytirishi mumkin. 36,000 dan ortiq amerikalik kattalar ishtirokida o'tkazilgan tadqiqotda, kalsiy iste'molini kechki ovqatdan ertalabki nonushtaga ko'chirish yurak-qon tomir kasalliklari xavfini 6% ga kamaytirgan. Bu, tananing sirkadiyalik ritmlari va gormon darajalari kalsiy so'rilishiga ta'sir qilishi mumkinligini ko'rsatadi. Ko'plab mamlakatlarda kalsiy yetishmovchiligi keng tarqalgan muammo hisoblanadi. Agronomik biofortifikatsiya — ya'ni don, sabzavot va mevalarni kalsiy bilan boyitish orqali bu muammoni hal qilish mumkin. Bu yondashuv, ayniqsa, o'rta va past daromadli mamlakatlarda kalsiy yetishmovchiligining oldini olishda samarali bo'lishi mumkin. Ba'zi tadqiqotlar shuni ko'rsatdiki, diabet bilan kasallangan odamlarda kalsiy qo'shimchalarini muntazam iste'mol qilish yurak-qon tomir kasalliklari va o'lim xavfini oshirishi mumkin. Kalsiy almashinuvi buzilishlarini aniqlashda sun'iy intellekt (AI) texnologiyalari:

AI yordamida qon analizlari, osteodensitometriya (suqiluvchanlikni o'lchash) va rentgen tekshiruvlari asosida osteoporozni aniqlashning avtomatlashtirilgan tizimlari ishlab chiqilmoqda. Shuning uchun, kalsiy qo'shimchalarini qabul qilishdan oldin shifokor bilan maslahatlashish muhimdir. Kelajakda kalsiy bilan bogliq kasalliklarning havfini kamatirish uchun organizmda kalsiy boshqaruvin tartibga solish kerak

Xulosa

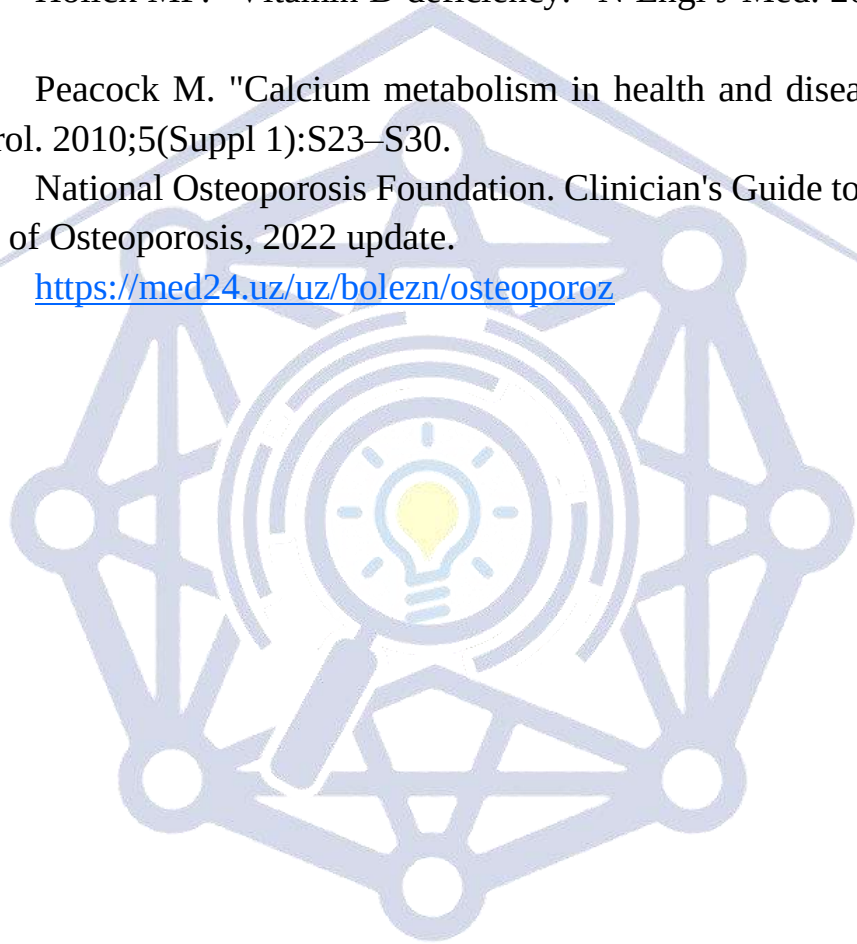
Xulosa o'rnida shuni aytib o'tishim kerak kalsiy inson organizmining eng ahamiyatli elementlaridan biri hisoblanadi. Kalsiy almashinuvining o'zgarishi natijasida kelib chiqadigan kasalliklarning oldini olish uchun eng avvalo sog'lom ovqatlanish va jismoniy faollikni oshirish darkor. Shunda gina biz bu kasallikka qarshi kurashgan bo'lamiz va kasallik havfini kamaytiramiz.

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Методы объективной оценки качества цифровых телевизионных изображений для прикладного телевидения

Хайдаралиева Хилола Фарход кизи

hilolahaydaraliyeva@gmail.ru

ассистент преподаватель Ташкентского университета

Мухаммада Ал-Хоразмий

Суёнов Шохихахон Холмунин угли

suyunovshohjahon64@gmail.com

студент 3 курса Ташкентский университет информационных технологий
имени Мухаммада Ал-Хоразмий

Аннотация: В данной научно-исследовательской работе рассматриваются методы объективной оценки качества цифровых телевизионных изображений, используемых в прикладных областях телевидения. В условиях, где телевизионный сигнал играет функциональную роль — например, в телемедицине, образовательных трансляциях, видеонаблюдении и правовой экспертизе — снижение качества изображения может привести к потере информации и снижению эффективности процесса. Проведено экспериментальное моделирование типичных искажений (размытие, шум, артефакты сжатия), с последующей оценкой чувствительности метрик PSNR, SSIM, VIF, BRISQUE и NIQE к этим искажениям. На основе полученных данных сделаны выводы о применимости указанных метрик в различных практических сценариях прикладного телевидения.

Ключевые слова: прикладное телевидение, объективная оценка, качество изображения, цифровое видео, PSNR, SSIM, VIF, BRISQUE, NIQE, телемедицина, видеонаблюдение, образовательные трансляции.

Введение. Современные технологии цифрового телевидения всё шире проникают в прикладные сферы, в которых видеоизображение выполняет не развлекательную, а функционально значимую роль. Это включает телемедицину, системы видеонаблюдения, судебную экспертизу и дистанционное обучение. В этих областях от качества визуальной

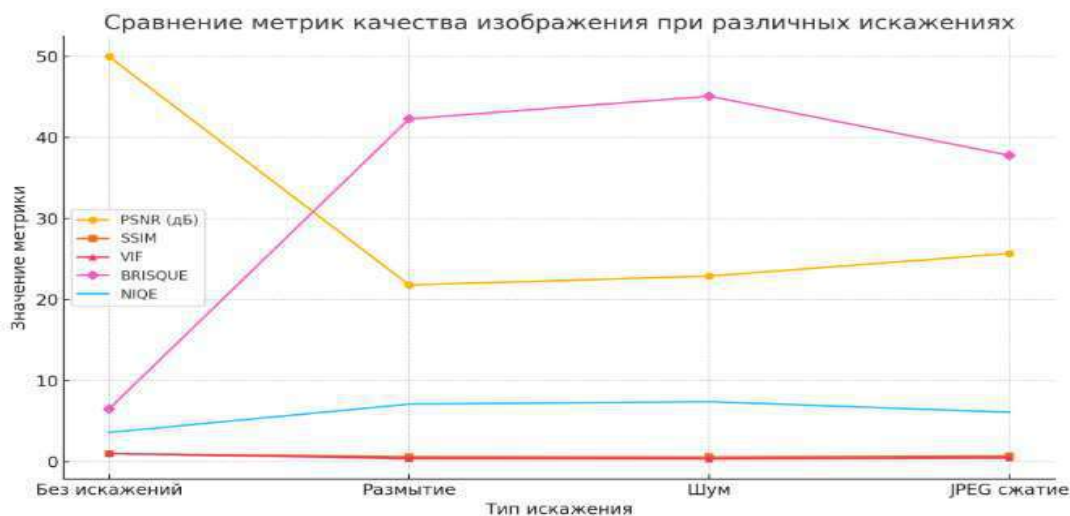
информации зависит принятие критически важных решений — будь то диагноз, доказательство в суде или точность передачи учебного материала.

В таких условиях возникает потребность в надёжной, количественной и воспроизводимой оценке качества изображения. Ручная, субъективная экспертиза, несмотря на высокую точность, требует времени, ресурсов и не применима для непрерывного мониторинга. Поэтому всё чаще используются объективные метрики, которые позволяют в автоматическом режиме диагностировать ухудшение качества, контролировать соответствие изображений стандартам и обеспечивать стабильность вещания.

Однако подавляющее большинство используемых метрик разрабатывались под задачи массового вещания и развлекательного контента. Они не всегда чувствительны к тем аспектам, которые важны именно в прикладных системах. Например, не все метрики могут корректно фиксировать потерю контрастности в снимке кожного покрова, неразборчивость текста на доске или размытость лица на кадре с видеонаблюдения. Это требует не только теоретического анализа, но и практического тестирования в имитированных условиях.

Для оценки эффективности методов объективной оценки качества цифрового изображения в прикладном телевидении было разработано экспериментальное моделирование на основе четырёх типов визуального контента: медицинское изображение (макроснимок кожного покрова), образовательный фрагмент (слайд с текстом), сцена видеонаблюдения (городская улица с фоновым шумом) и портретное изображение (для судебной экспертизы). Все изображения были отобраны таким образом, чтобы отражать реальную практическую нагрузку в соответствующих областях прикладного телевидения.

Каждое изображение подвергалось трем видам искажений: гауссовому размытию (радиус 3 и 7 пикселей), добавлению гауссова шума ($\sigma = 20$ и 40) и сжатию в формате JPEG с понижением качества до 90%, 60% и 30%. Все операции проводились в идентичных условиях разрешения (Full HD) и освещённости, с сохранением цветовой модели RGB.



В качестве инструментов оценки использовались пять метрик: PSNR, SSIM, VIF, BRISQUE и NIQE. Метрики PSNR, SSIM и VIF требуют наличия эталонного изображения и обеспечивают сравнительный анализ между оригиналом и искажённой версией (Full-Reference, FR). Метрики BRISQUE и NIQE не требуют эталона (No-Reference, NR) и ориентированы на автоматическую диагностику качества на стороне приёмника или системы мониторинга.

Расчёты производились с использованием языков Python и библиотек OpenCV, scikit-image, piq и brisque-models. Для каждой комбинации изображения и искажения рассчитывались значения всех пяти метрик. Кроме численного анализа, проводилась субъективная оценка качества визуального восприятия, чтобы оценить соответствие значений метрик восприятию человека.

По итогам эксперимента было выявлено, что PSNR, хотя и демонстрирует ожидаемое снижение при всех типах искажений, обладает слабой корреляцией с реальным визуальным качеством. При шуме и размытости PSNR показывал схожие значения, несмотря на существенные различия в восприятии, что ограничивает его применимость в контексте прикладного телевидения.

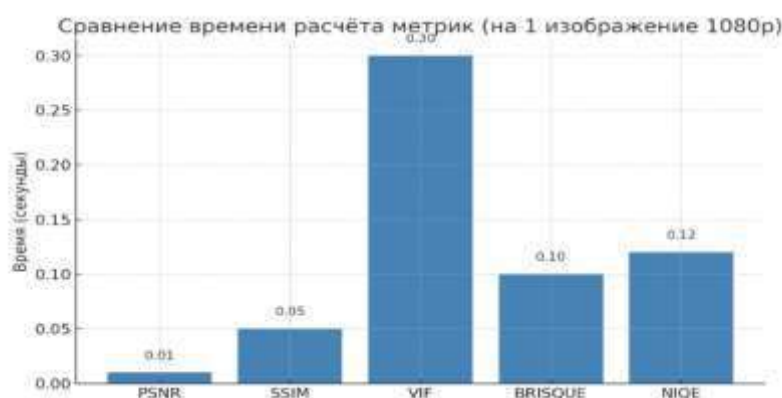
Метрика SSIM, напротив, более точно отражала структурные искажения и изменение контуров, особенно на образовательных и судебных кадрах. Её чувствительность к форме, яркости и контрасту делала её подходящей для задач, в которых важна передача текста и границ объектов. Метрика VIF показала наивысшую корреляцию с утратой визуально значимой информации,

особенно в медицинских изображениях, где требуется высокая точность сохранения микродеталей.

Безэталонные метрики BRISQUE и NIQE дали неоднозначные результаты. BRISQUE оказался чувствительным к шуму и размытиям и обеспечивал стабильную работу на «естественных» изображениях, но нестабилен на презентациях и графиках. NIQE показал высокую устойчивость к общим изменениям освещения и резкости, однако хуже реагировал на артефакты, связанные с агрессивным JPEG-сжатием.

На всех типах контента SSIM и VIF демонстрировали более высокую согласованность с субъективной оценкой, тогда как PSNR был полезен только как базовая техническая проверка. Метрики без эталона показали свою применимость исключительно в условиях реального времени, когда оригинал недоступен. При этом было выявлено, что BRISQUE демонстрирует хорошую чувствительность к искажениям, но может быть нестабилен без предварительной адаптации.

Анализ вычислительной нагрузки показал, что VIF, несмотря на высокую точность, требует значительного времени на расчёт — более 0.3 секунд на изображение формата 1080p. PSNR и SSIM выполняются практически мгновенно, а BRISQUE и NIQE занимают промежуточное положение. Это ограничивает использование VIF в системах реального времени, где задержка критична. На рисунке 1 представлена гистограмма, демонстрирующая среднее время выполнения метрик.



Полученные результаты позволяют сформулировать прикладные рекомендации по выбору методов оценки качества изображения в зависимости от специфики задачи и технических условий.



В телемедицинских системах, где требуется высокая точность передачи визуальной информации, особенно при удалённой диагностике кожных покровов, эндоскопии или дерматоскопии, наиболее обоснованным является применение метрик SSIM и VIF. Первая позволяет оценивать структурную целостность изображения, включая контраст и геометрию, в то время как вторая — более глубоко отражает сохранение диагностически значимой информации. Использование этих метрик оправдано как на этапе передачи сигнала, так и при приёме — например, в системах телемедицинских консультаций.

В образовательном телевидении ключевую роль играет читаемость текста, чёткость границ объектов, стабильность цветопередачи. Здесь SSIM может использоваться для контроля визуального восприятия, а BRISQUE — в режиме непрерывного мониторинга качества вещания в LMS-платформах или видеолекциях. Система, способная в реальном времени регистрировать превышение порога BRISQUE, может автоматически адаптировать битрейт трансляции или сигнализировать об ухудшении канала.

В задачах видеонаблюдения важны надёжность и устойчивость к внешним условиям — особенно при ночной съёмке, низком освещении или высокой динамике сцены. В этом контексте NIQE зарекомендовал себя как простая и надёжная безэталонная метрика, способная обнаруживать потерю резкости и дефокус. Дополнительно возможно внедрение VIF для последующей экспертной оценки или в системах архивного хранения с высоким приоритетом контента (например, при распознавании лиц).

В судебной практике, где изображение становится частью доказательной базы, любые искажения могут повлиять на интерпретацию. Здесь целесообразно использовать SSIM и VIF как основные инструменты оценки целостности и визуальной достоверности кадра. Причём такой анализ может быть автоматизирован в системах видеорегистрации или постфактум — при экспертизе записей.

Важно также учитывать реалии применения. Метрики PSNR и SSIM могут быть встроены в кодек или сетевой модуль на стороне вещателя или сервера. Метрики без эталона, такие как NIQE и BRISQUE, эффективно интегрируются в приёмные устройства, видеорекордеры, клиентские приложения, модули качества в облачных платформах. При этом особое

внимание следует уделять пороговым значениям: для каждой метрики следует эмпирически установить границы, при которых качество считается «приемлемым» или «критическим».

Наилучшие результаты достигаются при комплексной оценке качества — сочетании эталонных и безэталонных метрик, адаптированных под конкретный видеоконтент и среду применения. Разработка гибких адаптивных систем мониторинга качества цифрового изображения — ключ к стабильной и достоверной работе прикладного телевидения.

Проведённое исследование позволило установить, что выбор метрик объективной оценки качества цифровых телевизионных изображений должен быть строго обусловлен конкретной задачей прикладного телевидения, типом контента и условиями трансляции. Результаты показали, что метрики с эталоном, такие как SSIM и VIF, обладают высокой корреляцией с субъективным восприятием и способны надёжно отражать структурные и информационные искажения. При этом их использование требует наличия исходного изображения, что ограничивает сферу их применения в реальных системах.

Метрики без эталона — BRISQUE и NIQE — продемонстрировали практическую ценность для мониторинга качества в режиме реального времени, особенно в условиях отсутствия доступа к оригиналу. Однако их эффективность зависит от типа визуального контента и требует предварительной адаптации статистических моделей к конкретным задачам. PSNR, несмотря на широкое распространение, показал ограниченную применимость в прикладном контексте ввиду низкой перцептивной значимости.

Анализ экспериментальных данных показал, что в задачах телемедицины и судебной экспертизы наиболее эффективны SSIM и VIF, в образовательных трансляциях — комбинация SSIM и BRISQUE, а в системах видеонаблюдения — NIQE в сочетании с пороговым контролем. Вычислительная эффективность также играет ключевую роль: для интеграции в онлайн-системы предпочтительны метрики с минимальной нагрузкой на процессор, такие как PSNR, SSIM, NIQE.

Универсального метода оценки качества не существует, однако применение комбинированного подхода, учитывающего как технические, так

и перцептивные аспекты, позволяет добиться надёжного контроля качества цифрового изображения в широком спектре прикладных задач. Дальнейшие исследования могут быть направлены на разработку адаптивных гибридных метрик, использующих преимущества как эталонных, так и безэталонных подходов, а также на внедрение интеллектуальных систем мониторинга качества в реальных цифровых платформах телевидения.

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Интеграция ИИ в системы обработки видеосигналов

Суёнов Шохижохон Холмунин угли

suyunovshohjahon64@gmail.com

студент 3 курса Ташкентский университет информационных технологий
имени Мухаммада Ал-Хоразмий

Аннотация: Интеграция искусственного интеллекта (ИИ) в системы обработки видеосигналов открывает новые возможности для повышения качества, адаптивности и функциональности видеотехнологий. Современные нейросетевые модели позволяют эффективно решать задачи шумоподавления, суперразрешения, восстановления деталей, устранения артефактов сжатия и интерполяции кадров. В данной работе представлен обзор ключевых методов глубокого обучения, применяемых в видеопотоках, а также их сравнительный анализ по точности и вычислительным затратам. Особое внимание уделено практическому применению ИИ в таких областях, как телемедицина, интеллектуальное видеонаблюдение, автономный транспорт и промышленная визуализация. Также рассматриваются вопросы реализации ИИ-моделей в условиях ограниченных ресурсов и в системах реального времени, включая edge-вычисления и аппаратное ускорение. Полученные выводы подтверждают высокую эффективность и широкие перспективы использования ИИ в современных видеосистемах.

Ключевые слова: интеллектуальная обработка видео, нейросети, шумоподавление, суперразрешение, интерполяция кадров, видеонаблюдение, телемедицина, edge AI, восстановление изображения, реальное время.

Введение Цифровое видео стало основным средством визуальной информации в самых различных сферах — от медицины и транспорта до безопасности и образования. При этом качество видеосигнала оказывает прямое влияние на точность анализа, надёжность автоматических решений и комфорт восприятия. Однако реальные условия съёмки — нестабильное освещение, движение объектов, сжатие данных и шум — приводят к ухудшению качества видеопотоков, что ограничивает их практическую ценность.

На этом фоне особое значение приобретает внедрение методов искусственного интеллекта в обработку видеосигналов. В отличие от традиционных алгоритмов, основанных на жёстко заданных правилах, современные нейросетевые модели способны обучаться на больших наборах данных и эффективно восстанавливать детали, устранять искажения и адаптироваться к различным условиям съёмки. Это делает искусственный интеллект мощным инструментом повышения качества видео в задачах, где надёжность визуальной информации критически важна.

В данной статье рассматриваются основные направления применения ИИ в улучшении видеопотоков: подавление шума, повышение разрешения, восстановление резкости и устранение артефактов сжатия. Анализируются современные архитектуры нейросетей, их эффективность, вычислительная сложность и применимость в системах реального времени. Отдельное внимание уделяется интеграции ИИ в практические области — телемедицину, видеонаблюдение, автономные транспортные средства и промышленные системы визуального контроля.

Современные методы искусственного интеллекта, прежде всего основанные на глубоком обучении, значительно трансформировали подходы к обработке видеосигналов. В отличие от традиционных алгоритмов, нейросетевые модели способны адаптироваться к разнообразным условиям съёмки и эффективно восстанавливать визуальную информацию, утрачиваемую в процессе передачи, сжатия или в результате неблагоприятной среды. Основные направления применения ИИ в данной области включают подавление шумов, увеличение разрешения, восстановление размытых деталей, генерацию промежуточных кадров и устранение артефактов сжатия.

Шумоподавление при помощи сверточных нейронных сетей позволяет значительно повысить визуальное качество видео, особенно в условиях слабого освещения или цифровых помех. Архитектуры типа DnCNN и FastDVDnet обучаются на парах изображений с искусственным и реальным шумом, что делает их пригодными как для статических изображений, так и для видеопотоков, где важна временная консистентность. Аналогично, суперразрешение видеок кадров, особенно при увеличении масштаба в 2–4 раза, эффективно реализуется с помощью таких моделей, как SRCNN, EDSR, BasicVSR и их усовершенствованных версий. Эти сети обеспечивают



такие как EVRNet, обеспечивают компромисс между качеством и скоростью, позволяя интеграцию в мобильные и встраиваемые устройства.

Практическая применимость ИИ в обработке видео подтверждается его внедрением в телемедицинских платформах, где критически важно точное отображение микродеталей тканей и анатомических структур. В системах видеонаблюдения нейросети улучшают видимость лиц и объектов при слабом освещении или в условиях погодных помех. В транспортной отрасли, особенно в системах автономного вождения, ИИ позволяет повысить надёжность распознавания объектов и дорожной разметки. В промышленности — автоматизировать визуальный контроль качества продукции.

Особое внимание в последние годы уделяется реализации ИИ-моделей в режиме реального времени. Это достигается за счёт оптимизации нейросетевых архитектур, использования сжатых моделей (MobileNet, EfficientNet), а также аппаратного ускорения на базе GPU, FPGA и NPU. Платформы edge AI позволяют выполнять инференс непосредственно на камерах или терминалах без передачи видео на удалённый сервер, что уменьшает задержку и снижает нагрузку на сеть. Дополнительно применяются технологии квантизации, прунинга и компиляции моделей для ускорения вывода без потери качества. Инструменты вроде TensorRT, OpenVINO и TVM становятся неотъемлемой частью развертывания ИИ-систем в индустрии.

Интеграция ИИ в обработку видеосигналов обеспечивает не только значительное улучшение визуального качества, но и расширение функциональности видеоанализа. Прогресс в этой области способствует развитию высокоточных, автономных и интеллектуальных систем, способных работать в режиме реального времени в условиях ограниченных ресурсов.

Одним из важнейших аспектов внедрения искусственного интеллекта в обработку видеосигналов является адаптация нейросетевых решений к требованиям конкретных систем — по времени отклика, потребляемым ресурсам и устойчивости к изменяющимся условиям среды. Так, в системах видеонаблюдения, работающих непрерывно 24/7, важно не только повышенное качество изображения, но и возможность постоянного мониторинга без перегрузки вычислительной платформы. Здесь на первый план выходят безотказность, энергоэффективность и адаптивная



масштабируемость алгоритмов. Использование облегчённых моделей и динамическая активация свёрточных блоков позволяют реализовать компромисс между качеством и производительностью. Некоторые системы автоматически переключаются между высокоточной и упрощённой обработкой в зависимости от загрузки процессора или появившихся аномалий в кадре.

В свою очередь, в медицинских и научных приложениях акцент смещается в сторону точности и достоверности восстановленных данных. Здесь допустимы более длительные вычисления, если они обеспечивают сохранение деталей, важных для диагностики или анализа. Метрики типа VIF и LPIPS, ориентированные на перцептивную составляющую, также начинают использоваться как дополнительные критерии эффективности ИИ-обработки. Кроме того, в этих областях растёт интерес к использованию моделей, обученных с учётом ограниченного количества данных (low-data learning), что особенно важно для редких заболеваний или уникальных условий визуализации.

Не менее актуальна проблема интерпретируемости ИИ-решений. Поскольку нейросетевые методы являются по своей природе «чёрным ящиком», возрастают требования к визуализации внутреннего состояния модели, активаций и карт внимания. Это особенно важно в критически важных системах, где результат алгоритма должен быть объясним и воспроизводим. Для повышения доверия к ИИ применяются методы визуального обоснования решений, такие как Grad-CAM, которые позволяют локализовать области, повлиявшие на итоговую реконструкцию или фильтрацию изображения.

Технические платформы, на которых реализуются нейросетевые решения, также развиваются в направлении специализированных вычислительных блоков. Например, современные видеокамеры класса "AI-powered" уже содержат встроенные нейропроцессоры (Neural Processing Units), позволяющие выполнять улучшение видео в реальном времени без обращения к внешнему серверу. Это актуально для автономных беспилотников, охранных систем, промышленных контроллеров, где задержки передачи данных критичны. Одновременно ведутся разработки ASIC-чипов (Application Specific Integrated Circuits), оптимизированных под конкретные архитектуры ИИ для видео. Такие решения обеспечивают

рекордное соотношение производительности и энергопотребления, особенно в серийных промышленных изделиях.

Ещё одно перспективное направление — объединение нескольких задач в рамках одной модели. Традиционно задачи сверхразрешения, шумоподавления, деблюра и повышения контрастности решаются отдельными нейросетями. Однако современные подходы переходят к мультимодульным архитектурам типа all-in-one, способным адаптироваться к различным искажениям входного видео и применять соответствующие трансформации в одном проходе. Такие гибридные модели позволяют упростить архитектуру системы, уменьшить общий объём параметров и повысить устойчивость к комбинированным артефактам, часто встречающимся в реальных условиях съёмки.

Наконец, наблюдается устойчивый тренд к интеграции ИИ-обработки с другими технологиями видеопотоков — сжатие с помощью нейрокодексов, адаптивная передача видеоданных (content-aware transmission), улучшение восприятия на дисплеях (perceptual display tuning), а также взаимодействие с системами анализа и распознавания. На практике это приводит к построению единой интеллектуальной цепочки: от захвата кадра до конечной интерпретации — с участием ИИ на каждом этапе.

Основная тенденция в развитии ИИ в обработке видеосигналов заключается в сочетании высокого качества, адаптивности к среде и возможности масштабирования под ресурсы оборудования. Это делает технологии глубокого обучения неотъемлемой частью будущих интеллектуальных видеосистем в медицине, транспорте, безопасности, производстве и многих других отраслях.

Интеграция искусственного интеллекта в системы обработки видеосигналов представляет собой один из наиболее значимых векторов развития современных информационных технологий. Результаты проведённого анализа подтверждают, что глубокие нейросетевые модели способны эффективно решать широкий спектр задач: от подавления шума и повышения разрешения до устранения артефактов сжатия и интерполяции кадров. Эти технологии позволяют существенно повысить визуальное качество видеопотоков, обеспечить адаптацию к реальным условиям съёмки и улучшить точность последующего анализа изображений.

Обзор существующих архитектур и подходов показал, что выбор моделей зависит от специфики применения, требований к вычислительным ресурсам и необходимости обработки в реальном времени. Наиболее эффективные решения достигаются при сочетании точности и оптимизации: лёгкие модели на мобильных и edge-платформах обеспечивают базовое улучшение качества, в то время как тяжёлые архитектуры на GPU применимы в задачах с приоритетом на детализацию и надёжность.

Особое значение приобретает комплексный подход: объединение задач в рамках универсальных моделей, использование аппаратного ускорения, а также интерпретируемость решений и адаптация к критически важным сферам — от медицины до автономного транспорта. Несмотря на очевидные достижения, остаются вызовы, связанные с интерпретируемостью, энергоэффективностью и устойчивостью к новым типам искажений.

В перспективе можно ожидать дальнейшее слияние ИИ-обработки с интеллектуальной компрессией, видеокодированием нового поколения и многофункциональным анализом сцен. Развитие компактных и обучаемых в полевых условиях моделей, а также нейропроцессоров с малым энергопотреблением, откроет новые горизонты в применении ИИ в видеоаналитике и визуальных системах нового поколения.

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Определение эффективности очистки по технологии 1ВП и усовершенствование очистного оборудования

З. Холикова

Ассистент Ферганского государственного технического университета,
Республика Узбекистан, г. Фергана

Аннотация

В данной статье представлены сведения по оценке эффективности очистки волокна с использованием технологии 1ВП, а также рассматриваются вопросы совершенствования оборудования, применяемого в данном процессе. Проведен анализ существующих методов очистки волокна от посторонних примесей и коротких волокон, выявлены основные факторы, влияющие на эффективность очистки. Особое внимание уделено техническим характеристикам оборудования, его производительности, конструктивным особенностям и влиянию на качество получаемого хлопкового волокна. Также обоснованы предложения по модернизации очистного устройства 1ВП с целью повышения его энергоэффективности, производительности и степени очистки.

Ключевые слова: 1ВП, очистка волокна, хлопок, эффективность, оборудование, модернизация, короткое волокно, производительность

Введение

Очистка волокна от сухого мусора и мелких примесей после процесса джинирования наиболее эффективна, если проводится до этапа прессования и формирования тюков. При джинировании машинно-собранного хлопка количество сухих и мелких примесей зачастую превышает нормы, установленные стандартом. Если такое волокно прессуется без предварительной очистки, это значительно осложняет работу подготовительных машин ткацких фабрик. Кроме того, хлопковое волокно становится более извитым, что приводит к увеличению отходов в процессе текстильного производства.

Отдельные фрагменты волокна, выходящие из джина, могут иметь массу 15–20 мг и плотность, не превышающую 0,15–0,25 кг/м³. В связи с этим



установка волокноочистительных машин на хлопкоочистительных заводах представляется целесообразной. Волокноочистительные машины классифицируются по способу удаления загрязнений на механические, аэродинамические и аэромеханические.

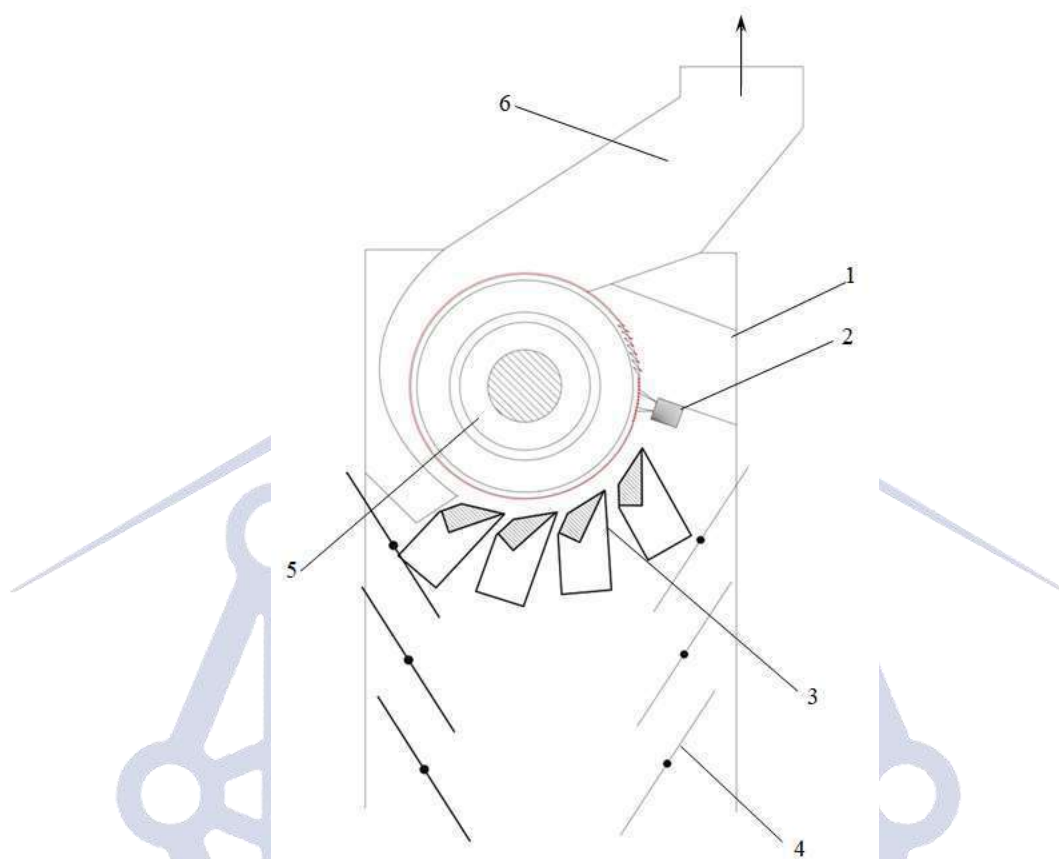
По числу этапов очистки волокноочистители делятся на одно- и многоступенчатые, а по отношению к джинам — на индивидуальные (обслуживающие один джин) и батарейные, обслуживающие весь блок джинов.

Аэродинамический способ очистки основан на использовании центробежной силы, возникающей при прохождении воздушного потока с волокном по изогнутому каналу. Однако эффективность очистки у таких машин невысока, так как возникающие центробежные силы способны отделить только те примеси, которые слабо сцеплены с волокном.

Сила сцепления сухого мусора и мелких примесей с волокном достигает 0,98–1,47 Н, тогда как создаваемая волокноочистителем центробежная сила не превышает 0,09–0,11 Н.

К основным технологическим требованиям, предъявляемым к волокноочистителям, относятся: отсутствие отрицательного воздействия на физико-механические свойства волокна; максимальное удаление мусора и сухих примесей при сохранении качества волокна; недопущение ухудшения стандартных показателей; минимизация потерь волокна в составе отходов. При проектировании конструкции волокноочистителей необходимо прежде всего учитывать их технологические характеристики и эффективность очистки.

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1 – входной патрубок; 2 – неподвижная щётка; 3 – решётка с колосниками; 4 – жалюзи;
5 – зубчатый цилиндр; 6 – выходной патрубок для волокна.

Рисунок 1. Общий вид волоконоочистителя

Технологические показатели

К основным технологическим показателям волоконоочистителя относятся:

- эффективность очистки;
- количество чистого волокна, попавшего в отходы;
- производительность устройства.

Содержание волокна в составе отходов определяется по следующей формуле:

$$B = \frac{q_t}{q_{if} + q_{ch}} \cdot 100\%$$

где: q_t — где: — масса волокна в отходах;

q_{if} — масса примесей;



Q_{ch} – общая масса отходов.

Показателем, характеризующим количество волокна в составе отходов, является коэффициент K_t содержания волокна в отходах.

$$K_t = q_t / q_{if}$$

$$K_t = B / (100 - B)$$

Эффективность очистки волоконного очистителя определяется по следующей формуле:

$$K = \frac{q_x \cdot (100 - B)}{G_2 S_2 + q_x \cdot (100 - B)} \cdot 100\%$$

Или

$$K = \frac{S_1 - S_2}{S_1} \cdot \frac{1}{1 - \frac{S_2}{100 - B}} \cdot 100$$

G_2 – очищенная волокнистая масса;

S_1 и S_2 – сумма дефектов в составе волокна до и после очистки.

Если необходимо определить эффективность очистки волокна на любом этапе работы волоконноочистителя, в этом случае используется следующая формула:

$$K_n = \frac{q_n \cdot (100 - B_n)}{G_2 S_2 + \sum_{i=n}^m q_i \cdot (100 - B_i)} \cdot 100$$

Q_n и Q_i – масса отходов, выделенных на исследуемой ступени и на всех ступенях волоконноочистителя;

B_n и B_i – содержание волокна в составе отходов, полученных на исследуемой ступени и на всех ступенях, в процентном выражении;

m – общее количество ступеней волоконноочистителя;

n – порядковый номер исследуемой ступени.

Если известна эффективность очистки на всех ступенях волоконноочистителя, тогда общая эффективность очистки всей машины определяется по следующей формуле:

$$K = 100 \cdot \left[1 - \left(1 - \frac{K_1}{100} \right) \cdot \left(1 - \frac{K_2}{100} \right) \cdot \dots \cdot \left(1 - \frac{K_m}{100} \right) \right]; \%$$

Ещё одним показателем, характеризующим работу волокноочистителя, является коэффициент снижения выхода волокна – K_{ch} .

$$K_{ch} = \frac{B_{T_1} - B_{T_2}}{B_{T_1}} \cdot 100\%$$

B_{T_1} и B_{T_2} – выход волокна до и после волокноочистителя.

Выводы

1. В ходе исследования установлено, что эффективность очистки волокна существенно зависит от конструктивных особенностей и технического состояния волокноочистителя 1ВП. Применение поэтапного анализа позволяет выявить узлы оборудования, где происходят наибольшие потери и снижение качества очистки.

2. Проведённые расчёты показали, что содержание волокна в составе отходов можно значительно снизить за счёт оптимизации геометрии очистных элементов и равномерной подачи сырья.

3. Обосновано, что модернизация отдельных узлов волокноочистителя, в частности — улучшение аэромеханических условий и снижение аэродинамического сопротивления, приводит к снижению потерь волокна и повышению энергетической эффективности.

4. Разработанный алгоритм оценки эффективности очистки на каждой ступени позволяет точно определить общую степень очистки машины и коэффициент снижения выхода волокна, что важно при промышленной эксплуатации и серийной настройке оборудования.

5. Полученные результаты могут быть использованы при проектировании новых моделей волокноочистителей, а также при модернизации существующих установок на хлопкоочистительных предприятиях.

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АНАЛИЗ ДАВЛЕНИЯ ВОЗДУХА ПРИ ТРАНСПОРТИРОВКЕ ХЛОПКА-СЫРЦА ПО ПНЕВМОТРАССЕ

З. Холикова

Ассистент Ферганского государственного технического университета,
Республика Узбекистан, г. Фергана

Аннотация

В данной статье представлен анализ изменения давления воздуха при транспортировке хлопка-сырца по пневмотранспортной трубе. Пневмотранспорт является одним из наиболее эффективных способов перемещения хлопкового сырья на перерабатывающих предприятиях. Однако во время перемещения волокна по воздуховодам возникают определённые аэродинамические явления, влияющие на равномерность подачи и сохранность качества хлопка. В работе рассмотрены основные физико-механические параметры воздушного потока, внутренняя структура пневмотрассы, а также взаимодействие хлопковых волокон с воздушной средой. Особое внимание уделено расчёту давления воздуха в различных участках трубопровода, а также влиянию геометрических характеристик трассы и скорости потока на сопротивление и потери давления. Полученные данные могут быть полезны при проектировании и оптимизации систем пневмотранспорта на предприятиях первичной переработки хлопка.

Ключевые слова: хлопок-сырец, пневмотранспорт, воздушное давление, аэродинамика, скорость потока, трубопровод, сопротивление воздуха

Введение

Одним из основных элементов оборудования воздушного транспорта является пневмотрубопровод, или воздушный канал. Воздушный трубопровод представляет собой полое трёхмерное тело различной формы, изготовленное из твёрдого и прочного материала. Путём герметичного соединения отдельных участков можно создать замкнутый канал необходимой длины, по которому можно транспортировать жидкости и газы, а также твёрдые материалы, перемещаемые вместе с воздушным потоком.

В промышленности пневмотрубопроводы (см. рис. 5), как правило,



изготавливаются из стальных листов толщиной 2–3 мм. В зависимости от условий эксплуатации они также могут быть выполнены из цветных металлов, чугуна, пластмассы или резины. Однако с точки зрения технологичности изготовления и эксплуатационных характеристик наиболее предпочтительным материалом для производства пневмотрубопроводов в промышленности остаётся листовая сталь.

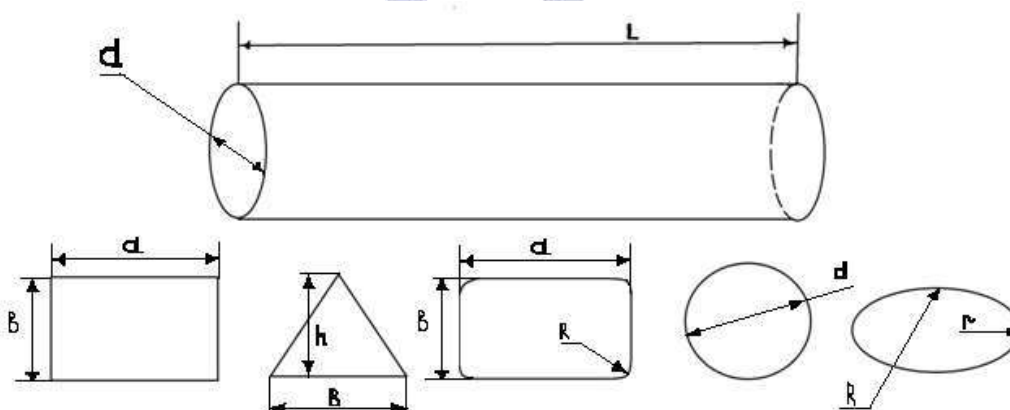


Рисунок 1. Формы пневмопровода (воздухопровода)

Основная часть

По поперечному сечению в пневмотранспортных системах применяются воздуховоды различных форм: круглые, прямоугольные, треугольные, узкие (прямоугольные с закруглёнными углами), овальные. Среди них, если особенности применения не требуют иного, предпочтение всегда отдаётся круглым воздуховодам. Это связано с тем, что при одинаковом периметре именно круглая форма обеспечивает наибольшую площадь поперечного сечения, а значит, является наиболее экономичной с точки зрения пропускной способности и эффективности воздушного потока.

В хлопкоочистительной промышленности чаще всего используются стальные воздуховоды диаметром от 200 до 600 мм. Так, трубы диаметром 200–300 мм применяются для транспортировки хлопковых семян, диаметром 400 мм — для сырого хлопка, а 600 мм — для хлопкового волокна. Поскольку в данном исследовании рассматривается процесс транспортировки сырого хлопка, основное внимание уделяется воздуховодам, наиболее подходящим именно для этой цели.

Длина воздуховодов может быть различной и определяется на стадии



проектирования. Предприятия металлургии и машиностроения могут изготавливать трубы необходимой длины — в хлопковой промышленности наиболее распространены воздухопроводы длиной 2, 3 и 4 метра. Для создания длинных трасс трубы соединяются между собой с помощью сварки, резьбовых креплений или специальных муфт. В зависимости от расположения хлопковых хранилищ относительно цехов, длина трассы может достигать 200, 300 и даже 500 метров.

Известно, что одним из основных недостатков пневмотранспортных установок является их высокая энергоёмкость. Наши исследования показали, что потребление энергии пропорционально зависит от длины и диаметра воздухопровода. Поэтому в рамках настоящей работы рассматривается также вопрос обоснования оптимального поперечного сечения (диаметра) воздухопровода.

Проведённые теоретические исследования показали, что в процессе пневмотранспортировки хлопка имеются резервы, которые в настоящее время не используются. В частности, из-за неравномерной подачи хлопка в пневмотрассу, диаметр трубопровода часто значительно превышает расчётные значения — с запасом, чтобы избежать засоров. При изучении пропускной способности воздухопроводов было установлено, что труба диаметром 400 мм способна пропускать до 60 тонн хлопка в час. Однако для современных хлопкоочистительных линий достаточно производительности 10–15 т/ч, так как производительность оборудования, как правило, не превышает 15 т/ч. Теоретически было обосновано, что для обеспечения такой производительности достаточно труб диаметром 355 мм и 315 мм, при условии равномерной подачи хлопка в систему.

В рамках наших разработок предложено решение этого вопроса — усовершенствование рабочих органов машины для разрыхления хлопковых гарусов и подача сырья в пневмотранспортную систему при помощи пневмомеханической питательной установки.

Следующая важная проблема связана с аэродинамическим сопротивлением на входе в трубу. Высокое сопротивление мешает свободному поступлению хлопка в воздухопровод, снижает пропускную способность и может вызывать засоры. Для снижения этого сопротивления мы предложили изготавливать входную часть воздухопровода в виде конического

расширения. Также был разработан алгоритм проектирования входных участков труб различного диаметра и определены оптимальные геометрические параметры.

Ещё одна задача, связанная с конструкцией воздухопроводов — обеспечение герметичности и гладкости внутренней поверхности при временном соединении переносных труб. Для её решения нами предложено следующее техническое решение (см. рис. 2): к каждому концу трубы (1) крепятся два одинаковых по форме и размеру конуса (2), изготовленных по единому шаблону. Меньшая часть конуса по диаметру равна внутреннему диаметру трубы, благодаря чему при соединении двух таких труб образуется гладкий внутренний переход — одна сторона конуса выполняет функцию воронки, а другая — втулки. Таким образом создаётся новая конструкция воздуховода с улучшенными аэродинамическими и монтажными характеристиками. На рисунке показано: в верхней части — способ крепления конусов сваркой, в средней — соединение двух труб, в нижней — соединение трёх воздухопроводов между собой.

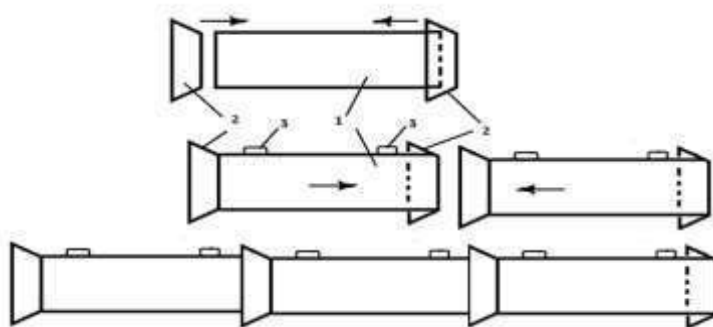


Рисунок 2. Схема формирования воздуховода с коническими концами и мобильной пневмотрассы

Такие воздухопроводы с коническими окончаниями могут быть соединены между собой для формирования пневмотрассы любой необходимой длины. При этом, если внешняя поверхность конуса и внутренняя часть воронки покрыты уплотняющим материалом, можно обеспечить высокую степень герметичности в местах стыков. В качестве герметизирующего слоя могут быть использованы резиновый клей, масляная краска, а также в производственных условиях — простая глиняная смесь на основе

мелкодисперсной почвы.

Во время эксплуатации воздухопроводы перемещаются с помощью специальных держателей (поз. 3) и при необходимости соединяются между собой: воронка одного воздухопровода надевается на конус другого и надёжно закрепляется. Такая конструкция соединений обеспечивает герметичность пневмотрасс и снижает вероятность всасывания наружного воздуха через зазоры.

Если конусы изготавливаются с высокой точностью, из прочного материала и надёжно закрепляются, можно полностью исключить утечку воздуха. Кроме того, выполнение входной части воздухопровода в виде конического сужения предотвращает чрезмерное сжатие воздушного потока при входе, снижает сопротивление движению как воздуха, так и транспортируемого материала, тем самым уменьшая вероятность засоров.

Таким образом, коническая форма входа воздухопровода способствует снижению риска закупорки в начальной зоне и повышает надёжность функционирования всей пневмотранспортной системы.

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ОПРЕДЕЛЕНИЕ ПОКАЗАТЕЛЕЙ КАЧЕСТВА ШЕРСТИ

Тоштемиров Косимжон Абдуллахоевич

Ассистент Ферганского государственного технического университета,

Республика Узбекистан, г. Фергана

E-mail: toshtemirov@mail.ru

Аннотация

При производстве изделий из шерстяного волокна в основном используются шерсть овец, коз, верблюдов и других животных. Продукция, изготовленная из шерстяного волокна, отличается натуральностью, эстетичностью, прочностью, мягкостью и высокой теплоизоляцией. Определение качественных показателей шерстяных волокон имеет большое значение для оценки свойств получаемых тканей и полуфабрикатов. В настоящей статье представлены сведения о строении шерстяного волокна и его характеристиках, основных показателях качества, а также рассматриваются технологии первичной обработки шерсти.

Ключевые слова: шерсть, волокно, качество, толщина, длина, эластичность, гигроскопичность, анализ, сортировка, текстильная промышленность

Введение

Шерсть — это один из древнейших и наиболее ценных видов натурального волокна, широко применяемого в лёгкой и текстильной промышленности. Благодаря своим уникальным свойствам — природной мягкости, упругости, теплоизоляции и способности сохранять форму — шерстяные изделия занимают особое место среди других текстильных материалов.

Основными источниками шерсти являются овцы, козы, верблюды и некоторые другие виды домашних животных. Качество получаемого волокна зависит от породы животного, условий его содержания, возраста, времени стрижки, а также технологии первичной обработки сырья. Разнообразие видов шерсти требует точных методов оценки её качества, поскольку именно от этих

показателей зависят дальнейшие технологические процессы и конечные свойства тканей.

Определение качественных характеристик шерстяного волокна, таких как длина, толщина, однородность, эластичность, влажность и содержание жира, является важной частью лабораторного и производственного контроля. Достоверная оценка этих параметров позволяет не только эффективно сортировать сырьё, но и прогнозировать его пригодность для различных типов текстильной продукции.

Основная часть

Шерстяная промышленность является одним из ведущих направлений текстильной отрасли. На предприятиях этого сектора осуществляется переработка шерсти с получением различных видов продукции: пряжи различной линейной плотности, чистошерстяных и смешанных тканей, технических и специальных текстильных материалов, ковров и ковровых изделий, войлока и фетра, а также нетканых материалов.

1. Линейная плотность шерстяного волокна. Линейная плотность волокон представляет собой один из важнейших показателей качества шерсти, так как она тесно связана с другими физическими свойствами: прочностью, эластичностью, блеском и мягкостью. В целом, чем тоньше шерсть, тем выше её однородность, прочность и эластичность. Однако чрезмерно тонкое волокно может быть подвержено повреждениям при прядении. Показатели линейной плотности обычно выражаются через средний диаметр волокна, номер качества и значение текса. Кроме того, используется коэффициент вариации диаметра волокон для оценки однородности партии. Диаметр шерстяных волокон варьирует в широком диапазоне: от 7 мкм у тонкой шерсти до 240 мкм у грубой. Даже в пределах одного животного диаметр волокон различается по участкам тела: самая тонкая шерсть — на плечах, более грубая — на животе и задней части.

2. Длина волокон шерсти. Благодаря естественной завитости, длина шерстяных волокон подразделяется на естественную (в завитом состоянии) и распрямлённую. В текстильной промышленности основное значение имеет именно распрямлённая длина, определяющая пригодность шерсти к прядению. Длина волокна зависит от породы, возраста, пола животного, условий кормления, места произрастания шерсти и времени стрижки. Так,



длина волокон тонкорунной шерсти составляет от 5,5 до 9 см, полутонкой — от 7 до 15 см, грубой — от 6 до 40 см. Более длинные и равномерные волокна обеспечивают высокую прочность и ровность пряжи.

3. Завитость шерстяного волокна. Завитость влияет на форму волокна, его упругость, сцепление и мягкость. Существуют три основных категории по форме завитков: слабо завитые (практически прямые), средние и сильно завитые. Глубина завитков и их частота определяют конечную текстуру ткани. Высокая завитость при прочих равных повышает объемность и упругость шерсти.

4. Влагоёмкость шерсти. Шерсть обладает одной из самых высоких способностей к поглощению влаги среди всех натуральных волокон. В условиях нормальной атмосферы влажность восстановления составляет 15–17 %. Это свойство делает шерсть комфортной при носке, так как она хорошо регулирует микроклимат кожи.

5. Прочность и растяжимость. Шерстяные волокна имеют относительно низкую прочность по сравнению с другими натуральными волокнами: предельная длина разрыва составляет 9–18 км. Однако шерсть демонстрирует наибольшую эластичность и удлинение: при разрыве сухого волокна — до 25–35 %, во влажном состоянии — до 50 %. Эластичность сохраняется даже после снятия нагрузки, что делает шерсть уникальной по способности к восстановлению формы.

6. Химическая стойкость шерсти. Шерсть устойчива к кислотам, но чувствительна к щелочам. Разбавленные и концентрированные кислоты за короткое время не оказывают существенного вреда шерсти, что позволяет использовать их для удаления растительных примесей и загрязнений. Органические кислоты (уксусная, муравьиная) широко применяются в процессах окрашивания как фиксирующие агенты.

Выводы

Шерсть представляет собой ценный природный волокнистый материал, качество которого определяется рядом физико-механических и технологических показателей. К основным относятся: линейная плотность, длина волокна, степень завитости, влаговпитываемость, прочность и химическая стойкость. Линейная плотность и диаметр волокна напрямую

влияют на сортность шерсти и её пригодность к последующей переработке. Чем тоньше и равномернее волокно, тем выше его текстильные качества.

Длина и завитость зависят от породы животного, возраста, пола, условий содержания и сезона стрижки. Эти параметры играют ключевую роль в выборе технологии переработки и формировании ассортимента конечной продукции. Высокая гигроскопичность и упругость делают шерсть особенно ценной для производства тёплой, комфортной и функциональной одежды и текстиля. Химическая стойкость, особенно к кислотам, позволяет эффективно использовать шерсть в промышленных условиях, включая процессы очистки и окрашивания.

Комплексный анализ перечисленных показателей необходим для точной оценки качества шерстяного сырья, оптимизации производственных процессов и повышения потребительских свойств готовой продукции.

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THE PERFORMANCE IMPROVING THE PERFORMANCE OF DUST COLLECTORS VZP-1200 AND ADDING NEW INNOVATION TECHNOLOGIES

Ergashev Yuldashali, Ogiloy A. Bakhtiyorova

Fergana state Technical University, Fergana, Uzbekistan

Abstract

The efficiency of the dust collectors has been increased by increasing the efficiency of the dust collectors and trapping the fibrous waste in the air flow and passing the remaining air flow to the dust collector. The calculation of the chain drive installed in the improved equipment and the determination of the number of stars were carried out.

Keywords: Cylinder, dust holder, air flow, hopper, vacuum valve, reducer.

Introduction

One of the features of the pneumatic transport of seeded cotton and its products in the conditions of cotton cleaning enterprises is the formation of large and dusty cotton dust on the inner surfaces of the pipes, conveyors and equipment.

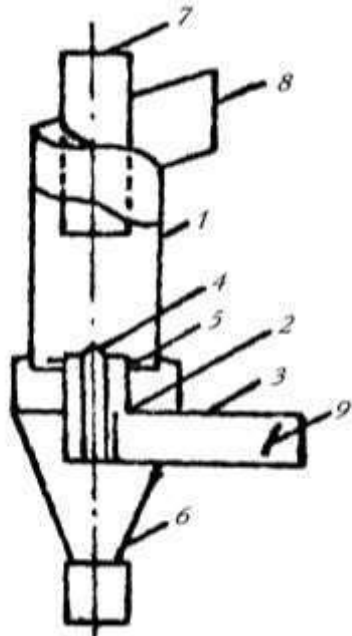
In contrast to dust collectors of the UIV, SS-6, SP-3 type, VZP counter-circulation air dust collectors have a sufficient impact on the work process. At the same time, counter-circulating air flow dust collectors have a slightly higher efficiency coefficient, which increases the reliability of their operation.

Counter-circulation equipment is a dry-type dust collector. The VZP dryer produced at the Moscow Textile Academy is successfully used in the chemical and other branches of industry. One of their main features compared to other dust collectors is their high efficiency. VZP-800 and VZP-1200 dust collectors consist of a cylindrical body, in the lower part of which there is a tangential pile 2, an inlet pipe 3, which works to transfer the primary flow of settled and dusty air. A cylindrical sucker is placed at the border of the rotor, which belongs to the axis.

It is connected with the upper part of the cone. On the outer surface of the rotor (returner) 5 is placed, its shape is truncated conical. The hopper part 6, the perforated dust holder is attached with a vacuum-valve flange. At the top of the dust holder, there is a pipe 7 for discharging the cleaned air. At the same time, this pipe

performs the function of rotating the dusty air coming from the second flow of dusty air. A secondary dusty air distribution valve 9 is placed in the primary dusty air inlet pipe.

VZP pulverizers work as follows: Two unidirectional streams of dusty air enter a mixer or separation zone located at the top of the suction pipe and the primary filter. Particles caught under centrifugal force are separated (separated) on the wall and fall down from the hopper with a downward flow. It is removed from the ground through a non-stop vacuum valve. As the downstream secondary flow spirals down the wall of the equipment, the return washer pulls it back up and joins the primary flow. Along with it, it leaves the suction pipe.



1st corps; 2nd tangential groove; 3-lower inlet pipe; 4-suction tube switch; 5th return puck; 6th lower bunker; 7-purified air outlet pipe; 8-upper inlet pipe; 9 valve.

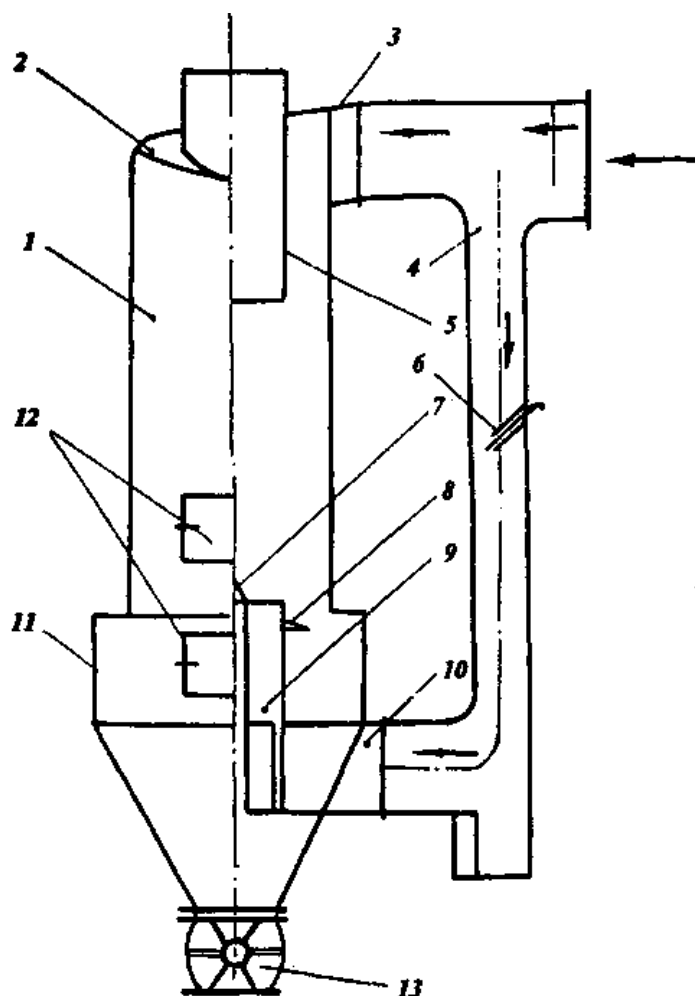
Figure 1. Scheme of VZP switches.

VZP is a unique aerodynamic device. In it, the large dust particles coming from the CC-15A separator get tangled due to the rotational movement of the air flow and reduce the useful efficiency of the VZP device. It contains small particles and mineral impurities, and captures small fractions [21].

Recently, the air productivity in cotton ginning industry is 3 and 6 m³ Vortex dust collectors VZP-800 and VZP-1200 with /s are widely used. These converging

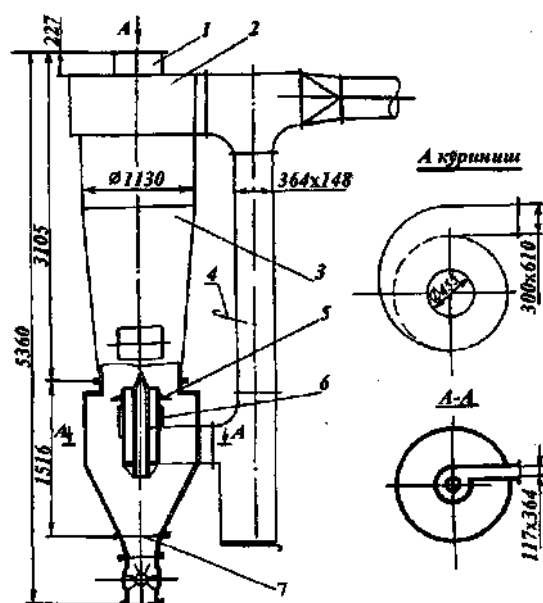


vortex dust collectors belong to the group of dry centrifugal air cleaning dust collectors and are designed to clean recycled air from dust.



1 - separation chamber; 2 - upstream vortex; 3 - pipe; 4 - supply air duct; 5 - air exhaust pipe; 6 - skylight; 7 - squeezer; 8th return puck; 9-downstream swirler; 10 - pipe; 11 - bunker; 12 - observation cover; 13 – vacuum valve.

Figure 2. Opposite VZP dust holder .



1 - dust extraction pipe; 2 - upstream vortex; 3 - separation chamber; 4 - window;
5 - return puck; 6 - downstream swirler; 7 - dust extraction hole.

Figure 3. Countercurrent VZP-MZ dust holder.

It is designed to clean the used air of the air-assisted transportation system for cotton. It is recommended to remove the dirt by air instead of the screw conveyor in order to avoid the large amount of dust coming out of the dust extraction holes. Each dedusting device is characterized by its dust capture efficiency, which is determined by the following equation:

$$\eta = \frac{G_2}{G_1} \cdot 100 \quad (1)$$

here: G_1 - total weight of dust in processed air, mg;

G_2 - dust weight captured by the dedusting device, mg.

Dust capture efficiency can also be determined by the difference in air pollution entering and leaving the dust collector.

$$\eta = \frac{d_1 - d_2}{d_1} \cdot 100\% \quad (2)$$

here: d_1 - dustiness of the air entering the dust holder, mg/m^3 ;

d_2 - dustiness of the air coming out of the dust holder, mg/m^3 .

$$\eta = [1 - (1 - \eta_1) \cdot (1 - \eta_2) \cdot k \cdot (1 - \eta_n)] \cdot 100\% \quad (3)$$

here: η_1, η_2, η_n - the dust collection efficiency, expressed as a percentage of the unit of each successive step.



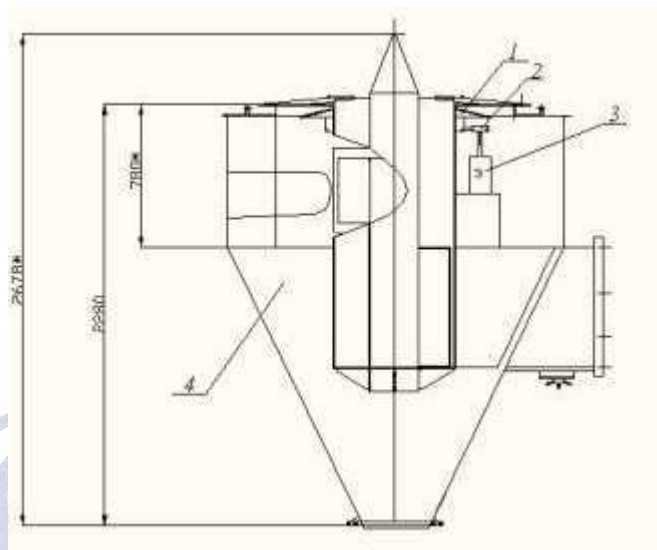


Figure 4. Calculation of rotation of the return washer of the dust holder

Power $P = 0,75 \text{ kW}$,

Electric motor brand #71A2,

Rotational speed 2840 RPM,

$$\eta_r = 0,95 \div 0,97$$

The diameter of the rotor of the rotating return washer $d_2 = 630 \text{ mm}$

1. Power consumption

$$P_r = P \cdot \eta_r = 0,75 \cdot 10^3 \cdot 0,96 = 0,72 \text{ kW} \quad (4)$$

2. Electric motor angular speed;

$$\omega_{\text{э.д.}} = \frac{\pi \cdot n}{30} = \frac{3,14 \cdot 2840}{30} = 297 \text{ ref / s} \quad (5)$$

3. The work done by the puck returner.

$$T_1 = \frac{P}{\omega} = \frac{0,72 \cdot 10^3}{297} = 2,43 \cdot 10^3 \text{ Hmmm}$$

4. The diameter of the electric motor mounted pulley

$$d_1 = \frac{d_2}{u_r (1 - \varepsilon)} = \frac{630}{2 \cdot (1 - 0,015)} = \frac{630}{1,97} = 320 \text{ hmmm} \quad (6)$$

5. Angular speed of the return puck

$$\omega_B = \frac{\omega_{\text{э.д.}}}{u_r} = \frac{297}{2} = 148,5 \text{ rad / s} \quad (7)$$

Useful efficiency of the belt drive



$$\Phi_{HK} = \frac{\omega_{\text{э.д.}} - \omega_B}{\omega_{\text{э.д.}}} \cdot 100 = \frac{297 - 148,5}{297} \cdot 100 = 0,5\% \quad (8)$$

6. Choose the maximum and minimum distances between axes

$$a_{\min} = 0,55(d_1 + d_2) + h = 0,55 \cdot (320 + 630) + 10,5 = 533 \text{ mm},$$

$$a_{\max} = d_1 + d_2 = 320 + 630 = 950 \text{ mm}.$$

here: h -remini thickness, $h = 10,5 \text{ mm}$.

From this we can choose the distance between the axes

$$a_p = 1000 \text{ mm},$$

7. The length of the rubber of the required belt drive

$$L = 2 \cdot a_p + 0,5 \cdot \pi \cdot (d_1 + d_2) + \frac{(d_2 - d_1)^2}{4 \cdot a_p} = 2 \cdot 1000 + 0,5 \cdot 3,14 \cdot (320 + 630) + \frac{(630 - 320)^2}{4 \cdot 1000} = 2000 + 1491,5 + 24 = 3515,525$$

Belt length from belt drives $L = 3550 \text{ mm}$, we accept that

8. Selecting the distance between the axles for the resulting frame

$$w = 0,5 \cdot \pi \cdot (d_1 + d_2) = 0,5 \cdot 3,14 \cdot (320 + 630) = 1491,5 \text{ mm},$$

$$y = (d_2 - d_1)^2 = (630 - 320)^2 = 9,61 \cdot 10^4 \text{ mm}^2$$

$$a_p = 0,25 \cdot \left[(L - w) + \sqrt{(L - w)^2 - 2 \cdot y} \right] = 0,25 \cdot \left[2058,5 + \sqrt{4045222,25} \right] = 1017,5 \text{ mm},$$

To make it easier to put remini on the tape $0,01 \cdot L = 0,01 \cdot 3550 = 35,5 \text{ mm}$,

For belt tension $0,025 \cdot L = 0,025 \cdot 3550 = 88,75 \text{ mm}$,

9. linear speed of belt transmission

$$V_1 = \omega_{\text{э.д.}} \cdot r_1 = 297 \cdot 160 = 47,52$$

here: $\omega_{\text{э.д.}}$ - the rotation speed of the electric engine $\omega_{\text{э.д.}} = 297 \text{ ref/s}$,

r_1 - the radius of the pulley

$$r_1 = 160 \text{ mm}$$

$$V_1 = V_2$$

10. Centrifugal impact of dust particles on the return disk.

$$F_n = \frac{m \cdot V_2}{R} = \frac{10 \cdot 10^{-6} \cdot 47,52}{0,315} = 0,002$$

here; m - the average weight of a dust particle $m = 10 \cdot 10^{-6} \text{ m}$,

R - the radius of the return washer, $R = 0,315 \text{ m}$,

Summary

The reason for the frequent clogging of these dust traps is the installation design of the return washer and the size of the suction section for the trapped dust is 50 mm. To eliminate this, the outer wall of the dust holder is specially hermetically sealed. At the beginning of the blockage, installation and its completion require a certain time, while the blade of the pneumatic transporter continues to work, the trapped dust is removed from the dust holder.

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IMPROVING THE EFFICIENCY OF THE TECHNOLOGY OF CLEANING SEED COTTON FROM SMALL IMPURITIES

Ogiloy A. Bakhtiyorova

Fergana state Technical University, Fergana, Uzbekistan

Abstract

In this article, our national wealth is faced with various problems in the processing of seed cotton from large and small impurities. In order to find a solution to these problems, it was determined as a result of the analysis that the machine for cleaning seed cotton from small impurities is more efficient than other models.

Keywords: saw drum, mesh surface, supply roller, brush drum, dirt hopper.

Introduction

Taking into account that the main cotton raw materials grown in our republic correspond to high varieties, and they contain 8-9% moisture, they are dried using cold air or are not passed through drying drums at all. When moisture is 9-10%, raw cotton is processed in drying drums to remove 1-2% moisture. Cotton drying with this method is very expensive. Currently, cotton drying in this way does not meet the requirements for production. Therefore, it is urgent to carry out the process of drying cotton raw materials with such humidity in other ways.

The increase and decrease of productivity and efficiency of the cotton ginning enterprise depends on the technological processes of drying and cleaning the seeded cotton. Today, due to the increase in the types of cotton varieties and the emergence of special varieties, which are called difficult to clean, it is necessary to improve the technology and technique of cleaning seed cotton from small impurities.

Today, cotton cleaning equipment of the 1XK and 6A-12M models are widely used in the cleaning departments of cotton gins. The advantage of 1XK equipment over other equipment is the high efficiency and cleaning efficiency. Also, the 1XK is relatively easy to service and repair.

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this method is very expensive. Currently, cotton drying in this way does not meet the requirements for production. Therefore, it is urgent to carry out the process of drying cotton raw materials with such humidity in other ways.

It was aimed to improve the 1XK cleaning equipment based on the drying process of seed cotton raw materials from small impurities in the equipment.

The working process of the 1XK small dirt cleaning equipment is as follows: Seeded cotton is lowered into the mine installed on the supply rollers. Counter-rotating feed rollers feed the seeded cotton evenly to the pile drum. The drum with a pile rotates clockwise and in turn carries the seeded cotton over various surfaces and conveys it to the second drum. In this order, seeded cotton is cleaned and separated from small impurities in all drums. Separated impurities fall down the sloped walls of the impurity hoppers through various surface openings at the bottom of the drums and are sucked up by pneumatic transport. Cleaned seeded cotton is removed from the equipment and transferred to the next technological process.

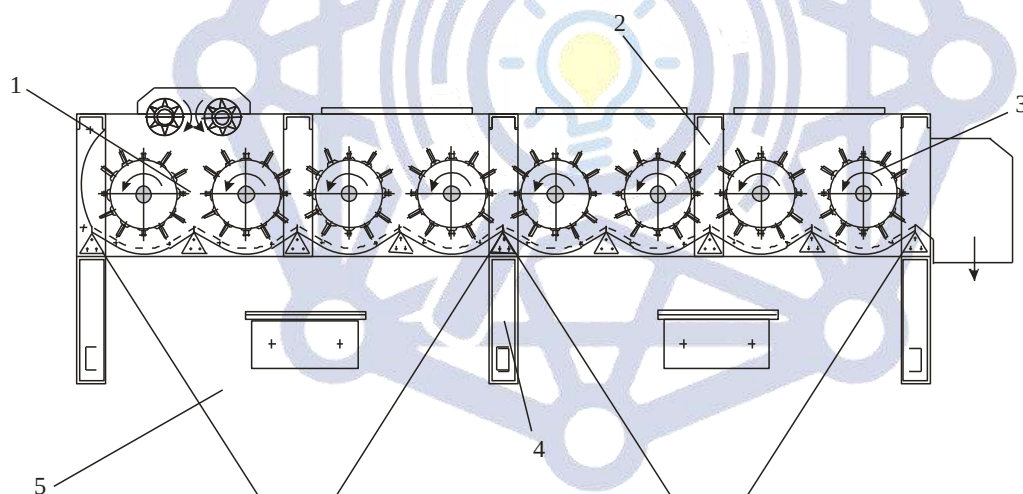


Figure 1 1XK model cleaning from small impurities scheme of the equipment

1-providing rollers; 2-pile-blade drums; 3-mesh surface (surface); 4th dirt hopper; Nov. 5.

Cotton falls on piled drums (2) and is pressed with piles and hit on mesh surface (3).

As a result, seeded cotton is shaken and cleaned of small impurities. The impurities released through the mesh surface fall into the hoppers (4) and are taken out with the help of a collecting auger.

In order to improve the technological processes of the 1-XK small dirt cleaning machine, scientific research work was conducted and analyzed. The results showed that small impurities (soil and cotton leaf particles) mixed with air in the air flow from the first pile drum were found to move to the next sections and fall back into the cotton. In order to study these problems, a device for absorbing the air formed during the rotation of the first drum with piles was prepared and experimental tests were conducted.

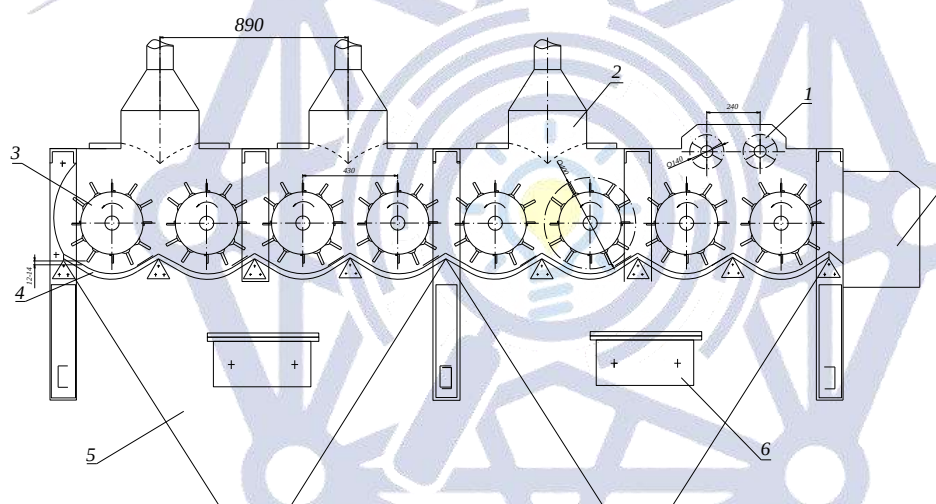


Figure 2 Cross-section diagram of 1XK equipment with proposed dry-cleaning processes

1. Supply rollers, 2. Hot air supply pipe, 3. Pile drum, 4. Mesh surface, 5. Impurity hopper, 6. Hole, 7. Outlet throat.

It was proposed to dry cotton with low moisture content (8-9%) by blowing hot air over the piled drums of the equipment for cleaning seed cotton from small impurities.



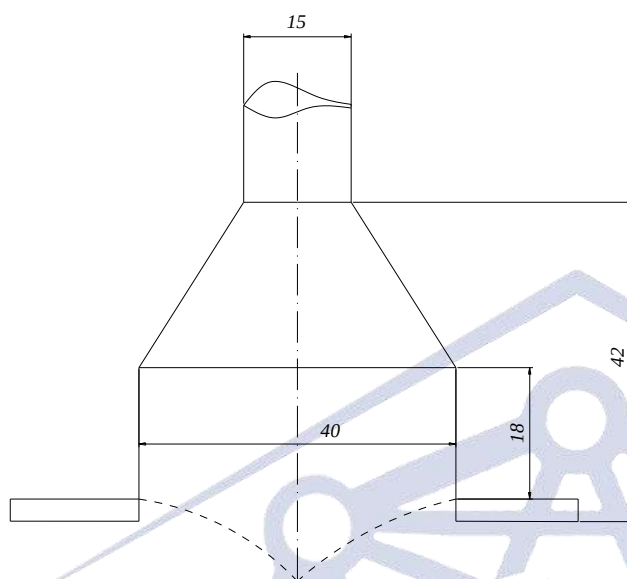


Figure 3 Scheme of the heat supply pipe to the 1XK cleaning equipment.

Conclusion

In order to improve the technological processes of the 1-XK small dirt cleaning machine, scientific research work was conducted and analyzed. The results showed that small impurities (soil and cotton leaf particles) mixed with air in the air flow from the first pile drum were found to move to the next sections and fall back into the cotton. In order to study these problems, a device for absorbing the air formed during the rotation of the first drum with piles was prepared and experimental tests were conducted.

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СОВРЕМЕННОЕ СОСТОЯНИЕ И ПЕРСПЕКТИВЫ РАЗВИТИЯ РЕЛИГИОЗНОГО ПАЛОМНИЧЕСТВА

Абдухалилова Хуршидабону Содикжон қизи
Международная исламоведения академия Узбекистана
студентка 4 курса направления религиоведение

Аннотация: В данной статье феномен религиозного паломничества рассматривается как один из древнейших и актуальных явлений, играющих важную роль в духовной жизни человечества. В статье особое внимание уделяется многогранной природе паломничества — его религиозному, культурному, социальному и коммуникативному значению. В современном мире процесс религиозного паломничества рассматривается как явление, тесно связанное с глобализацией и цифровыми преобразованиями.

Ключевые слова: религиозное паломничество, глобализация, религиозная вера, современность.

DINIY ZIYORATNING ZAMONAVIY HOLATI VA RIVOJLANISH ISTIQBOLLARI

Annotatsiya: Ushbu maqolada diniy ziyorat fenomeni insoniyatning ma'naviy hayotida muhim o'rin egallovchi qadimiy va dolzarb hodisalardan biri sifatida tahlil qilinadi. Maqolada diniy ziyoratning ko'p qirrali tabiati — uning diniy, madaniy, ijtimoiy va kommunikativ ahamiyatiga alohida e'tibor qaratiladi. Bugungi zamonaviy dunyoda diniy ziyorat jarayoni globalizatsiya, raqamlashtirish bilan chambarchas bog'liq hisoblanadi.

Kalit so'zlar: diniy ziyorat, globalizatsiya, diniy e'tiqod, zamonaviylik.

THE CURRENT STATE AND DEVELOPMENT PROSPECTS OF RELIGIOUS PILGRIMAGE

Annotation: This article analyzes the phenomenon of religious pilgrimage as one of the ancient and still relevant events that play an important role in the spiritual life of humanity. The article focuses on the multifaceted nature of pilgrimage — emphasizing its religious, cultural, social, and communicative significance. In today's modern world, the process of religious pilgrimage is considered to be closely linked with globalization and digitalization.

Keywords: religious pilgrimage, globalization, religious belief, modernity.

ВВЕДЕНИЕ

В современном мире религиозное паломничество приобретает всё более сложный характер, тесно переплетаясь с такими глобальными процессами, как урбанизация, цифровизация, рост мобильности и трансформация традиционных форм религиозности. Несмотря на усиление секуляризма и религиозного плюрализма, паломничество по-прежнему сохраняет высокую значимость для миллионов верующих по всему миру — оно служит средством духовного обновления, укрепления религиозной идентичности и межкультурного диалога.

МЕТОДОЛОГИЯ И АНАЛИЗ ЛИТЕРАТУРЫ

Методология исследования основывается на историко-сравнительном анализе и системном подходе. В качестве основных источников были проанализированы исторические, научные и современные материалы. В статье приводится цитата из выступления протоиерея Сергия [1]. Также значение религиозного паломничества в условиях глобализации анализируется на основе источника М. Силатевы «Духовный смысл православного паломничества в эпоху глобализации» [2]. С помощью ещё одного исследовательского труда обсуждаются перспективы развития религиозного паломничества [3]. Через труд П. Иванова «Православное паломничество в России: история и современность» раскрывается, как осуществляется паломничество в православной церкви [4].

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЕ

Современное состояние паломничества характеризуется устойчивым ростом числа участников. По данным католической статистики, в 2023 году Ватикан посетило около 8,5 миллионов паломников. В Европе ежегодно около 3 миллионов человек совершают паломничество в Сантьяго-де-Компостела, что делает этот маршрут одним из самых популярных в мире. Лурд, Фатима, Афон и Иерусалим остаются главными центрами притяжения для католических и православных верующих. По данным Русской православной церкви, более 2,5 миллионов человек ежегодно участвуют в паломнических поездках по территории России и за её пределами [5].

Глобализация способствует не только росту числа паломников, но и изменению мотивации: все чаще люди совершают паломничества не только из религиозного долга, но и ради духовного поиска, психологического



исцеления, культурного обогащения. Особенно это заметно в молодёжной среде, где паломничество совмещается с волонтерской деятельностью, экологическим туризмом и межкультурным диалогом[6].

Церковные структуры предпринимают ряд мер для модернизации паломнических программ:

- создаются официальные паломнические центры с мультязычными сайтами и онлайн-регистрацией;
- внедряются цифровые путеводители, аудиогиды, мобильные приложения;
- развиваются программы виртуального паломничества (особенно актуальные в период пандемии);
- организуются международные форумы и фестивали (например, Всемирные дни молодёжи в Католической церкви или «Царские дни» в Екатеринбурге).

Что касается православной церкви в Узбекистане, она представляет собой неотъемлемую часть Ташкентской и Узбекистанской епархии Русской Православной Церкви[7]. В настоящее время на территории республики действует более 35 приходов, среди которых важнейшими центрами являются Свято-Успенский кафедральный собор в Ташкенте, Покровский храм в Самарканде и Свято-Никольский собор в Бухаре. Несмотря на мусульманское большинство населения, интерес к православным святыням среди русскоязычного населения остаётся стабильным. Также наблюдается интерес к экскурсионно-паломническим поездкам среди туристов из России и Казахстана.

Перспективы развития паломничества в Узбекистане связаны с рядом факторов:

- поддержка со стороны государства идеи межконфессионального мира и религиозной толерантности;
- увеличение числа туристов из стран СНГ, в том числе с паломническими целями;
- развитие внутреннего туризма и включение православных объектов в культурные маршруты;
- цифровизация приходов и паломнических служб (введение сайтов, страниц в соцсетях, онлайн-записи).

Таким образом, религиозное паломничество сегодня переживает этап активного роста и обновления. Оно адаптируется к условиям глобального мира, не утрачивая при этом своей сакральной сути. А в странах Центральной Азии, в том числе в Узбекистане, наблюдается устойчивая тенденция к развитию православной паломнической инфраструктуры, что позволяет с оптимизмом смотреть на будущее этого института[8].

ЗАКЛЮЧЕНИЕ

Рассматривается современное состояние православного паломничества, которое, несмотря на вызовы времени – секуляризацию, цифровизацию, миграционные процессы и эпидемии – продолжает активно развиваться. Увеличивается число паломников, создаются новые маршруты, растёт интерес к внутренним святыням. Одновременно паломничество приобретает черты культурного и даже туристического явления, сохраняя при этом свой сакральный смысл.

Сегодняшние формы паломничества варьируются от традиционных пеших маршрутов до организованных поездок при поддержке Церкви и государства. Современные технологии – такие как онлайн-гиды, виртуальные туры по святыням и цифровое бронирование – интегрируются в паломническую практику, обеспечивая доступность для широких слоёв населения, включая пожилых и физически ограниченных людей. Это свидетельствует о гибкости и устойчивости паломничества как религиозного института в условиях XXI века. Кроме того, важно подчеркнуть, что паломничество сохраняет высокую межкультурную и межконфессиональную значимость. Оно способствует не только укреплению личной веры, но и развитию диалога между представителями различных конфессий, служит основой для мирного сосуществования и взаимопонимания. Особенно это актуально в контексте многонациональных и многоконфессиональных обществ, таких как Узбекистан, где религиозная терпимость является одним из приоритетов государственной политики. В целом, вторая глава показала, что паломничество в православии остаётся живой, динамично развивающейся практикой, сочетающей в себе глубину духовного опыта, богословскую насыщенность и социальную адаптивность. Оно продолжает выполнять ключевую функцию в передаче религиозных ценностей, укреплении



церковного единства и формировании нравственных ориентиров в современном мире.

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АНАЛИЗ КОРМОВОЙ БАЗЫ И ПРОИЗВОДСТВЕННОГО ПРОЦЕССА В ШЕЛКОВОДСТВЕ

Тоштемиров Косимжон Абдуллахоевич

Ассистент Ферганского государственного технического
университета, Республика Узбекистан, г. Фергана

E-mail: toshtemirov@mail.ru

Аннотация

В статье проведён анализ кормовой базы для шелкопряда и рассмотрен производственный процесс в шелководстве. Освещены основные виды кормов, в частности значение тутового дерева (*Morus alba*) в качестве основного источника питания для шелкопряда, а также агротехнические мероприятия, направленные на повышение продуктивности тутовых плантаций. Подробно описаны этапы разведения шелкопряда, включая инкубацию яиц, выращивание личинок и условия содержания. Также проанализированы факторы, влияющие на качество коконов и общий объём производства сырья. Результаты исследования могут быть полезны для оптимизации технологических процессов в шелководческих хозяйствах и повышения рентабельности отрасли.

Ключевые слова: шелководство, шелкопряд, тутовое дерево, кормовая база, агротехника, разведение, кокон, сырьё, производство шелка, насекомоводство

Введение

Шелководство — одна из древнейших отраслей сельского хозяйства, играющая важную роль в экономике и текстильной промышленности многих стран, включая Узбекистан. В современных условиях устойчивого развития сельского хозяйства особое значение приобретает научно обоснованный подход к организации кормовой базы для шелкопряда (*Bombyx mori*), поскольку именно от качества и доступности кормов зависит продуктивность и экономическая эффективность шелководческого производства [1].

Основным источником питания для шелкопряда является лист тутового дерева (*Morus alba*), что требует не только соответствующих агротехнических

мероприятий по уходу за плантациями, но и внедрения современных технологий в процесс выращивания, сбора и хранения корма [2].

Кроме того, организация самого производственного процесса, начиная с инкубации яиц, выращивания личинок и заканчивая сбором коконов, требует комплексного анализа с целью повышения рентабельности и устойчивости отрасли [3].

Настоящая статья направлена на изучение и систематизацию ключевых факторов, определяющих эффективность кормовой базы и производственных этапов в шелководстве, с учётом климатических и аграрных особенностей региона Ферганской долины.

Материалы и методы

Настоящее исследование направлено на анализ кормовой базы и производственного процесса разведения шелкопряда (*Bombyx mori*) в условиях Ферганской области Республики Узбекистан. В рамках работы были использованы следующие материалы и методы:

Материалы:

- Листья тутового дерева (*Morus alba*), собранные на местных плантациях Ферганской долины, являющиеся основным кормом для шелкопряда;
- Яйца и личинки шелкопряда, полученные из региональных центров шелководства;
- Сельскохозяйственные инструменты и оборудование, применяемые при выращивании, сборе и хранении тутовых листьев;
- Метеорологические данные по температуре, влажности и осадкам за период исследования;
- Хозяйственные журналы, отчёты и статистика с местных шелководческих предприятий.

Методы:

1. Полевые наблюдения — систематическое отслеживание биологических стадий развития шелкопряда, условий содержания и кормления на разных этапах;
2. Анализ агротехнических мероприятий — изучение методов возделывания тутовых деревьев, режимов полива, обрезки и борьбы с вредителями;

3. Лабораторный анализ — оценка качества и питательной ценности тутовых листьев в различные периоды вегетации;
4. Экспертные интервью — сбор мнений специалистов аграрной и текстильной промышленности региона;
5. Сравнительный анализ данных — сопоставление полученных результатов с нормативными показателями и данными других регионов.

Методологическая база исследования позволяет провести комплексную оценку влияния кормовой базы на производительность шелкопряда и эффективность технологического процесса в шелководстве.

Результаты и обсуждение

Шелководство является одной из приоритетных отраслей сельского хозяйства, обеспечивающей текстильную промышленность ценным натуральным сырьём — шёлком. По мере развития народного хозяйства и повышения уровня жизни населения Республики Узбекистан возрастает спрос на одежду и изделия, изготовленные из натурального шёлка, что обуславливает необходимость совершенствования всех звеньев шелководческого производства.

Натуральный шёлк используется не только в текстильной промышленности, но и находит широкое применение в таких высокотехнологичных отраслях, как авиация, космонавтика, медицина, радиотехника и других. Поэтому в Узбекистане развитию шелководства уделяется особое внимание на государственном уровне. Современное шелководство берёт своё начало в Юго-Восточной Азии, где одомашненный тутовый шелкопряд (*Bombyx mori*) питается исключительно листьями тутового дерева и формирует кокон из тончайшей нити длиной от 1000 до 1500 метров.

Создание и укрепление кормовой базы шелкопряда является важнейшим фактором в повышении продуктивности этой отрасли. С 2020 года в целях расширения тутоводства организациям шелководческой отрасли выделяются сельскохозяйственные земли, выведенные из оборота, на условиях многолетней аренды. Это позволило значительно расширить площади под тутовые плантации и создать более устойчивую базу для выращивания шелкопряда.



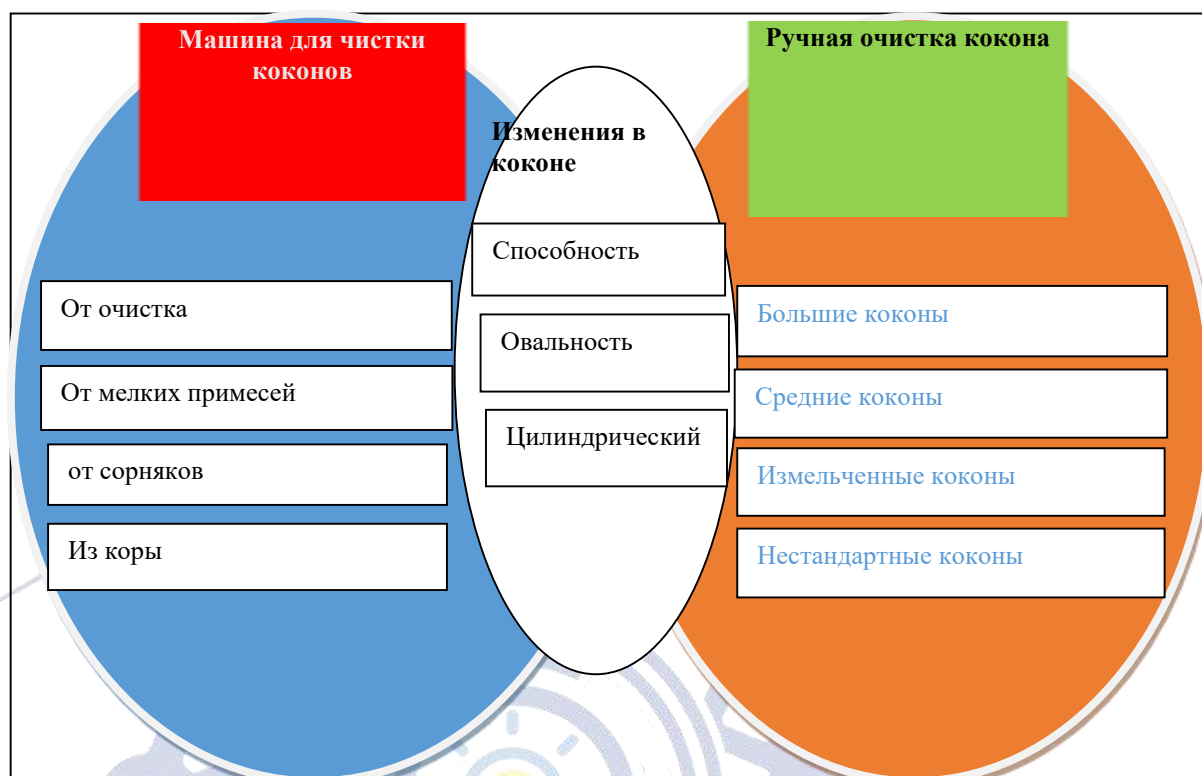
Следует отметить тесную взаимосвязь шелководства с хлопководством, особенно в аграрных районах. Тутовые деревья не только являются источником питания для шелкопряда, но также выполняют защитную функцию — предохраняют посевы хлопчатника от ветров, укрепляют берега ирригационных каналов, способствуют улучшению микроклимата и озеленению придорожных территорий [4].

Исследования показали, что мелколистный сорт тутовника, традиционно возделываемый в Средней Азии, отличается более высокой питательной ценностью по сравнению с крупнолистными сортами. Наличие белых ворсинок на нижней стороне листа положительно влияет на насыщаемость личинок, способствует формированию более качественных коконов, повышает выход сырья и улучшает его свойства.

Рациональное использование агротехнических приёмов, удобрений и механизации способствует снижению себестоимости тутовых листьев. Посадка качественных саженцев, полученных методом черенкования и прививки высокоурожайных сортов, положительно влияет на качество кормовой базы.

Разведение шелкопряда — это традиционное занятие, имеющее глубокие корни в культуре узбекского народа. Передача знаний по данной тематике требует применения современных педагогических подходов — таких как интерактивные методы, мозговой штурм и кейс-стади, что особенно эффективно при обучении студентов [5].

Также необходимо обратить внимание на этапы хранения и первичной обработки коконов. Несоблюдение технологических требований, таких как предварительная очистка коконов специальными машинами перед закладкой на хранение, может привести к биохимическим изменениям внутри кокона и снижению качества шелкового волокна. Обсуждение подобных практических вопросов способствует формированию у обучающихся более глубокого понимания технологической дисциплины в шелководстве.



Кокон — это биологическое образование, создаваемое шелкопрядом на переходных стадиях, когда он прекращает питание и переходит к следующим этапам своего развития. Основная функция кокона — защитить тело гусеницы от внешних неблагоприятных условий и естественных врагов. Внутри кокона происходит превращение гусеницы сначала в куколку, а затем в бабочку.

К концу пятого возраста шелкопряд прекращает питание, опорожняет кишечник от ненужных веществ и начинает активно искать место для формирования кокона. Обычно гусеницы взбираются вверх по пучкам или по деревянным частям сооружений, чтобы найти удобное и безопасное место для окукливания. Наиболее благоприятным местом для формирования кокона считается специально подготовленный пучок (достат).

Однако некоторые гусеницы формируют коконы прямо на гнезде, не покидая места обитания. Активность гусеницы в этот период особенно высока, так как она готовится к формированию кокона — жизненно важного элемента в её метаморфозе.

Выводы

Таким образом, шелководство занимает важное место в аграрной экономике Узбекистана, обеспечивая текстильную промышленность

стратегически важным сырьём — натуральным шёлком. Проведённый анализ показал, что создание полноценной и качественной кормовой базы для тутового шелкопряда является ключевым условием для повышения производительности и качества коконов.

Оптимизация агротехники выращивания тутовника, внедрение эффективных методов ухода за плантациями, использование высокоурожайных сортов и рациональное применение удобрений позволяют снизить себестоимость и повысить питательную ценность листьев. Это, в свою очередь, положительно влияет на развитие личинок и формирование высококачественного кокона.

Кроме того, глубокое понимание биологических стадий развития шелкопряда, особенно процесса формирования кокона, является основой успешного ведения производственного процесса в шелководстве. Для подготовки квалифицированных кадров в этой области необходимо использовать современные педагогические методы и практико-ориентированный подход.

В условиях растущего спроса на экологически чистую продукцию и натуральные материалы развитие шелководства представляет собой перспективное направление, требующее комплексной государственной поддержки и научного сопровождения.

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**O‘zbek va nemis tillaridagi kolorinim tarkibli frazeologik birliklarning
etimologik xususiyatlari va semantik jihatlari**

Etymological Characteristics and Semantic Aspects of Coloronym-Based
Idiomatic Expressions in Uzbek and German

Этимологические особенности и семантические аспекты
фразеологических единиц с колоронимами в узбекском и немецком языках

Otayeva Karomatxon Matnazar qizi

UrDU xorijiy filologiya fakulteti

Lingvistika(nemis tili) 231-guruh magistranti

Email: otayevakaromat32@gmail.com

Ilmiy rahbar: **Sapayeva Rayhon Bobojonovna**

Otayeva Karomatkhon Matnazar qizi

Urgench State University, Faculty of Foreign Philology

Master’s student, Group 231, Linguistics (German language)

Email: otayevakaromat32@gmail.com

Academic supervisor: Raykhon Sapayeva Bobojonovna

Отаева Караматхон Матназар кызы

Ургенчский государственный университет, факультет зарубежной
филологии

Магистрант, группа 231, Лингвистика (немецкий язык)

Электронная почта: otayevakaromat32@gmail.com

Научный руководитель: Райхон Сапаева Бобожоновна

Annonatsiya. Ushbu ilmiy maqola “O‘zbek va nemis tillaridagi kolorinim tarkibli iboralarning etimologik xususiyatlari va semantik jihatlari” mavzusiga bag‘ishlangan bo‘lib, bunda asosan, ikkala tildagi rang komponentli frazeologik birliklarning tarixiy kelib chiqishi, qaysi davrlardan boshlab xalq orasida ommalashgani va bunday iboralarning paydo bo‘lishiga qanday omillar vositachilik qilgani tahlil qilinadi. Shuningdek, mazkur iboralarning har ikki tildagi ma’noviy



jihatdan qanday o'xshashliklari va farqli jihatlari aniqlanganligi ham bu ilmiy maqolada ko'rib chiqilgan.

Abstract. This scientific article is dedicated to the topic "Etymological Characteristics and Semantic Aspects of Coloronym-Based Idiomatic Expressions in Uzbek and German." It primarily analyzes the historical origins of color-related phraseological units in both languages, the periods during which these expressions became widespread among the people, and the factors that contributed to their emergence. In addition, the article explores the semantic similarities and differences of such expressions in both languages.

Аннотация. Данная научная статья посвящена теме «Передача фразеологических выражений с колоронимами в немецком языке на узбекский язык и их лингвистическое применение». В статье проводится анализ того, как наименования цветов функционируют в фразеологизмах и выражениях в немецком и узбекском языках. Рассматривается роль цветовых фразеологизмов в лингвистике, их семантические, когнитивные и культурные особенности. Также исследуется, как фразеологизмы с названиями цветов в немецком языке переводятся на узбекский язык и как они трансформируются в культурном контексте.

Kalit so'zlar: kolorinim, etimologiya, olamning lisoniy manzarasi, milliy-madaniy xususiyatlar, ma'no, ekvivalentlik, shakllanish, oq, qora, qizil, qiyosiy-lingvokulturologik tahlil

Keywords: coloronym, etymology, linguistic worldview, national-cultural features, meaning, equivalence, formation, white, black, red, comparative linguocultural analysis

Ключевые слова: колороним, этимология, языковая картина мира, национально-культурные особенности, значение, эквивалентность, формирование, белый, чёрный, красный, сравнительный лингвокультурологический анализ

Kirish. Bizning bugungi ijtimoiy va kundalik hayotimizda nuqtimizning chiroyli chiqishi, uni tinglovchiga bekami-ko'st yetkazib bera olishimiz ham aynan biz nutq jarayonida qo'llaydigan so'zlarning mohiyatiga va naqadar ta'sirchanligiga ham borib taqaladi. Bunday so'zlar, odatda, bizning so'zlarimizning emotsional kuchini yanada oshirib bera oladi. Bunday so'zlar tarkibiga, shubhasiz, iboralar ham kiradi. Shu o'rinda ta'kidlash joizki, frazeologik birliklar, ayniqsa, kolorinim (rang

bildiruvchi birliklar) ishtirokidagi frazeologizmlar, nafaqat tilning va nutqning obrazlilik va emotsional-ekspressiv boyligini, balki xalqning dunyoqarashi, madaniy qadriyatlari va milliy tafakkur xususiyatlarini ham ifodalaydi. Kolorinim tarkibli frazeologik birliklar tillarda keng tarqalgan bo‘lib, ular orqali insonlarning atrof-muhit, ranglar bilan bog‘liq assotsiatsiyalari va ularning hayotiy-tarixiy tajribasi ifodalanadi. Ranglar turli madaniyatlarda har xil semantik konnotatsiyaga ega bo‘lganligi sababli, ushbu birliklarning qiyosiy-lingvokulturologik tahlili xalqaro madaniy muloqotni chuqurroq anglashga yordam beradi. O‘zbek va nemis tillaridagi rang komponentli frazeologik birliklarni o‘zaro qiyosiy tadqiq etish bu ikki xalqning lingvistik tafakkuri, madaniy-ma’naviy merosi va psixologik tasavvurlari orasidagi o‘xshashlik va farqlarni aniqlashga xizmat qiladi. Bugungi davrimizda ranglarning frazeologik birliklarni shakllantirishdagi o‘rni va ahamiyati juda ko‘plab sohalarda, shu jumladan, tilshunoslik, madaniyatshunoslik yoxud psixologiya kabi bir qator sohalarda dolzarb mavzuga aylangan. Shuningdek, bu soha nemis tilshunos olimlari va lug‘atshunoslari tomonidan ham chuqur tahlil va tadqiq qilingan. Mashhur nemis tilshunosi, frazeologiya va leksikografiya sohaslarida ancha dovrug‘ qozongan Hans Shemann “Deutsches Wörterbuch der idiomatischen Redewendungen” (“Nemis tilidagi idiomatik iboralarning lug‘ati”) kitobida ham rang komponentli frazeologik birliklarga alohida to‘xtalib o‘tganlar. Shuningdek, taniqli va atoqli o‘zbek tilshunos olimlaridan Shavkat Rahmatullayev va Muxtor Umarxo‘jayev ham o‘zlarining leksikografiyaga doir kitoblarida, shu jumladan, “O‘zbek tilining frazeologik lug‘ati” va “Deutsches-russisches-usbekisches phraseologisches Wörterbuch” (“Nemischa-ruscha-o‘zbekcha frazeologik lug‘at”) kitoblarida aynan bunday iboralarning semantikasi va xalq tilida qanday atalishi ham so‘z boradi.

Adabiyotlar tahlili. Ushbu maqolani Shavkat Rahmatullayev, Nizomiddin Mahmudov, Zulxumor Xolmanova, Iqbol O‘razova, Kamola Rixsiyevalarning “O‘zbek tili frazeologik lug‘ati”, Sven Staffeldt, “Was ist Farbe”, Evgeniia Aleksandrovna Dobrova, “Deutsche und russische Phraseologismen mit Farbkomponenten aus lingvokultureller Sicht”, Duden-Deutsches Universalwörterbuch, Шавкат Раҳматуллаев, “Ўзбек тилининг этимологик луғати”, Yo‘ldoshev B, “O‘zbek frazeologiyasi va frazeografiyasining shakllanishi hamda taraqqiyoti” va Hans Shemannning “Deutsche Idiomatik” kabi ilmiy asar va lug‘atlaridan foydalanildi.



Tadqiqot metodologiyasi. Mazkur maqolada har ikki tilda ham lugʻat va ayrim badiiy asarlarda keltirilgan rang tarkibli frazeologik birliklar lingvokulturologik qiyoslash va etimologik tahlil metodlari asosida oʻrganilib, tahlil qilindi. Oʻzbek va nemis tillaridagi ekvivalentlik darajasi, maʼnoviy strukturalari va turlicha etimologik jihatlari har ikki til madaniyatidan kelib chiqqan holda taqqoslanildi. Umumiy oʻxshashliklar va farqlarga ham alohida eʼtibor qaratildi.

Tahlil va natijalar. Mashhur nemis tilshunosi, Erfurt universiteti professori Ksaba Foldes oʻzining 1991-yilda chop etilgan “Nemis, rus va venger tillaridagi rang atamaları frazeologik strukturaviy komponent sifatida” degan asarida bu boʻyicha quyidagi fikrlarni ifodalab oʻtgan: “Oq rang tozalik, axloqiy qadriyatni ifodalaydi. Ammo qora rang bundan mustasno ravishda qarama-qarshi taʼsir kuchiga egadir: u pessimizm, motam, gʻazab, taʼqiq yoki vijdonsizlik kabi salbiy ramzlarga ishora qiladi”. Ushbu fikrlardan shunday toʻxtamga kelish joizki, ranglarning turli madaniyatlarda turlicha talqin etilishi oʻz navbatida, frazeologik birliklar qatlamidagi maʼnoviy jihatlarga ham xuddi shu tarzda ijobiy yoki salbiy taʼsir oʻtkazishi mumkin. Chunki biz olamning lisoniy manzarasini ranglar orqali idrok etar ekanmiz, ushbu ranglarning qanday semantik tuzilishga va boshqa madaniyatlarning tilshunoslik sohalarida qanday majoziy ahamiyatga va talqinga ega ekanligi ham bunda muhim sanaladi. Oʻzbek va nemis tilidagi kolorinim tarkibli frazeologik birliklar ham aynan shu asnoda tahlil qilinadi. Bu oʻrinda, eng avvalombor, har ikki tildagi rang tarkibli iboralarning etimologik jihatlarga eʼtibor qaratish muhim sanaladi. Aytaylik, qora rang bilan ifodalangan frazeologik birliklarni koʻrib chiqar ekanmiz, ularning koʻpchiligining maʼnosi salbiy tarafga yoʻnalganligini va har ikki til - oʻzbek va nemis tillaridagi ekvivalentlarining qay darajada mos ekanligini guvohi boʻlish mumkin. Misol tariqasida, oʻzbek tilidagi “koʻngli qora” iborasi ham nafaqat xalq ogʻzaki ijodida balki, koʻplab badiiy adabiyotlarda ham oʻz aksini topib kelgan. Nemis tilida bu iboraga aynan muqobili “schwarze Seele haben” deb ataladi va u ayniqsa, yomon niyatli, shavqatsiz yoki axloqiy buzilishga ega insonlarga nisbatan ishlatilib kelingan. Bu iboraning asl kelib chiqishi bugungacha toʻliq oʻrganilib hujjatlashtirilmagan boʻlsada, ammo paydo boʻlish tarixi ancha uzoq va koʻplab til va madaniy omillarga uzluksiz bogʻliq. “Schwarz auf weiß” iborasi ham nemis tilida keng tarqalgan iboralardan biri hisoblanadi va u oʻzbek tilida “oq-qora bilan yozilganidek, hujjatda qora bilan yozilgan” degan maʼnolarga egadir. Bu iboradagi schwarz soʻzi siyohga, weiß soʻzi

esa qog‘ozga ishora qiladi. Odatda, og‘zaki kelishuvlar soxtalashtirilgani yoki unutilib ketishi mumkinligi sababli ham hujjatlar aynan yozma tarzda bayon etilgan. Bu iboraning nemis tilida ko‘p tarqalishiga asosiy sabab shu Iogann Volfgang Gyotening “Faust” asaridir. Chunki bu asarda shunday jumlar mavjud:

*“Denn, was man schwarz auf weiß besitzt,
Kann man getrost nach Hause tragen”*

Bu iborani o‘zbek adabiyotida va jurnalistikasida ko‘p uchratmasakda, boshqa sinonimlari bilan ham qo‘llanilib kelinadi. Shuningdek, bu ibora Muxtor Umarxo‘jayevning “Nemischa-ruscha-o‘zbekcha frazeologik lug‘at” kitobida aynan “qoraga oq bilan yozib qo‘ygandek, aniq-ravshan yozib qo‘yilgan” degan ma’nolarda ishlatilgan. “Schwarze Gedanken machen” ya’ni “qora xayollarga berilmoq” iborasining ma’nosi har kki tilda ham — bu insonning salbiy, g‘amgin yoki tushkun fikrlar bilan band bo‘lgan ruhiy holatini bildiradi. Bu ibora har ikkala tilda ham ko‘proq badiiy asarlarda uchraydi. Shu jumladan, mashhur nemis yozuvchisi Volfgang Gyotyening “Yosh Verterning iztiroblari” asarida quyidagi jumlar keltirilgan: “Ich bin so allein mit all meiner Pein, wie ich es nie gewesen. Ich kann meine schwarzen Gedanken nicht vertreiben; sie verfolgen mich unaufhörlich.” Bu jumalarda yosh Verterning uni hech ham qo‘yib yuborishni xohlamagan umidsiz xayollari o‘z tasvirini topgan. Bu o‘rinda keltirilgan qora xayollar aslida depressiya, ikkalanish yohud chorasizlikni ifodalab kelmoqda. Shuningdek, mashhur va betakror adib yozuvchilarimizdan bo‘lmish Abdulla Qodiriyning “O‘tgan kunlar asarida ham bunga yaqqol misol keltrilib o‘tilgan: “Ba’zi kezlarda ul umid quchog‘ida shoshib qolar edi va ikkinchi vaqtda yaramas — qora xayollar bilan entikar edi.” Bundan tashqari, “In Schwarz gekleidet sein” yoki “sich Schwarz kleiden” iborasi o‘zbek tiliga “qora kiymoq” shaklida tarjima qilinadi. Tarixiy manbalarga ko‘ra, qora rangda kiyinish turlicha kontekst va shaxsiy talqinga qarab turli ma’nolarga ega bo‘lishi mumkin. Eng ko‘p uchraydigan holatlardan biri — motam va xotirlash bilan bog‘liq bo‘lib, qora rang an’anaviy tarzda motam ramzi sifatida qaraladi va ko‘pincha dafn marosimlarida kiyiladi. “Aus Schwarz weiß machen” iborasi esa o‘zbek tilida “qorani oq demoq” iborasiga mosa ekvivalent sanaladi. Bu iboraning kelib chiqishi va tarqalishi oq va qora ranglarning sifatlari bilan chambarchas bog‘liqdir. Nemis tilidagi „aus Schwarz Weiß machen“ idiomatik iborasi zamonaviy lingvistikaning frazeologiya bo‘limida alohida semantik yuklamaga ega bo‘lgan rang ifodalari asosida shakllangan frazeologik

birliklar sirasiga kiradi. Bu jihatdan nemis va o‘zbek tillarida ayrim iboralarning tahlilini ko‘rib chiqar ekanmiz, ba’zi paytlarda iboralar orasida ma’lum bir o‘xshashliklarga va farqlarga duch kelishimiz tabiiy hol, aslida. “Etwas ist keinen roten Heller wert” degan ibora o‘zbek tilida “sariq chaqaga ham arzimaydi” deb tarjima qilinadi. Chunki Germaniyada mis qotishmasidan tayyorlangan tanga pullar ilgari “roter Heller” deb atalgan. Biroq bu tangalar juda arzon bo‘lgani sababli, vaqt o‘tishi bilan “etwas ist keinen roten Heller wert” iborasi paydo bo‘lgan bo‘lib, u mutlaqo qadrsiz, hech qanday ahamiyatga ega bo‘lmagan narsani ifodalashda qo‘llanadi. Chunki bunday tangalar odatda tarkibidagi mis sababli vaqt osha qizil tusga kirib qolgan. “Jmdm einen roten Rock bringen” iborasi esa — poralamoq degan ma’noda ishlatiladi. Bu o‘zbek tilimizdagi “tomog‘ini moylamoq” iborasiga mos tushadi. “Knallrot werden” iborasi esa o‘zbek tilidagi “yuzi qizardi” iborasiga ekvivalent bo‘la oladi. Bu holat har ikkala tilda uyatdan yoki hayajondan yuzning qizil rangga kirishiga nisbatan qo‘llaniladi.

Xulosa. Biz yuqorida tahlil qilgan natijalarga ko‘ra, o‘zbek va nemis tillaridagi kolorinim (rang nomi) tarkibli frazeologik birliklarning lingvistik va lingvokulturologik xususiyatlarini tizimli ravishda tahlil qilish frazeologik birliklarning ikki til madaniyati, mentaliteti va til tuzilmasida qanday aks etishi o‘rganishga, ularning shakllanishi va qo‘llanilishidagi umumiylik va farqlar ochib berishga yordam beradi. Shuningdek, bunday iboralarning har ikki tildagi etimologik tahlili ham har bir tilning o‘ziga xos jihatlarini anglashda va olamning lisoniy manzarasini idrok qila olishimizda ko‘makchi bo‘ladi.

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**Қадимги Хоразмнинг ижтимоий-иқтисодий муносабатлари, этник
жараёнлари ҳамда дафн маросимлари таҳлили (археологик тадқиқотлар
манбалари асосида)**

РАХИМОВ ШИХНАЗАР БЕКТУРДИЕВИЧ

Маъмун Университети, тарих кафедраси,

доцент

raximovshixnazar844@gmail.com

<https://orcid.org/0009-0009-5765-2847>

Аннотация. Мазкур мақолада Қадимги Хоразмнинг ижтимоий-иқтисодий муносабатлари ҳамда этник жараёнлари ва дафн маросимлари, урф-одатлари археологик тадқиқот манбалари асосида таҳлил қилинади.

Калит сўзлар. Тош қути, Хоразм, Тузгир, катакомбалар.

Анализ социально-экономических отношений, этнических процессов и погребальных обрядов Древнего Хорезма (на основе источников археологических исследований)

РАХИМОВ ШИХНАЗАР БЕКТУРДИЕВИЧ

Университет Маъмуна, кафедра истории,

доцент

raximovshixnazar844@gmail.com

<https://orcid.org/0009-0009-5765-2847>

Аннотация. В данной статье на основе источников археологических исследований анализируются социально-экономические отношения, этнические процессы, погребальные обряды и обычаи Древнего Хорезма.

Ключевые слова. Каменный ящик, Хорезм, Тузгир, катакомбы

**Analysis of the socio-economic relations, ethnic processes, and burial rites of
Ancient Khorezm (based on archaeological research sources)**

RAKHIMOV SHIKHNAZAR BEKTURDIYEVICH

Ma'mun University, Department of History,

associate professor

raximovshixnazar844@gmail.com

<https://orcid.org/0009-0009-5765-2847>

Abstract. This article analyzes the socio-economic relations, ethnic processes, burial rites, and customs of Ancient Khwarazm based on archaeological research sources.

Keywords. Stone Box, Khorezm, Tuzgir, catacombs

Кириш.

Милоддан аввалги V-II асрлар Хоразм воҳасида қабр остидаги кўмиш маданияти даврига (тош кутига, ёки тош ҳалқага ёки кўрғонларда кўп қаватли кўмиш) тўғри келади. Ушбу маданият ёдгорликлари асосан Каспий минтақасида, Узбой бўйида, Устюрт ва Манғишлоқ бўйлаб кенг тарқалган. В.Н.Ягодиннинг таъкидлашича, бу Устюрт платоси ва унга туташ ҳудудларни яйлов ҳамда қишлоқ ҳудудлари сифатида ишлатиб юрган чорвадор қабилаларнинг маданиятидир.

Тадқиқот материаллари ва усуллари.

Ушбу ёдгорликлар гуруҳининг келиб чиқиши, аввалги даврда Амударёнинг Сарикамиш дельтаси ҳудудида яшаган Жанубий Орол денгизи минтақасининг сак қабилалари билан боғлиқлигини кўрсатади. Ахамонийларга қадар Сарикамиш тарихий-этнографик минтақаси кўчманчилари иқтисодий жиҳатдан бир хил бўлган. Уларнинг баъзилари, эҳтимол Сарикамиш минтақасида қишқи биноларга эга бўлиб, ёзда жанубий Урал даштларига кўчиб ўтишган [1, 46]. Яна бири гуруҳи эса Устюрт атрофида айланиб юрган. Учинчиси минтақани тарқ этмасдан ярим кўчманчитурмуш тарзини олиб борган. Милоддан аввалги VI-асрнинг иккинчи ярмида Ўрта Осиёда Ахамонийлар давлатини босиб олиш сиёсати билан боғлиқ сиёсий воқеалардан сўнг, Сарикамиш яқинидаги яна бир гуруҳ ажралиб чиқади [2:88]. Уларнинг баъзилари ўзларининг тақдирларини Хоразм билан боғлашган, улар, авваламбор, ярим кўчманчилар, Қуйисой маданиятини ташувчилари эди.

Уларнинг иқтисодиёти кўпроқ Сарикамиш билан боғлиқ бўлган. Ахамонийлар даврида Қуйисой маданиятининг аҳоли манзиллари, бу ерда Кўзалиқир маданияти ёдгорликлари билан бирга яшаган. Бошқалар Хоразм ва Ахамонийларга бўйсуншни истамай, ўзларининг асосий қишқи яйловлари жойларини ғарбга - Устюрт ва Манғишлоқга кўчиришга мажбур бўлганлар.

Шундай қилиб, Устюрт платоси ва унга туташ ҳудудлар (Узбой, Каспий бўйи, Манғишлақ) нафақат ёзги яйловлар, балки қишлаш жойлари сифатида ҳам фойдаланила бошланди. Ушбу даврдаги кўчманчилар гуруҳи дафн маросимларида аввалги Саклар даврининг бир қатор қуйидаги белгиларини сақлаб қолишган:

- биринчидан, қадимий Хоразмда дафн иншоотининг қурилиши.
- Иккинчидан, дафн хоналарига олиб борадиган йўлакка ўхшаш дромос кириш жойларига эгалиги.
- Учинчидан, кейинги дафн маросимларини ўтказишда нисбатан эрта кўмилганларни қисман ёки ҳатто бутунлай йўқ қилишга имкон берадиган одат.
- Тўртинчидан, дафн қилинадиган жойларни чеклайдиган, баъзан икки баробар катта бўлган махсус тош қўرғонларнинг қурилиши.

Бизнинг фикримизча, Шарқий Каспий денгизи минтақасида йўлак шаклидаги кириш жойлари бўлган ер ости қўрғонларининг тарқалишига Жанубий Урал кўчманчилари кучли таъсир кўрсатган бўлиб, улар милоддан аввалги VI-аср охирлариданоқ ўзларининг жамоавий дафн маросимлари - дромос қабрларини кенг ишлатишган.

Натижалар.

Дафн ёдгорликлари (жамоат кўп қаватли дафн маросимлари бўлган тошдан ясалган қабрлар), балки культ мажмуалари ва мавсумий аҳоли манзиллари билан ҳам ифодаланади. Дафн маросимининг баъзи бир хусусиятлари ва қабристон ёдгорликларининг кичик инвентарлари (қурол-яроғ, тўқалар, суяк қошиқлар, турли-хил зеб-зийнат буюмлари) асосида Жанубий Уралнинг дастлабки Сарматия ёдгорликларидан энг яқин ўхшашликларни топади. Ушбу минтақанинг чорвадорлари, Хоразмнинг ўтрок аҳолиси ҳамда Копетдоғнинг тоғ текислиги, шунингдек Эрон ва Кавказнинг узокроқ минтақалари билан яқин алоқалар мавжуд бўлган. Тош конструкцияси ичида Хоразмда жойлашган дафнлардан ташқари, Шарқий Каспий минтақасининг жанубий қисмида (Катта Балхан, Узбой) оз миқдордаги тупроқли қабрлар ҳам аниқланган [3:65].

Уларнинг кўмилиши остида дафн қилинганларнинг жанубий ва шимолий йўналиши бўйича ер ости ва катакомба (лаҳад)ларда кўмилганлиги текширилди. Улар милоддан аввалги IV-II асрлар ва эрамининг биринчи



асрларида ҳам кенг тарқалган қабрлардир. Устюртдаги ўра гўрларда дафн этиш маданияти Устюрт ва Жанубий Урал дафн этилган жойларнинг ниҳоятда яқин эканлигини тасдиқлайди [4:32]. Булар:

- мархумнинг жанубий йўналиши билан қопламадаги дафнлар;
- қадимий Хоразмда пастки квадрат ёки думалоқ тош иншоотнинг марказида жойлаштирилган, кенглик ёки меридионал йўналтирилган кенг тўртбурчак тупроқли ўра гўрлар;
- қадимги Хоразмда тош халқага эга тор тупроқ ўра гўрларидаги дафнлардир.

Устюртда Жанубий Урал кўчманчиларининг мавжудлиги милоддан аввалги II асрнинг бошлариданоқ айниқса сезила бошланди. Ва бу, эҳтимол Орол денгизи, авваламбор, Хоразмдаги кўчманчилар дунёсининг жанубий чегарасидаги сиёсий воқеалар билан боғлиқ.

Бу ерда фақат кўчманчи дашт ва Хоразм ягона иқтисодий тизим бўлганлиги, Жанубий Урал ва Хоразм кўчманчилари ўртасидаги яқин алоқалар "Сарматия кўчманчилар цикли" ёки кенгрок маънода яйлов-кўчманчиларга асосланганлигини таъкидлаш зарур [5:99].

Хоразм жанговар кўчманчиларни қўллаб-қувватлашга интилиб, уларга маълум хавфсизлик кафолатларини тақдим этган. Натижада милоддан аввалги IV-асрнинг бошларида Хоразмнинг Катта Айбуйир-калъа қароргоҳи яқинидаги Шарқий Устюрт қоясида кўчманчиларнинг, шу жумладан Уралдаги кўмилган ёдгорликлар пайдо бўлди. Аҳоли манзилларининг пайдо бўлиши милоддан аввалги V-аср охири - IV-аср бошларига тўғри келади. В.Н. Ягодин [6:56], бу аҳоли манзилгоҳи Хоразмнинг Жанубий Урал кўчманчилари ўртасидаги савдонинг асосий таянч нуқтаси бўлган.

Муҳокама.

Хоразмдан Жанубий Уралгача бўлган Айбуйир-калъа манзилгоҳи орқали Жанубий Уралнинг Прохоров дафн маросимларида тақдим этилган қизил лойдан ясалган молберт сопол буюмларининг бир қисми, ёки уларнинг деворларидан яхлит ёки бўлак идишлар ва шпиндел ғилдираклари, Жанубий Уралга келади. Хоразм орқали ҳинд карнели ва табиий ёки сунъий равишда бўялган қора, оқ, содали нақшлар билан безатилган халседонидан мунчоқлар ҳамда маржонлар Жанубий Уралга етказилиши мумкин эди. Улар, нафақат Қўй-Қрилган-калъанинг пастки қатламларидан (милоддан аввалги IV - асрлар)

хаттоки, Тузгир қабристониинг милоддан аввалги IV-III асрлардаги қабрларидан ҳам топилган.

Устюртнинг қўшни ҳудудларида ер ости сувлари яқин бўлган ҳосилдор тупроқларида ўтлоқи-дашт ва дашт жамоалари шаклланган. Сариқамиш минтақасида, Қорақум ва Қизилқум чўллари, Устюрт платосида, Барса-Келмас шўрҳокларида оқаётган қўллар тизимлари ишлаган. Жанубий Урал даштларидан Устюртга кўчиш Каспий ва Орол ўртасида доимий яшаган кўчманчи аҳолининг сезиларли даражада кўпайишига олиб келди. Милоддан аввалги IV-асрнинг охири –III-асрлар бошларида Устюртда, Хоразмнинг чап соҳилида жанубий ва шимолий йўналишдаги дафн маросимлари пайдо бўлади. Дафн этилганлар, марҳумларнинг жанубий йўналиши бўлган катакомбаларда, меридионал йўналишга эга оддий чуқурлар гўрларда дафн қилишган. Уларнинг кенг тарқалиши, Б.И.Вайнбергнинг сўзларига кўра, "... бир вақтнинг ўзида Уралдан Шарқий Каспийга ва чап соҳил Хоразмга аҳолининг махсус гуруҳга ўтиши тўғрисида" гувоҳлик беради. Ушбу номга хос этник таркиб, гуруҳ, унинг фикрига кўра, адабиётда Гансу Йўлаги (замонавий Хитойнинг Гансу вилояти) деб номланган ҳудуддан Жанубий Уралга кўчиб кетган. Буердан Устюрт платоси орқали у чап соҳил Хоразм ва Шарқий Каспий минтақасига кириб борган.

Умуман, Б.И.Вайнбергнинг хулосалари билан келишган ҳолда, биз уларга баъзи тузатишлар киритишни зарур деб биламиз [7:44]. Биринчидан, ушбу шарқий кўчманчилар гуруҳининг дастлабки кўчиб юриш ҳудуди Шимолий Хитой ёки эҳтимол Шарқий Туркистон ҳудудларида бўлганлиги шубҳасиздир. Иккинчидан, Жанубий Урал дафн этилган жойларнинг материаллари бўйича, шарқий кўчманчиларнинг ушбу минтақага кўчиши, эҳтимол, милоддан аввалги V-асрнинг учинчи чорагида содир бўлган. Ваниҳоят, Хоразмнинг чапқирғоғида энди шарқий кўчманчилар йўқ ("юэчжи"), аммо жанубий Уралнинг дастлабки сарматлари, Прохоров маданиятини ташувчилар, уларнинг якуний шаклланишида бу шарқдан келган муҳожирлар қатнашиши Б.И. Вайнберг томонидан ҳам кўрсатиб ўтилган.

Жанубий Урал даштларида қабрларга тош ёдгорликларни ўрнатиш одати милоддан аввалги VI аср ўрталаридан милоддан аввалги IV аср охирларига қадар бўлган. Устюртда антропоморф тошдан ясалган ҳайкаллар милоддан аввалги V-аср охирлариданоқ пайдо бўлган ва вақт ўтиши билан бу

ерда улуғвор қўрғонлар яратилган. Бундан ташқари, энг қадимги Устюрт ҳайкаллари морфологик ва иконографик хусусиятлари ва мавзу репертуарлари жиҳатидан Жанубий Уралга жуда яқиндир. Устюртда қўрғонларнинг пайдо бўлиши, бизнинг фикримизча, милoddан аввалги IV-асрда Жанубий Уралда содир бўлган ўзгаришлар билан боғлиқ. Бир неча бор таъкидлаб ўтилганидек, милoddан аввалги VI – V асрларнинг охирида, Жанубий Урал даштлари худудида, иерархик тузилишга эга бўлган кўчманчиларнинг этно-потестар бирлашмаси катта роль ўйнаган. У дафн маросимлари тизимида акс этган сезиларли даражада ижтимоий фарқланиш билан ажралиб турган. Ушбу бирлашма ўзининг энг юқори чўққисига, эҳтимол милoddан аввалги V - асрнинг охири – IV асрнинг бошларида эришган.

Хулоса.

Кейинги даврларда аҳолининг мураккаб қабр тошларини, дафн этилган ва дафн қилинадиган иншоотларини, катта квадрат ва дромос қабрларини қуриш анъанаси камайиб борди, дафн маросимлари ва қурбонликлар учун ишлатиладиган ҳайвонлар сони ҳам деярли камайди. Унинг ўрнига, бир қабрда кўп сонли дафн маросимлари олиб бориш одати кенг тарқалди. Буларнинг барчаси милoddан аввалги IV асрда, Жанубий Уралнинг дастлабки кўчманчилари жамиятида тармоқ сиёсий ва иқтисодий стратегиясидан корпоратив стратегияга ўтиш борлиги ҳақида тахмин қилишимизга имкон беради. Шунини таъкидлаб ўтиш жоиз-ки, корпоратив стратегиянинг энг аниқ далили айнан бирлашишнинг рамзий маънода ва умумий маросимларда кенг аҳолининг иштироки учун мўлжалланган монументал жамоат биноларини қуришдир.

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ЖИСМОНИЙ ТАРБИЯ ТИЗИМИДА ХАЛҚ ЎЙИНЛАРИНИНГ АҲАМИЯТИ

Тангиров Давлат Туғилович

Самарқанд иқтисодиёт ва сервис институти ассистенти

Аннотация. Халқ ўйинлари болаларда миллий ғурурни ўстириш билан бирга уларни жисмоний чиниқтиради ҳам. Чунки халқ ўйинларида уларнинг иштирокчиларидан кўп жисмоний куч сарфлашни, кўп ҳаракатланишни талаб этади. Халқ ўйинларининг турлари ниҳоятда кўп ва улар тарихан турли-шароитлар натижасида туғилган, шаклланган, даврлар ўтиши билан ўзгариб, такомиллашиб борган.

Калит сўзлар: миллий урф-одатларимиз, анъаналаримиз, халқ ўйинлари, чўзма, оксуяк, бекинмачоқ, кўпкари, чавгон, пойга.

Аннотация. Народные игры, наряду с воспитанием национальной гордости у детей, также тренируют их физически. Поскольку народные игры требуют от участников больших физических усилий и много движений. Существует много видов народных игр, и они исторически возникали, формировались, изменялись и совершенствовались в результате различных условий.

Ключевые слова: наши национальные обычаи, традиции, народные игры, чузма, аксуяк, бекинмахак, копчари, чавгон, гонка.

Abstract. Folk games, along with fostering national pride in children, also train them physically. Because folk games require their participants to expend a lot of physical effort and move a lot. There are many types of folk games, and they have historically arisen, formed, and changed and improved as a result of various conditions.

Key words: our national customs, traditions, folk games, chuzma, aksuyak, bekinmakhak, kopcari, chavgon, race.

Мустақиллик йилларида жамиятимизда юз бераётган туб ижтимоий-сиёсий ва маънавий ўзгаришлар умуминсоний қадриятлар тизимида инсоннинг барча шахсий эҳтиёжлари, талаблари ва манфаатларини, айниқса,

ўсиб келаётган ёш авлоднинг маънавий-ахлоқий ва жисмоний имкониятларини янада ривожлантишни тақозо этмоқда.

Шу жиҳатдан қараганда ўсиб келаётган ёш авлодни тарбиялашнинг мураккаб ва кўп қиррали муаммоси кишида ўз соғлиги тўғрисида ўзи қайғуриш маданиятини юзага келтиришдир. Бу борада биринчи Президентимиз И.А.Каримов “уни таркиб топтириш учун энг ёшлик пайтдан бошлаб, оила, мактаб, маҳалла, соғлиқни сақлаш, жисмоний тарбия ва спорт тизимларининг бутун куч-қувватини ғайратларини ишга солиб, ёрдам бермоқ даркор” деб таъкидлаган эдилар.

Ўзбекистон ўз мустақиллигига эришгунга қадар халқимиз ҳаётининг маънавият соҳаларида миллий қадриятлар, анъаналар у ёки бу даражада камситиб келинган бўлсада, кейинги йилларда асрлар мобайнида бой ва қимматли тажрибалар тўпланган қадриятлар ўсиб келаётган ёш авлодни маънавий ва жисмоний тарбиялаш соҳасида ҳам ўз ифодасини топди.

Миллий урф-одатларимиз, анъаналаримиз, маросим ва байрамларимиз ёшларни маънавий камол топтиришда муҳим аҳамиятга эга. Бу ўлмас қадриятларимизда халқимизнинг миллий руҳи, маънавий олами зухур этади ва бу гўзал туйғулар болаликдан бизнинг онгу шууримиздан мустаҳкам ўрин олади. Ҳар бир миллатнинг ўзига хос миллий руҳи ва миллий олами бор. Бу жиҳатдан биз ҳар қанча фахрлансак арзийди. Чунки ота-боболаримиздан бизга мерос қолган маънавий бойлик шу қадар бой ва ранг барангки, у бизнинг тарбиявий фаолиятимизда битмас-туганмас манба ҳисобланади. Улардан фойдаланиш ва фарзандларимизни ҳам жисмонан, ҳам маънан соғлом вояга етказиш бугунги куннинг энг долзарб вазифасидир.

Жисмоний тарбия бола организмнинг ҳар томонлама гармоник ривожланишини, унинг бақувват, кучли бўлиб ўсишнинг таъминлайди. Ўтмишда ота-боболаримиз танани чиниктиришга ҳам алоҳида эътибор қаратишган ва бунинг учун болаларни жуда ёш чоғида турли жисмоний машқларни маҳорат билан бажаришга ўргатишган. Жисмоний машқларни сифатида халқ ўйинларидан фойдаланишган. Шахсни жисмоний жиҳатдан тарбиялашда халқ ўйинларининг ўрни беқиёсдир. Жумладан бугунги кунда таълим тизимларида: Мактабгача таълим муассасаларида “Болажон таянч дастури” ва турли таълим муассасаларида ДТС ларда жисмоний тарбия машғулотларида миллий ҳаракатли ўйинларни акс эттирилиши билан боғлиқ.

Халқ ўйинлари болаларда миллий ғурурни ўстириш билан бирга уларни жисмоний чиниқтиради ҳам. Чунки халқ ўйинларида уларнинг иштирокчиларидан кўп жисмоний куч сарфлашни, кўп ҳаракатланишни талаб этади. Халқ ўйинларининг турлари ниҳоятда кўп ва улар тарихан турли-шароитлар натижасида туғилган, шаклланган, даврлар ўтиши билан ўзгариб, такомиллашиб борган.

Халқ ўйинлари байрамлар, маросимлар, сайиллар муносабати билан ўйналган ва инсонларга ҳамиша завқ-шавқ бағишлаган. Ўйинда қатнашганлар ўзларини ҳар жиҳатдан маҳоратли, чаққон, абжир эканликларини намоиш этишга ҳаракат қилишган, ғурур, ор-номус талашишган. Маълумки, сайиллар муайян ҳудудда маҳаллалар, гузарлар, қишлоқлар аҳолиси иштирокида ўтказилган. Халқ ўйинлари улар орасида ўтказилиб, чинакам муросасиз баҳслашувлар руҳи ҳукмрон бўлган.

Бугунги кунда ҳам Мустақиллик, Наврўз умумхалқ байрамлари халқ ўйинларисиз ўтмайди. Байрамлар ва маросимлардан ташқари болаларнинг ўзлари яшаб турган ҳудудларда гуруҳ-гуруҳ бўлиб ўйнайдиган ўйинлари ҳам кўп ва хилма-хил. «Чиллик», «Қулоқ чўзма» ўйинлар болалардан чаққонликни, ақл-идрокли бўлишни, ўзаро жипслашишни талаб этади. «Арқон тортиш» «Хўрозлар жанги» ўйини эса чинакам жисмоний баққувватликни талаб этадиган, халқ сайилларининг кўрки бўлган халқ ўйинидир. Бундан ташқари «Чўзма», «Оксуяк», «Бекинмачоқ» каби халқ ўйинларини севиб ўйнашади. Бу чавондозлар ўртасида ўтказиладиган «Кўпкари», «Чавгон», «Пойга», «Қиз қувди» каби халқ ўйинлари кўп асрлик тарихга, чуқур миллий мазмунга эгалиги жиҳатидан катта аҳамиятга эга.

Халқ ўйинларининг моҳият ва мазмуни ҳақида соҳа мутахассислари кўп тадқиқотлар олиб бориб, улардан ёшларни чиниқтириш мақсадида фойдаланишда жисмоний тарбия дарслари ҳал қилувчи аҳамиятга эга деган фикрни илгари суришган. Шунинг учун бу ўйинларни нафақат бошланғич синфларда, балки умумтаълимнинг ҳамма босқичларида ўрганиш, ёшларга ўргатиш, улар ўртасида мусобақалар ўтказиш зарур. Замонавий спорт турлари ва жисмоний машқларнинг кўпида миллий халқ ўйинларининг элементлари мавжуд. Маълум бир спорт тури қонун-қоидаларни ўргатиш ва уни мукамал эгаллаш жараёнида унда акс этган халқ ўйинларига хос элементларни назардан қочирмаслик таълим ва тарбия самарадорлигини оширишга ёрдам беради.

Юқорида айтиб ўтилган ўйинлари асосан ўғил болалар ўртасида ўйналган. Лекин қизларимиз учун ҳам турли-туман халқ ўйинлари бўлганки, ҳозирги пайтда ҳам бу ўйинлар ўйналади. Жумладан, мамлакатимизнинг деярли барча ҳудудларида қиз болалар ўртасида “Беш тош”, “Хола-хола” ўйинлари ўйналган. Бу ўйинларнинг жисмоний тарбия билан алоқадорлик жойлари кўп. Қиз болаларнинг жисмоний жиҳатдан гармоник ривожланишида ўйинлар давомида улардан чаққонлик, сезгирлик, топқирлик талаб этилиши муҳим аҳамият касб этади.

Хулоса қилиб айтганда, халқ ўйинларини бугунги кунда ўрганиш ёшларни жисмоний чиниқтириш, маънавий-ахлоқий жиҳатдан етук инсонлар қилиб тарбиялашда фойдаланиш долзарб вазифалардандир. маънавий юксак инсонларни тарбиялашда миллий кадриятларимиз орасида алоҳида ўрин тутган халқ ўйинларидан тарбиявий восита сифатида мунтазам фойдаланишимиз, шу билан ёшларимизни ҳам маънавий, ҳам жисмоний чиниқтиришимиз лозим.

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1XK rusumli paxtani mayda iflosliklardan tozalash uskunasini takomillashtirish

Farg‘ona davlat texnika universiteti
t.f.n.dots. Yu.Ergashov, assistent, M.Babayeva
talaba, X.Jo‘rayeva

Annotatsiya: Ushbu maqolada 1XK rusumli paxtani mayda iflosliklardan tozalash mashinasida tozalanayotgan paxtalar yaxshi titilmasligi natijasida tozalash effekti yaxshi bo‘lmasligi nazarda tutilgan. Taminlagichdan tushayotgan paxtalar tozalash mashinasining markaziy qismidan harakatlanishi natijasida yaxshi titilmasdan keyingi jarayonga uzatilishi aniqlandi. Taklif etilayotgan paxtani mayda iflosliklardan tozalash mashinasining takomillashtirilgan qoziqchali barabani paxtani bir tekisda titib tozalanishini ta‘minlab beradi.

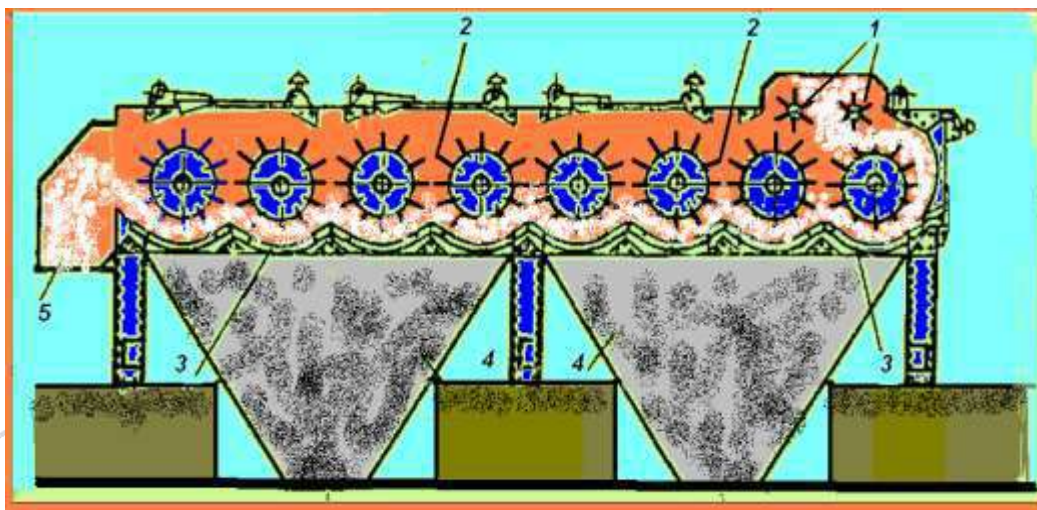
Kalit so‘zlar: 1XK, tozalash uskunasini, mayda iflosliklar, paxta, texnologik jarayon, samaradorlik.

1XK qoziqchali-plankali tozalagich o‘rta tolali chigitli paxtani mayda ifloslikdan tozalash uchun mo‘ljallangan bo‘lib, paxta tozalash korxonalarining quritish-tozalash va tozalash bo‘limlarining uzluksiz texnologik jarayoniga o‘rnatilgan bo‘ladi. Bu tozalash mashinalari arrali barabanli tozalash mashinalaridan oldin, texnologik jarayon boshiga o‘rnatiladi. Qayta tozalash uchun esa, texnologik jarayonning oxiriga ham o‘rnatiladi.

Paxtani qayta ishlashda tozalash samaradorligi va ishlab chiqarish unumdorligi 1XK rusumli paxtani mayda iflosliklardan tozalash mashinasining asosiy ko‘rsatkichi hisoblanadi. 1.1-rasmda ushbu mashinaning ko‘ndalang kesim sxemasi keltirilgan. Tozalagich 8 ta qoziqchali-plankali barabandan iborat. Qoziqchalar 75 mm balandalikda, har ikki qator qoziqchadan so‘ng parraklar (plankalar) ham shu balandlikda barabanga qotirilgan. Barabanlar ostiga kolosnikli panjaralar yoki perfaratsiya usulida tayorlangan to‘r o‘rnatilgan. Mashinaga paxta yuklash shaxtasi orqali ta‘minlovchi valiklarga (1) uzatiladi. Ta‘minlovchi valiklar qoziqchali-plankali barabanlarga paxtani bir me‘yorda ta‘minlash vazifasini o‘taydi. IBA variatoriga ulangan bo‘lib, uning ta‘minlovchi valiklari 0-20 (ayl/daq) gacha aylanishlar soniga ega. Qoziqchali barabanlarga (2) paxta tushadi va qoziqchalar bilan titilib, to‘rli yuzaga (3) uriladi. Natijada chigitli paxta silkitilib, mayda



iflosliklardan tozalanadi. To'rtli yuza orqali ajralib chiqqan iflosliklar bunkerlarga (4) tushib, yig'uvchi shnek yordamida tashqariga chiqib ketadi.



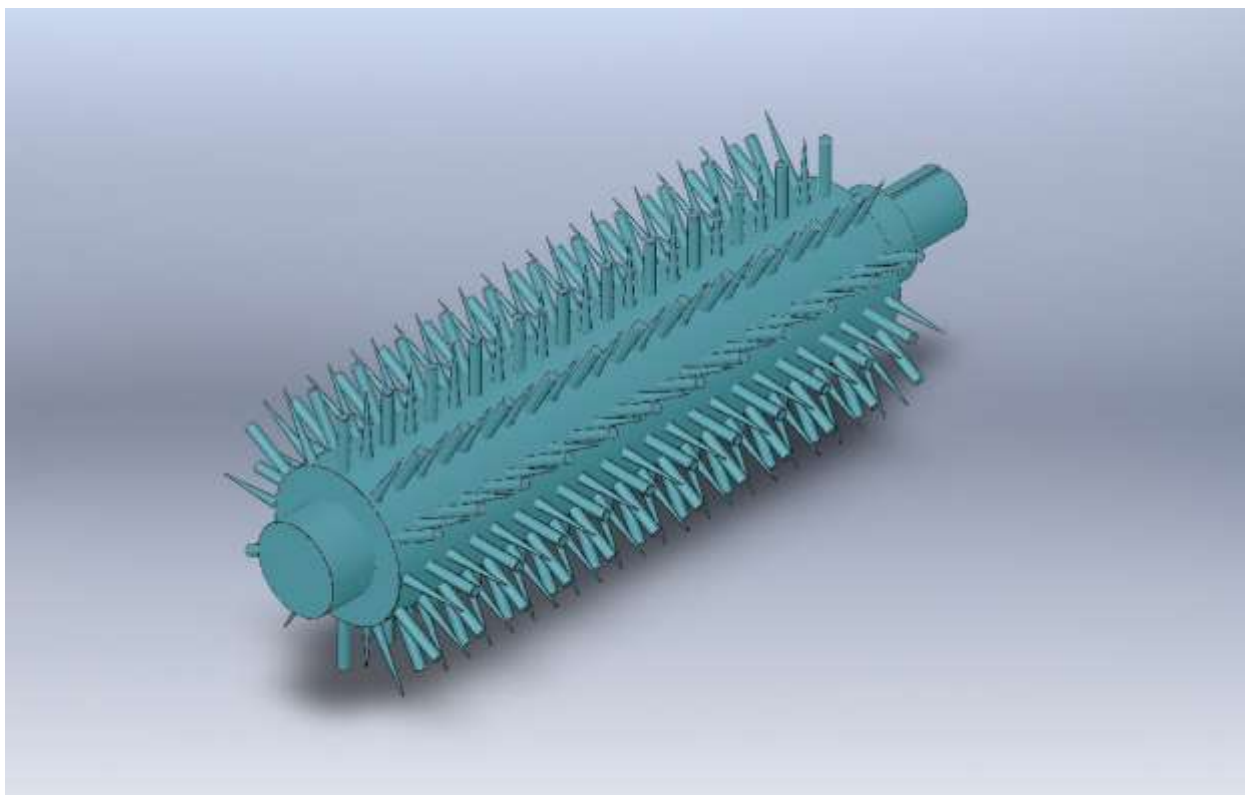
1.1-rasm. 1XK rusumli chigitli paxtani mayda ifloslik lardan tozalagichning texnologik sxemasi.

1-ta'minlash valiklari; 2-qoziqchali-parrakli barabanlar; 3-to'rtli sirt (yuza);
4-ifloslik bunkerlari; 5-nov.

Tozalash jarayonida paxta xom-ashyosi sirtida joylashgan iflos aralashmalarni dinamik kuch ta'sirida ajratishning nazariy taxlil qilinganda, mayda iflosliklar asosan xom ashyo bo'laklarining sirtida joylashgan bo'ladi, ularning tola bilan birikishi ancha bo'sh bo'lgani sababli ularni toladan ajratish katta muammo tug'dirmaydi. Chigitli paxta qatlamini ishchi kenglik bo'yicha bir hil taqsimlanishi hisobiga tozalagichning arrachali baraban yuzasidan maksimal foydalaniladi, bu esa yuqori tozalash samaradorligida uning unumdorligini 6-9 t/soat gacha oshirishga imkon beradi.

Tozalagichning asosiy mohiyati unga dinamik kuch ta'sirida chiqindi zarrachasi bilan tola orasidagi birikish kuchini kamaytirish, zarrachani xom ashyo tarkibida nisbiy xarakatga keltirish va uni xom ashyo massasidan chiqarib yuborishdan iborat. Quyidagi takomillashtirilgan 1XK rusumli paxtani mayda iflosliklardan tozalash uskunasini paxta tozalash korxonalari uchun ishlatiladi. Yangi o'zgartirish kiritilgan qoziqchali baraban ko'rinishi 2.2-rasmda keltirilgan.





2.2-rasm. O'zgartirish kiritilgan qoziqchali - baraban ko'rinishi.

Yangi taklif etilayotgan 1XK mayda iflosliklardan tozalash mashinasini qoziqchali barabanining tuzilishi quyidagicha bo'lib, har bir qoziqchalar o'rtasida konussimon qo'shimcha qoziqchalar kichik qilib tayyorlangan. Konussimon qoziqchalar o'lchami bo'yicha kichik qilib tayyorlangan qoziqchalar paxtani mayda iflosliklardan tozalash jarayonida chigitli paxta qoziqchalar o'lchami turli bo'lganligi sababli chigitli paxtaning harakatlanishi amaldagi qoziqchali barabandagi paxta harakatida tubdan farq qilib titilish darajasi yuqoriligi kuzatildi. Chunki jarayonga ta'sir etuvchi kuchlar ya'ni F_1 -to'rli yuzada paxtaning ishqalanish kuchi, C_1 - markazdan qochma kuch, G -paxta bo'lagini massasi, F_2 -paxta bo'lagining qoziqchalardagi ishqalanishi P -qoziqchani paxta bo'lagiga o'zaro ta'sir etuvchi kuchlardagi o'zgarishlar ijobiy bo'lib, titilish darajasi 1,5 barovarga ortishi ish unumdorligi va tozalash samaradorligi oshirishga erishilgan.

Xulosa

Tozalash jarayonida paxta xomashyosi sirtida joylashgan iflos aralashmalarni dinamik kuch ta'sirida ajratishning nazariy taxlil qilinganda, yirik iflosliklar asosan



xom ashyo bo‘laklarining sirtida joylashgan bo‘ladi, ularning tola bilan birikishi ancha bo‘sh bo‘lgani sababli ularni toladan ajratish katta muammo tug‘dirmaydi. Tozalagichlarning texnologik parametrlarini tanlashda asosiy jarayondagi qismlar va ularni hisoblash usullari ko‘rib chiqilgan. Unda paxta xom ashyosini chiqindidan tozalash jarayonidan zarba va xarakatlanayotgan sirtidan paxta bo‘lakchalarini sudrash asos qilib olingan.

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“The Gold Standard: Evaluating High Jewellery’s Role in Luxury Market Capitalization”

Student Name: Rajabova Sabrina

Faculty of Economics and Business Education

Data: June 2025

Student ID: 2421962

Supervisor: Netti Siska Nurhayati

Abstract

High (or haute) jewellery – the upper echelon of luxury jewellery – has historically been prized for craftsmanship and scarcity. This article examines high jewellery’s financial significance within the global luxury market using recent industry data and reports. We review academic and industry literature on luxury goods, alternative investments (e.g. watches, art), and survey luxury financial studies. Our methodology aggregates financial results from major jewelry firms (e.g. Richemont’s Cartier and Van Cleef & Arpels), industry reports (Bain & Company, Deloitte, BCG), and market analyses. Results include trend tables showing jewellery vs. watch market sizes (2019–2021) and growth rates, illustrating that high-end jewellery has been a resilient growth segment. Comparisons to luxury watches show that while both are alternative assets, high jewellery has outperformed in recent years: for example, Bain & Company reports that in 2019 personal luxury jewellery sales grew 9% (constant FX) while watches declined 2%, and through the Covid downturn (2020) watches fell ~30% versus ~12% for jewellery. By 2021, global luxury jewellery sales (≈€22 billion) surpassed 2019 levels, driven by branded high-jewellery demand.

The discussion interprets these trends in light of asset characteristics: high jewellery’s intrinsic value (precious metals/gems), brand prestige, and low correlation to equities make it a potential portfolio diversifier.

We conclude that haute joaillerie plays an increasingly prominent role in luxury market capitalization, meriting recognition as an alternative investment class with both opportunities and limitations.

(Bain & Company. (2021). *Luxury Report 2021: From rapid recovery to elegant advancement*; Richemont. (2023). *Annual report and financial statements 2023*; Boston Consulting Group (BCG). (2023).

Pre-owned Luxury Watch Prices Outperform S&P 500.)



Keywords

High jewellery, luxury market, alternative investment, market share, luxury watches

Introduction

High jewelry (haute joaillerie) refers to the most exclusive, custom-made pieces of jewelry, often crafted from rare gemstones and precious metals. In the luxury goods industry, high jewelry represents a niche but prestigious segment led by houses such as Cartier and Van Cleef & Arpels (Richemont), Tiffany & Co. (LVMH), and independents such as Chopard or Graff. According to recent industry reports, jewelry is one of the fastest growing categories in personal luxury goods.

The global luxury market (goods and experiences) has exceeded €1.5 trillion, with personal luxury goods (fashion, accessories, jewelry, watches) worth €300-350 billion. Jewelry is a significant part of this. For example, Bain & Company notes that branded jewelry will account for about 30% of the €90 billion core luxury goods market in 2019.

This paper examines the financial role of luxury jewelry: how it contributes to the overall luxury market capitalization, and how it compares to similar asset classes such as high-end watches. We synthesize literature from finance and luxury studies, analyze five years of market data, and evaluate high jewelry as a potential investment vehicle. (Bain & Company. (2023). Global Luxury Market to Reach €1.5 Trillion in 2023; Bain & Company. (2021). Luxury Report 2021.)

Literature Review

Previous research on luxury investing often focuses on collectibles (watches, art, wine) rather than jewelry per se. For example, Weisskopf and Masset (2025) find that luxury watches provide lower returns than stocks, but with lower volatility, which improves portfolio diversification. Studies of watches and alternative assets show robust secondhand markets (Rolex, Patek Philippe) with ~20% annual price appreciation (2018-2023).

Fine jewelry, on the other hand, is less academically studied, but industry sources emphasize its enduring value. Bain & Company (2021) reports that the jewelry segment proved to be the most resilient during the pandemic: despite a downturn, it rebounded quickly, driven by high and entry-level items.

Global consulting firms (Bain, Deloitte, BCG) note that jewelry (and shoes) outperformed other luxury categories; in 2019, jewelry grew 9% while watches declined and in 2020 will decline only ~12% versus -30% for watches.

Vogue Business similarly highlights jewelry as "a top performer at both the entry-level and high-end, outpacing growth in watches.". Collectively, these sources portray high jewelry as a standout luxury segment. Financial analyses also consider jewelry's asset quality. A BlockApps analysis suggests that high-end jewelry has intrinsic value - gems and gold - that can appreciate as supplies dwindle.

Such analyses argue that jewelry often has a low correlation to traditional markets and can hedge against inflation or volatility.

However, jewelry's illiquidity and opaque valuation are cited as risks. Industry reports suggest that high-end jewelry has relatively high profit margins (driven by craftsmanship and branding) and limited production, similar to high-end watches. In summary, while rigorous academic studies of high jewelry investments are limited, industry data and related literature (on luxury as an asset) suggest that it is a growing asset class. (Bain & Company. (2021). *Luxury Report 2021*; Boston Consulting Group (BCG). (2023). *True-Luxury Global Consumer Insight*; Boston Consulting Group (BCG). (2023). *Luxury pre-owned watches, your time has come*; Vogue Business. (2023). *The Hard Luxury Resale Race Heats Up*; BlockApps (cited in-text, though not formally listed in references – consider adding for completeness))

Methodology

This study combines quantitative data from industry reports with qualitative analysis of luxury finance literature. We collected global sales figures and growth rates for luxury jewelry and watches from 2018 to 2022 using:

- 1) annual reports of major luxury conglomerates (Richemont, LVMH, Kering, Swatch, etc.),
- 2) consulting firm publications (Bain & Company luxury studies, Deloitte Global Powers, BCG insights),
- 3) market research (Statista, industry forecasts), and
- 4) financial news.

In particular, Bain & Company's annual *Luxury Study* and press releases provide category-level market sizes (in EUR) and growth trends.

Where possible, we focused on jewelry that is considered "high" (e.g., reported sales of high-end houses such as Cartier, Van Cleef & Arpels). We also examined comparable data for luxury watches (e.g., Bain reports, industry estimates). Data was

normalized to constant exchange rates to isolate market growth. For investment analysis, we reviewed asset reports and boutique indices (e.g. BCG watch studies investor blogs) to characterize jewelry performance. The methodology is descriptive and comparative, relying on publicly available figures and case examples rather than original survey or econometric work. Tables and charts have been prepared to illustrate key trends (market size, segment contributions, growth rates). (Richemont. (2023).

Annual report and financial statements 2023; Bain & Company. (2023). Luxury in Transition: Securing Future Growth; Bain & Company. (2023). Global luxury goods market accelerates after record 2022.)

Results

Table 1 and **Figure 1** summarize key trends in personal luxury goods (PLG), with a focus on jewelry versus watches. Table 1 shows annual market sizes (in billions of dollars) for global luxury watches and jewelry, based primarily on estimates from Bain & Co.

In 2019, the luxury watch market will be around € 40 billion, while the jewelry market will be much smaller (≈€ 21 billion). In that year, jewelry sales grew ~9% (constant currency), while watches declined ~2%. During the Covid downturn (2020), watches declined ~30%, while jewelry declined only ~12%. By 2021, both segments had recovered: jewelry sales reached ≈€22 billion (about +7% vs. 2019) and the luxury watch market returns to ≈€40 billion. These data point to higher year-over-year volatility for watches than for jewelry.

Year	Jewelry (EUR bn)	Watches (EUR bn)
2019	20.6 (≈)	40.0
2020	18.1 (≈)	28.0
2021	22.0	40.0

Table 1. Global market size for personal luxury goods: jewelry vs. watches (2019-2021, EUR billion). Sources: Bain & Company Luxury Studies

Figure 1 (below) plots the same data, highlighting the sharper downturn/recovery of watches compared to jewelry. Jewelry's smaller absolute market size belies its importance: it has consistently outperformed watches in terms of percentage growth. Moreover, Bain's 2024 Luxury report notes that "jewelry proved to be the most resilient core luxury category" (≈31 billion by 2024) and that high jewelry "significantly outperformed the less elevated parts of the market."



The data shows that high jewelry plays a disproportionate role at the high end of luxury spending. Figure 1. Personal luxury goods market trends for jewelry vs. watches (2019-2021). (Data from Bain & Co. luxury market studies)

In particular, the major jewelry brands posted strong financial results. Richemont (owner of Cartier, Van Cleef & Arpels, Piaget, etc.) reported that its top three "jewelry houses" generated combined sales of €13.4 billion in FY2023 (up 21% from FY2022) dwarfing Richemont's watch sales (~€3.9 billion in the same period). LVMH's Tiffany and Bulgari divisions also posted double-digit growth. These company figures underscore how jewelry drives luxury revenues: for Richemont, jewelry accounted for roughly two-thirds of sales and half of profits in 2023 far ahead of the watch segment.

Comparisons to similar luxury assets (such as watches) further illuminate the position of fine jewelry. Pre-owned luxury watches have shown remarkable auction returns (BCG reports ~20% annual price appreciation for top models from 2018-2023). There is no public index for fine jewelry, but anecdotal evidence (e.g., record auction sales of rare jewelry) suggests very low liquidity but high value retention for iconic pieces. Unlike watches (many of which trade in secondary markets), high jewelry is largely one-of-a-kind, which limits turnover but enhances exclusivity. (Bain & Company. (2021, 2023). *Luxury Reports*; Richemont. (2023). *Financial and operational highlights*; Boston Consulting Group (BCG). (2023). *Pre-owned Luxury Watch Prices Outperform S&P 500.*)

Discussion

These results suggest that high jewelry occupies an increasingly important niche in the "capitalization" of the luxury market. Several factors explain its strong performance: First, high jewelry is often viewed as a tangible store of value. Made of gold, platinum and precious stones, it retains intrinsic value. In fact, blogs and industry analyses note that the value of fine jewelry tends to rise because the supply of precious materials is finite. Second, fine jewelry benefits from brand equity and craftsmanship: rare pieces from top maisons (e.g., Cartier's haute joaillerie collections) have a "boutique" appeal that sustains high price-to-cost ratios. Third, the customer base for fine jewelry - ultra-wealthy collectors - has remained relatively stable. Bain's research shows that the global pool of Very Important Clients (VIPs) now accounts for ~45% of luxury spending.

These clients continue to invest in statement jewelry as a status symbol. Unlike mass market luxury, high jewelry demand is less price sensitive. Interestingly, Bain



(2024) notes that while overall personal luxury spending has flattened, "high jewelry has significantly outperformed", suggesting that it may act as a "safe haven" within luxury. When comparing fine jewelry to luxury watches (a well-known collectible asset), the data shows both parallels and divergences. Both asset classes rely on craftsmanship and rarity. However, our analysis (and the academic work of Weisskopf & Masset) suggests that watches have higher short-term volatility and trade more rapidly in secondary markets, while fine jewelry trades infrequently and is held as heirlooms or trophies. Watches, for example, will quickly return to a €40 billion market by 2021, but then showed slower growth amid macroeconomic headwinds. Jewelry's smaller base (≈€22-31 billion) grows steadily through 2021-2024, driven by new customers in Asia and resilient demand in the U.S. and Middle East. From a portfolio perspective, high jewelry offers some advantages: low correlation with stocks and bonds (as its value is partially exogenous to financial markets) and inflation protection due to precious materials.

According to BlockApps, luxury jewelry's low correlation to the markets can provide "growth and safety" in uncertain times. However, it also has drawbacks: luxury jewelry is illiquid (hard to sell quickly), lacks transparent pricing, and incurs high transaction costs (auction fees, insurance). As a result, its role in a portfolio is more similar to that of other collectibles. In summary, interpreting the results within a financial framework, high jewelry can be considered an "alternative asset" with unique characteristics. It represents a niche but growing share of the value of luxury goods. Industry data suggests that fine jewelry is growing faster than many traditional luxury categories - a trend that is likely to continue given its appeal to high-end consumers.

As such, financial advisors and investors may consider including iconic pieces of high jewelry as part of a diversified asset allocation (complementing watches, art, etc.), especially for ultra-high-net-worth individuals. However, caution is warranted due to illiquidity and valuation uncertainty. (Bain & Company. (2023). *Luxury in Transition: Securing Future Growth*; National Jeweler. (2024). *Richemont Jewelry Sales Jump 14% in Holiday Quarter*; BlockApps (again, used in-text but not fully cited – should be included).)

Conclusion

This study highlights the important role of high jewelry in the luxury market capitalization. Over the past five years, luxury jewelry (especially its high-end



segment) has proven to be more resilient and faster growing than several other luxury segments, including watches.

Major luxury groups report that jewelry now accounts for the majority of luxury revenues and profits (e.g., Richemont's jewelry sales reached €13.4 billion in FY2023). These trends reflect the intangible value of fine jewelry and the steady demand from affluent consumers. From a financial perspective, fine jewelry can act as a store of value - often maintaining or increasing its value - even though it does not generate cash flow. In conclusion, high jewelry should be recognized as a distinct luxury asset class with investment potential. While it will never replace mainstream assets, it complements them by offering portfolio diversification, inflation protection, and participation in the upper echelons of the luxury economy. As luxury markets evolve, more investors and analysts are likely to treat haute joaillerie as part of the "capitalization" of the luxury sector-and the data and discussion in this article provide a foundation for that understanding. (Data and insights drawn from Bain & Company luxury market reports.)

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**BOSHLANG‘ICH SINIF GRAMMATIKA VA IMLO DARSLARIDA
QIZIQARLI O‘YINLARDAN FOYDALANISH**

**Shomurotova Sevinchoy San‘at qizi,
Urganch davlat pedagogika instituti
Boshlang‘ich ta‘lim yo‘nalishi 3-bosqich talabasi
E-mail: sevinchoyshomurotova93@gmail.com**

Annotatsiya: Ushbu maqolada boshlang‘ich sinif o‘quvchilariga ona tili grammatikasi va imlo darslarida qiziqarli o‘yinlaridan foydalangan holda dars o‘tish usullari haqida fikr yuritiladi.

Kalit so‘zlar: boshlang‘ich sinif, ona tili, o‘quvchi, nutq, yozuv, grammatika, metod, uslub.

**ИСПОЛЬЗОВАНИЕ ИНТЕРЕСНЫХ ИГР НА УРОКАХ ГРАММАТИКИ
И ПРАВОПИСАНИЯ В НАЧАЛЬНЫХ КЛАССАХ**

**Шомуротова Севинчой Санъат кизи,
Урганчский государственный педагогический
институт, направление начального
образования, студентка 3-го курса.
E-mail: sevinchoyshomurotova93@gmail.com**

Аннотация: В данной статье рекомендуется использовать веселые игры на уроках грамматики и орфографии младших школьников на родном языке.

Ключевые слова: начальный класс, класс, родной язык, ученик, речь, письмо, грамматика.

**USING ENGAGING GAMES IN GRAMMAR AND SPELLING LESSONS IN
PRIMARY SCHOOL**

**Shomurotova Sevinchoy San‘at qizi,
Urgench State Pedagogical Institute,
Department of Primary Education,
3rd-year student.**

E-mail: sevinchoyshomurotova93@gmail.com

Abstract: This article discusses the use of interesting games in teaching grammar and spelling in the native language to primary school students.

Keywords: primary, class, native language, student, speech, writing, grammar.

Boshlang‘ich sinflarda ta‘lim-tarbiyaning zamon talablari darajasida takomillashtirilishi, yoshlarning ma‘naviy barkamol shaxslar bo‘lib yetishida asosiy omillardan hisoblanadi. Buning uchun o‘qituvchilarning ilmiy-pedagogik va metodik tayyorgarligini oshirish, darslarni ilmiy jihatdan takomillashtirish, ilg‘or va zamonaviy pedagogik texnologiyalarni ta‘lim jarayoniga to‘liq joriy qilish to‘g‘risida ko‘plab fikrlar bayon etilmoqda.

Bugungi kunda xalq ta‘limi xodimi oldida turgan eng muhim masala bu– yosh avlodni barkamol insonlar qilib tarbiyalashdir. Buning uchun salohiyatli, zamonaviy ilm-fan sirlarini puxta o‘zlashtirgan kadrlarga ehtiyoj sezilmoqda.

Yurtboshimiz alohida ta‘kidlaganidek: “Biz xalqimizning dunyoda hech kimdan kam bo‘lmasligi, farzandlarimizning bizdan ko‘ra kuchli, bilimli dono va albatta baxtli bo‘lib yashashi uchun bor kuch va imkoniyatlarimizni safarbar etayotgan ekanmiz bu borada ma‘naviy tarbiya masalasi, hech shubhasiz, beqiyos ahamiyat kasb etadi” [1].

Zero, boshlang‘ich sinf ona tili darslarida o‘quvchilarning ham ta‘limiy ham tarbiyaviy ahamiyat kasb etuvchi dars maqsadiga erishishda o‘quvchilarning imloviy savodxonligi, uni yanada takomillashtirish usullaridan foydalanish va darslarni tashkil qilish o‘ziga xos ahamiyat kasb etadi.

Boshlang‘ich sinflarda o‘quvchilar nutqiy va imloviy savodxonlikka ega bo‘ladigan ona tili ta‘limida o‘quvchi o‘z fikrlarini ravon bayon qila oladigan bo‘lishi va to‘g‘ri savodli yoza oladigan bo‘lishi kerak. Shu jihatdan, boshlang‘ich sinflarning ona tili darslarida o‘quvchilarning imloviy bilimlarini bosqichma-bosqich, tadrijiy ravishda takomillashtirib borish lozim. Shunga ko‘ra, ona tili darslarida o‘quvchilarning imloviy bilimlarini takomillashtirishning eng samarali usul va metodlarini qo‘llash bo‘lajak boshlang‘ich sinf o‘qituvchisi oldida turgan muhim vazifa hisoblanadi. Ta‘limning takomillashgan turlaridan foydalanish har jihatdan xususan, ona tili darslarida ham o‘ta dolzarbdir. Umumiy o‘rta ta‘lim maktablarida keng qo‘llanilayotgan eng samarali metodlar asosida darslarni tashkil qilish, noan‘naviy usullardan o‘rinli foydalanish metodlarini ishlab chiqish va uni hayotda tatbiq etishdir. Vaholanki, boshlang‘ich sinflar ona tili darslarida o‘quvchilarning imloviy bilimlarini takomillashtirish va mustahkamlashda turli-tuman qiziqarli texnologiyalarni qo‘llash o‘quvchilar faolligini ta‘minlaydi [7]. Shunday ekan bu kabi texnologiyalarni qo‘llash ijobiy samara beradi.



Ta'lim maktabi «Ona tili o'qish va nutq o'stirish» dasturining muhim ko'rsatmalaridan biri – nutq va tafakkurni o'stirishdir. Buning uchun o'quvchilarni faol mustaqil ishlash, nutqi va tafakkurini o'stirish, faol o'ylash, fikr yuritish, tushuntira bilishga o'rgatish, muhokama-mulohaza yuritishga, xulosa chiqarish va umumlashtirish usullaridan foydalana olishga o'rgatish talab etiladi.

Ta'lim maktabida bolalarni tovushlarni to'g'ri talaffuz etishga, yangi o'rgangan tovush, so'z va gaplarni o'z nutqida to'g'ri ishlata olishga, gap va matn tuzishga o'rgatiladi. Og'zaki va yozma nutqni o'stirish maqsadida o'quvchilar ongiga ayrim grammatik ma'lumotlar singdirib boriladi.

Ta'lim maktabida ona tili darslari amaliy xarakterga ega bo'lib, nutqiy ko'nikma va orfografik malakani hosil qilishga qaratiladi. Ta'limiy vazifalardan tashqari ona tili darslarida korreksion vazifalar ham amalga oshiriladi. Og'zaki va yozma nutq taraqqiy etilishi bilan bir qatorda o'quvchilarning bilish faoliyati, mantiqiy tafakkuri kengayib boradi. Bolalar til materiallarini tahlil qilishga, farqlash, taqqoslash, umumlashtirish, asosiylarini ajratishga o'rganadilar. Materialni analiz va sintez qilish, guruhlash va umumlashtirish, o'xshash va farqli tomonlarini topish, grammatik va orfografik bilimlarni amalda tatbiq etish kabi ongli aqliy jarayonlar bolaning umumiy rivojlanishini ta'minlaydi, nutqiy va aqliy nuqsonlarini bartaraf etishga yordam beradi.

Ona tili va yozuv darslarida o'qituvchi bolalarni til hodisalarini kuzatish va tushunib yozish, ongli o'qish, kitob yoki doskadan, kartochkalardan ko'chirib yozish, nutqni diqqat bilan tinglash, eshitib turib diktovka ostida yozish, o'rgangan qoidaga amalda rioya qilish, aytilgan va yozganlarini tekshirish, ko'rgan-kechirganlarini, o'z taassurotlarini og'zaki va yozma shaklda bayon etishga o'rgatadi.

Ta'lim maktabida ona tili dasturida «Grammatika, imlo va nutq o'stirish» bo'limi o'z ichiga to'rtta katta mavzularni qamrab olgan: «Tovush va harflar», «So'z», «Gap», «Bog'lanishli nutq». Shu qismlarda o'rganiladigan mavzular bilan bog'langan xolda husnixatga doir ayrim ma'lumotlar va imlosi qiyin so'zlar ro'yxati beriladi.

Ta'lim maktabining boshlang'ich sinflarida yozuv darslarida amaliy mashqlar asosida ma'lum grammatik bilimlar beriladi va ko'nikma hamda malakalar hosil qilinadi. Shu yo'l bilan yuqori sinfda ona tili darslarida nazariy bilim egallash uchun zamin hozirlanadi. 1-4 sinflarda o'quvchi so'zning fonetik qurilishi, tarkibi, ma'noli qismlari bilan, ayrim so'z turkumlari va ularning asosiy belgilari bilan tanishadilar, gap va gap bo'laklari haqida ma'lumot oladilar, mazkur mavzularga oid imlo va tinish



belgilari qoidalarini o'rganadilar [3]. Bu kabi bilimlar egallanishida o'qituvchining alohida pedagogik mahoratga ega bo'lishi asosiy rol o'ynaydi.

Dasturda so'zning leksik ma'nosi, ko'p ma'noli, ma'no jihatidan bir-biriga yaqin(sinonim), qarama-qarshi ma'noli(antonim) so'zlar bilan tanishtirishga alohida e'tibor beriladi, nutqni tinglash iqtidori o'stiriladi, adabiy tilda ko'nikma hosil qilinadi, tilning asosiy qismlari bo'lgan tovush, so'z va gapga ongli munosabatda bo'lish tarbiyalanadi.

Dastur materiallarning sinflar bo'yicha taqsimlanishi muhim ahamiyatga ega. To'g'ri taqsimlangan material bilimlarni izchillik bilan puxta va to'liq o'zlashtirishni ta'minlaydi.

Ta'lim maktabining «Ona tili, o'qish va nutq o'stirish» dasturi konsentrik ravishda, bosqichli izchillik tamoyili asosida tuzilgan. Beriladigan bilim, ko'nikma va malakalar birinchi sinfdan boshlab to 4-sinfning oxirigacha bosqichli izchillikda murakkablashib, kengayib boradi. Birinchi sinfdan asosan savod o'rgatish ishlari tovush va harflarni o'qish va yozishga o'rgatish, amaliy yo'l bilan fonetikani o'rganish: tovushlarni to'g'ri talaffuz etish, bir-biridan farqlash, unli va undoshlarni ajratish, jarangli va jarangsiz tovushlar o'rtasidagi farqni bilib olishga qaratilgan. Xuddi shu ishlar keyingi sinflarda yangi leksik materiallar asosida davom ettiriladi.

“So'z” bo'limidagi mavzular ham grammatik, ham leksik tomondan o'rganilib, 2-sinfda “So'zning tarkibi” mavzusi ichida o'zakdosh so'zlar, o'zakdosh so'zlarning umumiy qismi (o'zak) haqida, so'z yasovchi va so'z o'zgartuvchi qo'shimchalar haqida umumiy ma'lumot beriladi.

3-sinfda “So'z tarkibi” mavzusi yuzasidan olingan bilimlar kengaytiriladi, murakkablashib boradi. «So'z turkumlari» mavzusini o'rganishda 2-sinfda dastlabki tayyorgarlik boshlanadi. O'quvchilar narsa nomini bildiradigan so'zlar, Kim? Nima? so'rog'iga javob beradigan so'zlar bilan tanishib, narsa, belgi, harakat kabi tushunchalarni o'zlashtiradilar. Xuddi shu tushunchalar 3-sinfda murakkabroq shaklda mustahkamlanadi, 4-sinfda kengroq tushunchalar mustahkamlanadi, yuqori sinflarda esa birinchi bor «Ot», «Fe'l», «Sifat», «Son» so'z turkumlari haqida nazariy bilimlar beriladi, ushbu atamalar o'quvchilarning nutqiga kiritiladi, ularning ma'nosi va ayrim belgilari, ko'rsatkichlari o'rgatiladi. Jumladan, otlarning birlik va ko'plikda qo'llanishi, atoqli va turdosh otlar, ot kelishiklari; bo'lishli va bo'lishsiz fe'llar.

Keyingi sinflarda grammatika va orfografiyadan beriladigan nazariy bilimlar murakkablashib boradi. Otning kelishik va egalik qo'shimchalari bilan turlanishi,



fe'lining shaxs va son qo'shimchalari bilan tuslanishi, zamonlari o'rgatiladi; son, olmosh va bog'lovchi haqida ma'lumot beriladi, sonning ma'nosi (narsaning soni va tartibini bildirishi), so'roqlari; kishilik olmoshlari, ularning birlik va ko'plikda qo'llanishi, kelishiklar bilan turlanishi; va, ammo, lekin, biroq, shuning uchun kabi bog'lovchilari bilan amaliy mashqlar asosida tanishadilar. Bu mavzularni o'rganish bilan bog'liq xolda egalik qo'shimchalarining aytilishi va yozilishi, qip-qizil, sap-sariq kabi sifatlarning yozilishi, sonlarning yozilishi, kelishik qo'shimchalari bilan turlangan kishilik olmoshlarining yozilishi, o'tgan zamon qo'shimchasi –di ning aytilishi va yozilishi, qo'shma fe'llarning yozilishi kabi va boshqa mavzular o'rgatiladi [3]. Shu kabi bilimlar o'quvchilar yoshiga mos tarzda bosqichma-bosqich o'rgatiladi.

«Gap» mavzusi bo'yicha o'quvchilar nutqdan gaplarni ajrata olishga, o'qish vaqtida tinish belgilariga, ohang va pauzaga rioya qilishga; gapni yozib, oxirida nuqta qo'yishga, gapni bosh harf bilan yozilishiga, so'roq va undov belgilari, gap bo'laklari haqidagi nazariy bilimlariga amal qilishga o'rganadilar. Grammatika va orfografiya darslarida aqlan zaif o'quvchilar mustaqil hayot kechirishi davomida zarur bo'lgan barcha ma'lumotlar bilan tanishib, gapning bosh va ikkinchi darajali bo'laklari, uyushiq bo'laklarning bog'lovchilari, gapni uyushiq bo'laklari, soda va qo'shma gaplar kabi va boshqa bilim, ko'nikma va malakalarni egallab oladilar. Shu tariqa har bir sinfda olib borilgan ishlar o'zbek tili grammatikasi va orfografiyasini butun bir xolda o'rganib, takrorlab, mustahkamlab borish imkonini beradi. Har bir sinfda ma'lum bir bo'limga ko'proq e'tibor berilishi ko'zda tutilgan bo'lsada, umumiylik, yaxlitlik ona tili dasturida saqlangan. Dasturning tushuntirish xatida «Grammatika, imlo va nutq o'stirish» bo'limi ustida olib boriladigan ishlarga qo'yilgan talablar va ularni amalga oshirish tamoyillari, shart-sharoitlari, usullari ko'rsatilgan [3]. Ushbu bo'limlarning har birida tushuntirish metodikalari bayon qilingan.

Ta'lim maktabining «Ona tili, o'qish va nutq o'stirish» dasturi tahlili shuni ko'rsatdiki boshlang'ich sinf yozuv darslarida grammatika va orfografiyadan beriladigan bilimlar elementar-amaliy xarakterda bo'lishiga qaramay, ushbu bilimlar yuqori sinfda o'zbek tili grammatikasi va imlodan nazariy bilimlarni o'zlashtirishga puxta zamin hozirlaydi [8]. Nazariy bilimlar bilan bir qatorda amaliy bilimlar ham alohida ahamiyat kasb etadi.

Shunday qilib, ta'lim maktabida grammatika va imlo darslari ikki bosqich bo'yicha o'tilishi maqsadga muvofiqdir. Birinchi bosqichda 1-4 sinflarda amaliy



bilimlar deyarli berilmaydi. Amaliy mashqlar orqali boshlang'ich sinf o'quvchilari keyinchalik yuqori sinflarda grammatika va imlodan nazariy bilim olish uchun zarur bo'lgan ko'nikma va malakalarni o'zlashtirib oladilar, ularning nutqi va tafakkuridagi, bilish faoliyatidagi nuqsonlari kamaytiriladi, korreksiyanadi.

Keyingi bosqichda o'quvchilarga Grammatika va imlodan mustaqil hayot kechirishda zarur bo'lgan hajmdagi nazariy bilim va ular asosida orfografik ko'nikma va malakalar shakllantiriladi, o'quvchilarning og'zaki va yozma bog'langan nutqi rivojlantiriladi [3]. Bog'lanishli nutqni o'quvchilarda rivojlantirish muhim jihatlardan biridir. Chunki o'z fikrlarini nutq yordamida bayon qiladilar.

Xulosa qilib aytganda, boshlang'ich sinf grammatika va imlo darslarida qiziqarli o'yinlardan foydalanish o'quvchilarning bilim olishida va darsga qiziqishida juda ahamiyatlidir. Har bir yangicha o'yin va didaktik materiallardan foydalanib o'tish o'quvchilarning o'zlashtirishida samarali usul hisoblanadi.

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ТЕХНОЛОГИЧЕСКИЙ АНАЛИЗ ОБОРУДОВАНИЯ МАРКИ 1PU ДЛЯ УЛАВЛИВАНИЯ ТЯЖЁЛЫХ ПРИМЕСЕЙ НА ХЛОПКООЧИСТИТЕЛЬНЫХ ПРЕДПРИЯТИЯХ

Имамназаров Хуршидбек Хушназар огли

Ассистент, Ферганский государственный технический университет,
Фергана, Узбекистан

Ахмадалиева Сарвиноз Хилолиддиновна

Студент группы 100-22 ТТДИТ, Ферганского государственного
технического университета, Фергана, Узбекистан

Аннотация

Оборудование для улавливания тяжелых примесей марки 1PU широко используется на хлопкоочистительных предприятиях. Усовершенствуя оборудование для улавливания тяжелых примесей марки 1PU, можно повысить эффективность очистки, удалить определенное количество примесей и улучшить качество семян хлопка.

Ключевые слова: 1PU, подающие ролики, ворсовый барабан, труба, камера сбора тяжелых примесей, электродвигатель, поточная линия.

Введение

На хлопкоочистительных заводах семена хлопка в основном транспортируются и доставляются с одного места на другое с помощью пневмотруб. На пневмотрубах устанавливается сепаратор тяжелых примесей 1PU. Различные тяжелые примеси, смешанные с семенами хлопка, поступающими из пневмотрубы, задерживаются оборудованием типа 1PU до 97%. В сепараторе тяжелых примесей 1PU тяжелые примеси отделяются в зависимости от их веса. Сепаратор тяжелых примесей 1PU устанавливается на пневмотрубах на хлопкоочистительных заводах. Функция машины 1PU заключается в улавливании тяжелых и крупных примесей, смешанных с семенами хлопка, и в автоматическом регулировании равномерной и равномерной подачи семян хлопка в поточную линию.

Технические характеристики оборудования 1ПУ:

1. Производительность хлопка, кг/час 10000
2. Эффективность улавливания объектов массой более 5 г, % 97
3. Частота вращения вала питания, мин-1 8-12
4. Скорость вращения барабана со шплинтом, мин-1 420
5. Расход приточного воздуха, м³/сек 2,5-3,0
6. Потребляемая мощность электродвигателя, кВт:
 - а) мощность поставки 0,25
 - б) барабан со сваей.....3,0 [1].

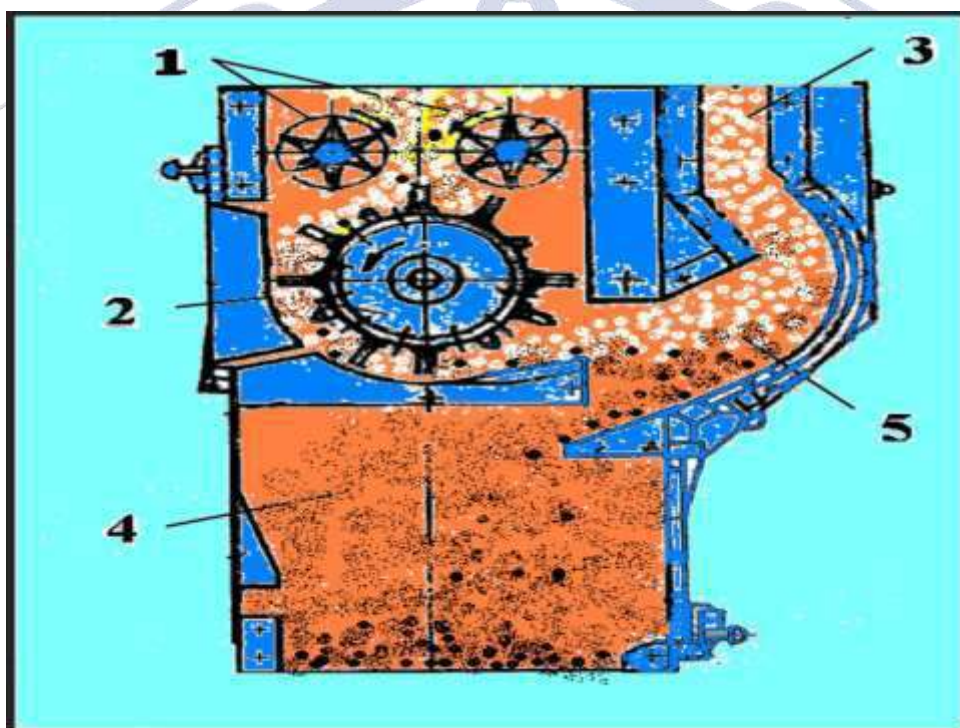


Рисунок 1. Технологический вид машины 1ПУ

К основным рабочим органам относятся: подающие ролики, барабан с гребенкой, труба для транспортировки хлопка с семенами и камера для сбора тяжелых примесей [1].

После машины 1ПУ семя хлопчатника отделяется от воздуха с помощью скребкового сепаратора типа СС-15А. Эффективность очистки сепаратора СС-15А очень низкая, а именно 5-7%, поэтому целесообразно повысить эффективность очистки машины 1ПУ. Отличие предлагаемого нами



усовершенствованного сепаратора тяжелых примесей марки 1ПУ от машины 1ПУ, используемой на производственных предприятиях, заключается в том, что на днище барабана ворса установлена овальная сетчатая поверхность, которая является одним из основных рабочих органов усовершенствованной машины 1ПУ, предназначенной для удаления мелких примесей [2].

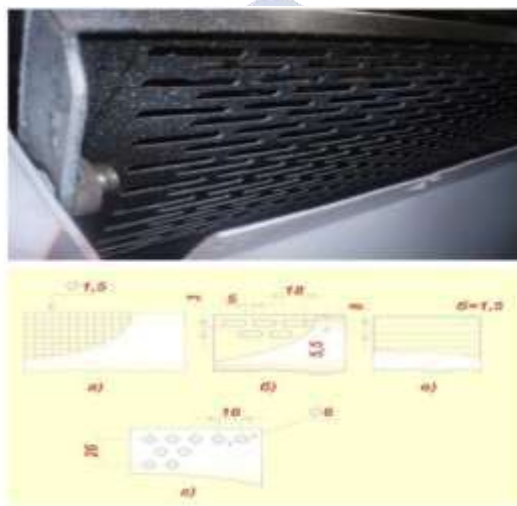


Рисунок 2. Сетчатая поверхность [3]

Таким образом, мы можем очистить семена хлопка не только от тяжелых примесей, но и от различных других примесей. В результате вращения барабана с ворсом и удара семян хлопка о сетчатую поверхность, семена хлопка очищаются от 10-15% примесей, примеси попадают в бункер для примесей и эффективность очистки оборудования увеличивается. При этом не расходуется лишнее электричество, а качество семян хлопка улучшается за счет того, что семена хлопка очищаются больше, чем раньше.

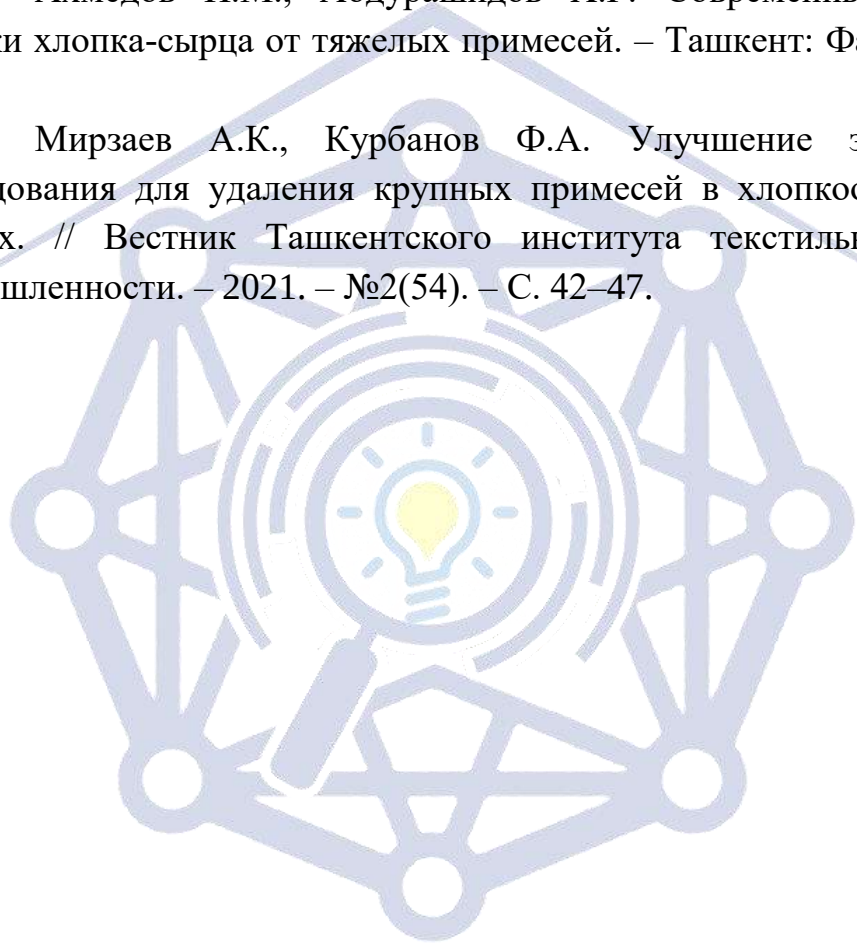
Закключение

В заключение следует сказать, что при внедрении предлагаемого усовершенствованного сепаратора тяжелых примесей марки 1ПУ на хлопкоочистительных предприятиях семена хлопка будут очищаться не только от тяжелых примесей, но и одновременно от различных других примесей, без избыточного потребления электроэнергии и экономии энергозатрат.



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IMPROVING COLOSSAL GRID OF 5LP LINTING TECHNOLOGY PROSESSES AND INITIAL IMPROVEMENT

Z. Kholiqova

Lecturer, Fergana state of technical university, Fergana, Uzbekistan

Annotation

Adjustment of the supply of seed to the linter is performed depending on the density of the seed mass in the working chamber. The performance of the linter on the seed is carried out by changing the length of the chain connecting the variator with the seed density lever in the working chamber and by changing the position of the load on the lever of the density lever.

Keywords: Seeds, grate, stirrer, saw shaft, seed comb, air blower.

Introduction

Columns of 5LP linter equipment are made of U8 steel. Lower operating costs are achieved by installing the improved U13A steel plate shown in the above picture on the working part of the grate, that is, the working part where the saw disc feeds the fluff. Also, the installation of the proposed metal plate will save time and resources (new colostrum) required for replacing spread colostrums, preventing broken pieces of seed from passing through the fluff due to spreading.

The main task of the linter equipment installed in the linting department of cotton gins is to separate the fluff from the surface of the seed mechanically, that is, with saw teeth. Linters are subject to the following requirements: seed and lint should not be damaged during linting, impurities and impurities should not be added to the lint, the mechanism (tool-equipment) that controls the quality of lint, the level of fluffiness of the seed, and the performance of the linter should work.

The main indicators of linter work are the level of fluff separation and the productivity of the seed.

There are two ways to configure the linter workflow:

- by changing the position of the seed comb;
- by changing the seed supply procedure.



By changing the position of the seed comb, the degree of fluff separation from the seed is changed. By changing the seeding mode, the linter's seeding performance is changed.

Adjustment of the supply of seed to the linter is performed depending on the density of the seed mass in the working chamber. The performance of the linter on the seed is carried out by changing the length of the chain connecting the variator with the seed density lever in the working chamber and by changing the position of the load on the lever of the density lever. The adjustment of the separation of dust and dirt is done by changing the position of the dust separation rail of the air chamber.

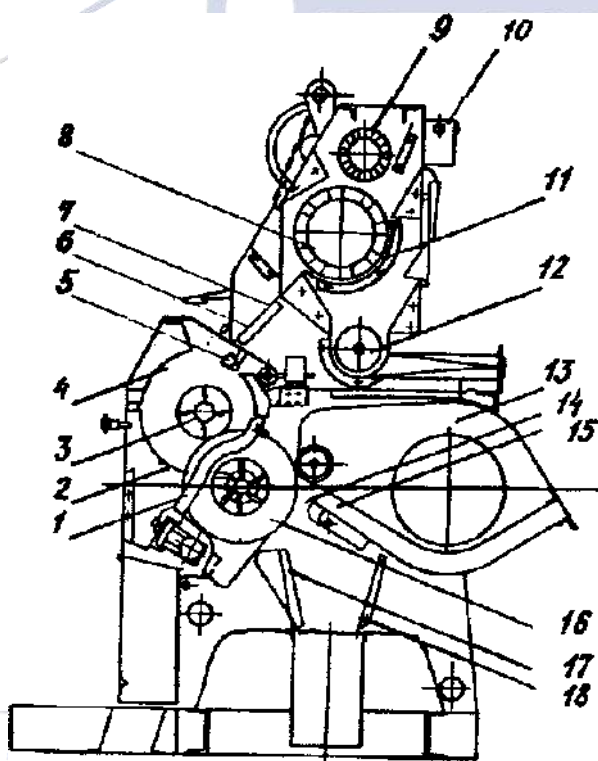


Fig. 1. Linter machine type 5-LP

1st rib fence; 2- seed comb; 3- trimmer; 4- working chamber; 5th density stack; 6-magnetic plate; Item 7 is a nova; 8-leveling drum; 9-supporting drum; 10- linter provider; 11-net; 12th waste auger; 13-air chamber; 14-dead pile; 15th pipe; 16-saw cylinder; 17th small rod; 18-big nov.



The linter is equipped with a working chamber lifting mechanism. The mechanism is controlled by a button on the linter control panel. The kinematic scheme of the rotary working bodies of the 5LP-linter is shown.

Linter production indicators are characterized by three different indicators:

- Lint separation productivity (kg/hour);
- Productivity of hairy seed transfer (kg/h);
- Lint acquisition percentage (%).

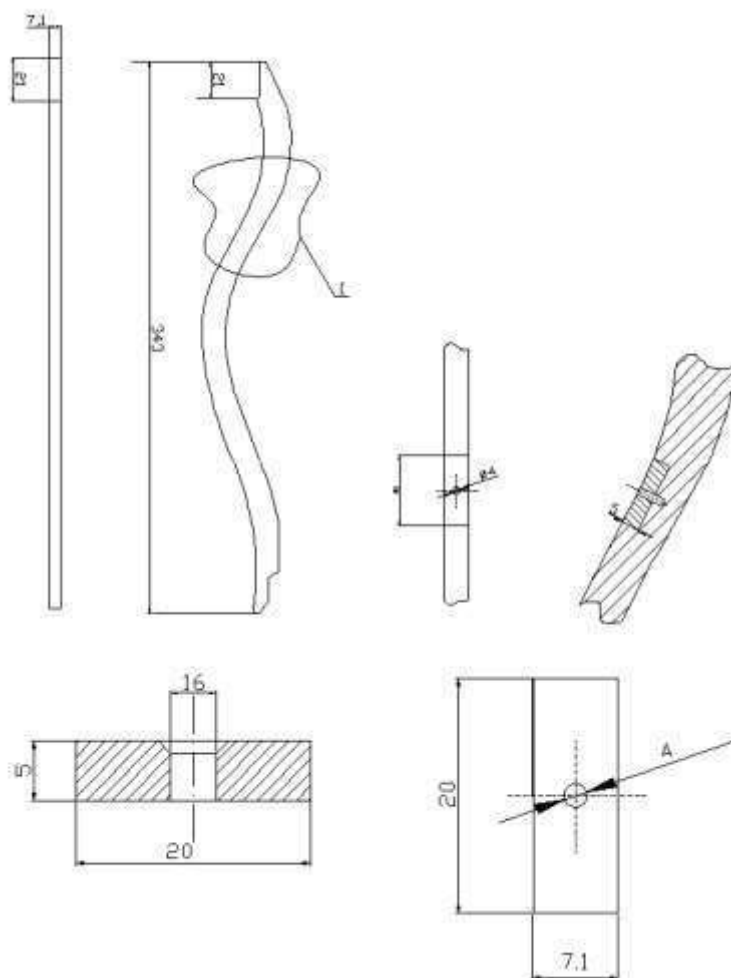
These indicators are interconnected as follows:

$$R = Q \cdot C / 100 \text{ kg/h}$$

Where: R is linter performance, lint by lint

Q - productivity of seed transfer

S is the degree of lint removal from the seed, in %.



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A-colossal grid, b-cut view, v-metal plate.

Fig. 2. The proposed U13A steel metal plate

Columns of 5LP linter equipment are made of U8 steel. Lower operating costs are achieved by installing the improved U13A steel plate shown in the above picture on the working part of the colosnik, that is, the working part where the saw disc feeds the fluff. Also, the installation of the proposed metal plate will save time and resources (new colostrum) required for replacing spread colostrums, preventing broken pieces of seed from passing through the fluff due to spreading.

The 5 LP linter under development has a linter capacity of 100 kg/h and a seed capacity of 2000 kg/h. A seed receiver-cleaner (KPP) is installed on the linter.

Seed falling into the working chamber is distributed in the required amount with the help of the density handle and variator brand IVA-40.

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ПНЕВМОТРАНСПОРТ ОРҚАЛИ ТАШИЛАЁТГАН ПАХТАНИ ҚУВУРНИНГ УЗУНЛИГИ БЎЙИЧА ҲАВО ЗИЧЛИГИНИ ЎЗГАРИШИ НАЗАРИЙ ТАҲЛИЛИ

Д.У.Турғунов, Б.Қ.Қобилов

Фарғона давлат техника университети, Фарғона, Ўзбекистон

Аннотация

Ушбу мақолада пахта ва ҳаво аралашмалари қувур ичида зичликларини тақсимланиши қонуниятлари ўрганилган. Пахта ва ҳаво аралашмасининг турбулент ҳаракатида қувур бошланиш қисмидан ҳаво босимини ҳосил қилувчи вентелятор томон ҳаракатланиши билан ҳаво зичлиги орасидаги муносабат ўрганилди.

Калит сўзлар: ҳаво, қувур, тезлик, ҳажм, оғирлик, ишқаланиш, шикастланиш, босим, пахта, чигит, тирсак бурилиш, криставина,

КИРИШ

Тўқимачилик, жумладан толали материалларни йиғириш, тўқиш, енгил саноат соҳасида хона ва жиҳозларни шамоллатиш, иқлимни мўътадиллаштириш, шунингдек, ярим фабрикаларни, тайёр маҳсулотларни цех ичида ва цехлараро ташишда ҳам аэродинамик, шу жумладан ҳаво транспорти ускуналари кенг қўлланади [1; 22-28 б.].

Ҳозиргача амалга оширилган илмий-тадқиқот ишларида аниқланган қонуниятлар, амалий натижалар пахтани қайта ишлаш, шунингдек уни ҳаво транспортида ташиш илми ва амалиётини муайян даражада ривожлантиришга хизмат қилди. Шундай бўлсада, ҳали пахтага ишлов бериш ва уни ташишда юз берадиган айрим ходисаларнинг моҳияти тўлиқ очиқ берилмаган, айрим технологик машина ва ускуналар, шу жумладан ҳаво транспорти ускунаси ҳали тўлиқ такомилга эришган эмас.

П.В.Байдюк [2; 24-98 б.] тадқиқотларида ҳаво транспорти жараёни ҳаво қузури ичидаги ҳаво босимининг йўқолиши билан кечишива у асосан ҳаво тезлигига, ҳаво қувурининг диаметри ҳамда ташилаётган материалнинг ўлчами ва шаклига боғлиқ эканлиги аниқланган.

Горизонтал ҳаво қувирида ташиш жараёни назарияси билан шуғулланган кўпчилик олимлар [3, 4] пахтанинг горизонтал ҳаво қувиридаги ҳаракатини ўрганишда уни муайян массага ва аэродинамик қаршилиқ коэффициентига эга бўлган моддий нукта сифатида қараганлар. Шунинг учун ҳам қабул қилинган динамик моделлар ҳисоб-китобларда зарур даражадаги аниқликни бермаган.

Х.Ахмедходжаев [5; 1-186 б.] ва Махаметов Т.Д. [6; 121 б.]лар томонидан ўтказилган тадқиқотларда ҳаво билан ҳаракатланаётган пахта бўлагининг ҳаракати тезлаштирилган тасвирга олиш йўли билан ўрганилган. Муаллифлар горизонтал ҳаво қувиридаги пахта бўлагининг ҳаво қувири кесим юзасида тақсимланиши ҳаво тезлигига боғлиқ эканлигини аниқлаганлар.

Яратилган назариялар, асосан ҳаво ёрдамида ташувчи қурилманинг алоҳида муаммолари ва таркибий қисмларини қамраб олган бўлиб, бунда ҳам ўзаро мос келмайдиган, баъзан бир-бирини инкор қилувчи натижалар олинган.

МЕТОДЛАР

Пахтани ҳаво транспортида ташиш илми ҳам, аввалроқ таъкидлаганимиздек узоқ тарихга эга, десак, хато қилмаган бўламиз. Жумладан, 1929 йилда биринчи бўлиб пахтанинг оқимдаги тезлигининг ҳаво оқими тезлигига боғланиш тенгламаси ишлаб чиқилган [6; 121-б.]:

$$U_x = (1,27 \div 1,30) \cdot V_m \quad (1)$$

бу ерда: U_x - ҳавонинг тезлиги, м/с; V_m - пахтанинг тезлиги, м/с.

Г.Жаббаров [7] томонидан ҳаво қувирунинг диаметрини аниқлаш тенгламаси таклиф этилган:

$$d = 1.13 \sqrt{\frac{G_m}{\mu \cdot \rho \cdot V_m}} \quad (2)$$

бунда: G_m —секунддаги оғирлик бирлигидаги материал сарфи, кг/с; μ — ҳаво қувирунинг кўндаланг кесими, м²; ρ — ҳаво зичлиги, кг/м³; V_m —материалнинг ҳаракат тезлиги, м/с.

Тажриба йўли билан аниқланган пахта ва ҳавонинг ҳаракат тезликлари нисбати қуйидагича, алоҳида бўлаклар учун:

$$\frac{V_o}{U_i} = 0.75 \div 0.85 \quad (3)$$

Титилган, майда пахта бўлаклари учун:

$$\frac{V_o}{U_i} = 0.57 \div 0.70 \quad (4)$$

Худди шундай тадқиқотлар С. Қодирхўжаев [8] томонидан ҳам ўтказилган бўлиб, унинг олган натижаларига кўра:

а) пахтанинг ҳаракат тезлиги бўлакчаларнинг ҳар хил вазн ва ўлчамларида ҳавонинг тезлигига қуйидагича боғланади:

$$V_i = (0,5 \div 0,75)U_o \quad (5)$$

б) ҳаво қувири оғзидаги ҳавонинг минимал тезлиги ҳаво транспортининг пахта ташиш унумдорлигига қуйидагича боғланади:

$$V_M = 8,5G_M^{0,4} \quad (6)$$

бу ерда: G_M - пахтани ҳаво ёрдамида ташиш унумдорлиги, т/соат.

в) пахтанинг сўрилиш тезлиги қуйидаги ифода орқали аниқланади:

$$U_x = 2,56 \sqrt{\frac{\gamma_n}{\gamma_x} d_n}, \quad (7)$$

бунда: γ_n - пахтанинг зичлиги, кг/м³; d_n - пахта бўлакчасининг диаметри, м; γ_x - ҳаво зичлиги, кг/м³.

Ҳаво транспорти қувирида ўртача тезликларда ташилганда оғир жисмлар ва пахта ҳаво қувири деворлари билан унинг пастки қисмида кучли таъсирлашади. Пахта ва ҳаво қувири деворлари ўртасида ишқаланиш юзага келади ва бу толаларнинг думаланиб, жипслашуви ва эшилишига олиб келади. Шунингдек, бу ҳолатда пахта толаси шикастланади ва ҳаво қувири ички юзаси емирилади. Аммо, С.Қодирхўжаевнинг таъкидлашича пахтани ҳаво қувирининг горизонтал қисмида катта тезлик билан ташилганда, чигит ва толалар шикастланмайди ва юзанинг эскириш жараёни секинлашади. Лекин, материални бундай тезлик билан ташилганда ҳаво қувири чиғаноқларида инерция кучлари кескин кўтарилади. Пахта чиғаноқ ички юзасига катта куч билан урилади. Натижада тезлик йўқолади, урилиш жойида кучланиш ортади, чигит механик шикастланиши кўпаяди, чиғаноқ ички юзасининг емирилиши кучаяди.

Х.Ахмедхўжаев ва С.Қодирхўжаевларнинг аниқлашларича ҳаво оқимининг тезлиги 28 м/с дан катта бўлганда пахта ҳаво қувурининг кўндаланг кесими бўйлаб текисроқ тақсимланади. Бундай ташиш шароитларида материал муаллақ ҳолатга ўтади. Ҳаво оқимининг тезлиги 25,0 м/с дан пасайса, материалнинг кўпроқ қисми ҳаво қувурининг пастки қисмида ҳаракатлана бошлайди. Ҳаво оқимининг тезлиги 18 м/с дан пасайса пахтанинг катта бўлакчалари ҳаво қувури тубига тушади ва сакраш йўли билан, нотекис ҳаракатлана бошлайди.

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NAM MATERIALLARNI QURITISH TEXNOLOGIYALARI TAHLILI

Q.O. Toshmirzayev

Assistant, Farg‘ona davlat texnika universiteti, Farg‘ona, O‘zbekiston

N.Sharipova

Talaba, Farg‘ona davlat texnika universiteti, Farg‘ona, O‘zbekiston

Annotatsiya

Paxta xomashyosini qayta ishlashning uzluksiz jarayonining boshida quritish paxta xomashyosining namligini texnologik reglamentda tavsiya etilgan qiymatlarga kamaytirish uchun mo‘ljallangan bo‘lib, bunda keyingi tozalash uskunalarining ishonchli va samarali ishlashi ta‘minlanadi. Shuning uchun paxta xomashyosini quritish texnologik jarayonning asosiy va zarur jarayonlaridan biridir.

Kalit so‘zlar: paxta, quritish agenti, ifloslik, issiqlik sarfi, namlik, harorat.

Kirish

Kamerali quritgichlari atmosfera bosimida ishlaydi va quritish harorati 250-300C gacha bo‘lgan va davriy qurilmalarga tegishli bo‘lgan quritish materiallarida qo‘llaniladi. Quritish jarayoni kamerada o‘rnatilgan tokchalarga yoki aravachalardagi yoyilgan materiallarga quritish agentini uzatish orqali amalga oshiriladi. Quritish agentidan bir marta yoki qayta-qayta foydalanilishi (regeneratsiya qilinishi) qisman havo aylanishi bilan ishlaydi, bu past harorat va yumshoqroq quritish sharoitlarini ta‘minlaydi.

Bunday kamerali quritgichlar quritilayotgan materiallarni stasionar qalin qatlamda quritish tufayli past ish unumdorligiga ega va kameradagi quritish agentining notekis harorati tufayli quritilayotgan materialdan bir xil namlikni ololmasligi bilan ajralib turadi, bu kamchilik quritish agentining qisman yuqoridagi zonalarga eng qisqa yo‘l bilan o‘tib ketishi tufayli yuzaga keladi. Kamerali quritgichlariga texnik xizmat ko‘rsatish juda ko‘p qo‘l mehnatini talab qiladi, bu ham muhim kamchilikdir [1].

Asosiy qism

Tunnelli quritgichlari kamerali quritgichlardan farq qiladi, chunki ularda bir-biriga ulangan aravachalar juda uzun to'rtburchakli kamera bo'ylab relslarda asta-sekin harakatlanadi. Aravachalar sim tros va mexanik vint yordamida harakatlantiriladi. Quritish agentini quritilayotgan materialga to'g'ri oqimli yoki qarshi oqim bilan berilishi qo'llanilishi mumkin [1]. Tunnelli quritgichlari kamerali quritgichlar bilan bir xil kamchiliklarga ega, bundan tashqari ushbu turdagi quritgichlar qo'l mehnatini ko'p talab qiladi.

Lentali quritgichlarda quritish jarayoni atmosfera bosimida uzluksiz ravishda amalga oshiriladi. Quritgich kamerasida quritilayotgan material qatlami tortuvchi va tortiluvchi barabanlari orasiga cho'zilgan cheksiz lentada harakat qiladi. Nam material lentaning bir uchiga beriladi va quritilgan material boshqa uchidan chiqariladi. Quritish agenti qarshi oqim yoki o'zaro oqimni materialning harakat yo'nalishiga o'tkazadigan issiq havo yoki tutun gazlari orqali amalga oshiriladi.

Tasmali quritgichlar katta hajmli (tunnelli quritgichlari kabi) va ularni ishlatish jarayoni qiyin, asosan lentalarning qiyshayishi va cho'zilishi tufayli o'ziga xos ish unumdorligi past va o'ziga xos quritish agenti sarfi ancha yuqori. Bundan tashqari, ular turli xil materiallarni qurita olmasligi sababli ularni rolikli quritgichlar bilan birgalikda ishlatiladi. Ba'zi konstruksiyalarda o'ta qizdirilgan par quritish agenti sifatida ishlatilsa, ba'zan esa issiq inert gazlar bilan aralashmada ishlatiladi. Haddan tashqari qizdirilgan par bilan quritish havodagi kislorod ishtirokida yuqori haroratda oksidlanadigan yoki yonib ketadigan materiallarni quritish uchun yaxshi samara beradi. Konstruktiv tuzilishiga ko'ra bu quritgichlar murakkab, chunki ularga havo kirmasligi uchun ularning germetikligini ta'minlash kerak [2].

Barabanli quritgichlar bo'lak, donador, tolali va quyma materiallarning atmosfera bosimida uzluksiz quritish uchun keng qo'llaniladi. U gorizontal ravishda yoki gorizontalga ozgina qiyalik burchagi bilan o'rnatilgan va roliklarda aylanadigan silindrsimon barabanga ega. Baraban elektr motor tomonidan tishli uzatma va reduktor qutisi orqali boshqariladi. Quritiladigan material barabanga ta'minlagich tomonidan beriladi, barabanning deyarli butun uzunligi bo'ylab joylashgan ichki kameraga kiradi. Quritish barabanining ichki qismidagi kuraklar barabanning bo'ylama kesimi bo'ylab materialning bir xil taqsimlanishini va yaxshi aralashishini, shuningdek, quritish agenti – tutun gazlari bilan uning yaqin aloqasini ta'minlaydi.



Eng oddiy holatda, kuraklar baraban korpusining ichki qismiga payvandlangan metall listlardir. Quritish agenti va quritilayotgan materiallar, ko‘p xollarda, to‘g‘ri oqim bilan harakatlanadi, bu quritilayotgan materialning haddan tashqari qizib ketishining oldini olishga yordam beradi, chunki bu holda eng issiq gazlar eng yuqori namlikka ega bo‘lgan material bilan aloqa qiladi. Quritish agentini tezligi materialning kattaligi va zichligiga qarab tanlanadi [3].

Tabiiy gaz, mazut yoki boshqa suyuq yoqilg‘ini (dizel yoqilg‘isi, moy) yoqish natijasida olingan tutun gazlari ko‘pincha baraban quritgichida quritish agenti sifatida ishlatiladi. Tutun gazlari to‘g‘ridan-to‘g‘ri gorelkadan barabanga yoki aloxida issiqlik ishlab chiqargich orqali tayyorlab berilishi mumkin, bu tutun gazlarini havo bilan aralashtirish darajasini sozlash imkonini beradi. Aloxida issiqlik ishlab chiqargichi yuqori haroratda bo‘linib (parchalanib) ketadigan materiallarni quritish zarur bo‘lganda ishlatiladi. Barabandagi ichki kurakli qurilmalari dona hajmi va quritilayotgan materiallarni [10] xususiyatlariga bog‘liq ravishda tanlanadi.

Qaynayotgan (suyuq) qatlamli quritgichlar quritish apparatlarining progressiv turlaridan biridir. Suyuq qatlamli jarayoni material zarralari va quritish agenti orasidagi aloqa yuzasini sezilarli darajada oshirishga, materialdan namlikning bug‘lanishini kuchaytirishga va quritish vaqtini (bir necha daqiqagacha) qisqartirishga imkon beradi [4].

Suyuq qatlamli quritgichlari hozirgi vaqtda kimyoviy texnologiyada nafaqat yuqori to‘kiluvchan materiallarni (masalan, mineral va organik tuzlar) quritish uchun, balki birikib, bo‘laklanib qoladigan materiallar, masalan, ammoniy sulfat, polivinilxlorid, polietilen va boshqa polimerlarni quritish uchun ham muvaffaqiyatli qo‘llanilmoqda. Silindrsimon korpusli bu turdagi quritgichlarda quritishning sezilarli notekisligi kuzatiladi, chunki qatlamda intensiv aralashtirish bilan alohida zarrachalarning bo‘lish vaqti butun materialning o‘rtacha bo‘lish vaqti qiymatidan sezilarli darajada farq qiladi [5, 6].

Qaynayotgan (psevdo-qaynoq) qatlamli quritgichlarda materialni intensiv aralashtirish, tezlashtirilgan issiqlik va massa uzatishga erishiladi, shuning uchun quritish agentining yuqori haroratda bo‘lgan holatida ham yakuniy quritilgan mahsulot sifatini sezilarli darajada yo‘qotmasdan ishlatilishi mumkin. Quritgichning soddaligini yuqori o‘ziga xos unumdorlik va avtomatlashtirish qulayligi bilan ushbu quritgichlar har xil materiallarni quritishda keng qo‘llanilishini topdi.



Davriy harakatlanuvchi qator vakuumli quritgichlarida materialni eshkakli sekin aylanadigan gorizontal aralashtirgich bilan aralashtirish orqali materialni quritish tezligi biroz oshadi; shu bilan birga, ular vakuumli quritish shkaflari kabi materialni qo'lda yuklash va tushirishni talab qilmaydi [7].

Eshkakli quritgich par ko'ylagi va aralashtirgichli silindrsimon korpusdan iborat. Eshkakli aralashtirgichlari o'qqa o'zaro perpendikulyar o'rnatiladi; baraban uzunligining yarmida eshkakli aralashtirgichlar bir yo'nalishda, ikkinchi yarmida – teskari yo'nalishda egiladi. Bundan tashqari, eshkakli aralashtirgich reversiv har 5-8 daqiqada aylanish yo'nalishini avtomatik ravishda o'zgartiradigan qaytariladigan uzatmaga ega. Shuning uchun aralashtirgichning ishlashi paytida material vaqti-vaqti bilan periferiyadan barabanning o'rtasiga va teskari yo'nalishda harakat qiladi.

Shuni ta'kidlash kerakki, vakuumli quritgichlardan kimyo sanoatida foydalanish, atmosfera quritgichlariga nisbatan yuqori narx va murakkablikka qaramay, texnologik mulohazalar bilan belgilanadi: ular yuqori haroratga sezgir, shuningdek toksik va portlovchi moddalarni quritish uchun javob beradi, tozaligi oshgan quritilgan mahsulotlarni olish uchun, shuningdek materiallardan [6] suv bo'lmagan erituvchi bug'larini ajratib olish zarur bo'lgan xollarda ishlatilgani ma'qul.

Pnevmatik quritgichlar ketma-ket ulangan bir yoki bir nechta vertikal quvurlardan iborat. Qurtilayotgan material bu quvurlar orqali quritish agenti oqimi bilan harakatlanadi, uning tezligi eng katta zarrachalarning harakat tezligidan oshadi (odatda 0,1-0,4 m/s). Kontaktning qisqa davomiyligi (1-5 s) tufayli bu quritgich quritish agentining yuqori haroratida ham termik beqaror materiallarni quritish uchun ishlatilishi mumkin.

Xulosa

Tahlildan kelib chiqadiki, nam materialda issiqlik va massa o'tkazuvchanligi parametrlarining yetarlicha katta qiymatlari bilan konvektiv quritish usuli sezilarli darajada yuqori samaradorlik tufayli boshqa quritish turlariga nisbatan afzalliklarga ega, garchi u energiya intensivligi jihatidan infraqizil va mikroto'lqinli quritish usulidan bir oz pastroq bo'lsa ham. Shunday qilib, energiya sarfi nuqtai nazaridan eng tejankor imkoniyatni o'rganish va amalda qo'llash tavsiya etiladi.

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Vizual mediata'lim

**G'iyasova Azizaxon Muratovna-Toshkent Gumanitar fanlar Universiteti,
Aniq va gumanitar fanlar kafedrası o'qituvchisi
Xoliqberdiyeva Rayhona Sanjarbek qizi-Toshkent Gumanitar fanlar
universiteti Boshlang'ich ta'lim yo'nalishi talabasi**

Annotatsiya: Ushbu maqolada globallashuv va raqamli texnologiyalar sharoitida vizual mediata'limning dolzarbligi va uning O'zbekiston ta'lim tizimidagi o'rni tahlil qilinadi. Vizual kommunikatsiyaning zamonaviy jamiyatdagi hukmronligi, yoshlarning axborotni qabul qilish va qayta ishlash xususiyatlariga ta'siri ko'rib chiqiladi. Maqolada vizual savodxonlikni – tasvirlarni tanqidiy tahlil qilish, interpretatsiya qilish va yaratish qobiliyatini shakllantirishning asosiy pedagogik tamoyillari, xalqaro tajriba va uni milliy ta'lim standartlariga integratsiya qilish imkoniyatlari yoritilgan. Tadqiqot natijasida O'zbekistonda vizual mediata'limni rivojlantirish bo'yicha amaliy taklif va tavsiyalar ishlab chiqilgan.

Kalit so'zlar: Vizual mediata'lim, media savodxonlik, tanqidiy fikrlash, vizual kontent, raqamli fuqarolik, infografika, dezinformatsiya, ta'lim texnologiyalari, semiotika.

Kirish: XXI asr – axborot texnologiyalari va vizual kommunikatsiyalar asridir. Bugungi kunda biz har qachongidan ham ko'proq tasvirlar qurshovida yashaymiz: ijtimoiy tarmoqlardagi fotosuratlar va videolar, reklama bannerlari, kinofilmlar, yangiliklar lentasidagi infografikalar – bularning barchasi bizning dunyoqarashimiz, qadriyatlarimiz va qarorlarimizga sezilarli ta'sir ko'rsatadi. Internetning keng tarqalishi natijasida har bir smartfon egasi nafaqat vizual kontent iste'molchisi, balki uning faol yaratuvchisi va tarqatuvchisiga aylandi.

Bunday sharoitda an'anaviy matnga asoslangan savodxonlik yetarli emas. Yosh avlodni vizual axborot oqimida mustaqil yo'l topa oladigan, manipulyatsiyani fosh qila oladigan, estetik didli va mas'uliyatli media ijodkor sifatida tarbiyalash uchun **vizual mediata'lim** muhim ahamiyat kasb etadi. Ushbu ta'lim yo'nalishi o'quvchilarda tasvirlarni shunchaki "ko'rish"ni emas, balki ularni "o'qish", tahlil qilish va baholash ko'nikmalarini shakllantirishga qaratilgan.

O'zbekistonda ta'lim tizimini modernizatsiya qilish borasida keng ko'lamli islohotlar amalga oshirilayotgan bir paytda, vizual mediata'lim konsepsiyasini o'quv



dasturlariga integratsiya qilish zamon talabidir. Ushbu maqolaning maqsadi – vizual mediata’limning nazariy asoslarini o‘rganish, uning ta’lim jarayonidagi o‘rnini asoslash va O‘zbekiston sharoitida joriy etishning samarali yo‘llarini taklif qilishdan iborat.

Asosiy qism

1. Vizual mediata’limning nazariy asoslari va tamoyillari

Vizual mediata’lim – bu media savodxonlikning (media literacy) tarkibiy qismi bo‘lib, u vizual xabarlarni (fotosurat, video, reklama, dizayn, infografika) tanqidiy idrok etish, tahlil qilish, baholash va yaratish qobiliyatlarini o‘z ichiga oladi. Uning asosida bir nechta muhim nazariy yondashuvlar yotadi:

- **Semiotika (belgilar nazariyasi):** Bu yondashuv har qanday tasvirni belgilar va kodlar tizimi sifatida ko‘rib chiqadi. O‘quvchilar tasvirdagi denotativ (bevosita) va konnotativ (qo‘shimcha, yashirin) ma’nolarni ajratishni o‘rganadilar. Masalan, reklama roligidagi qimmatbaho mashina nafaqat transport vositasi (denotatsiya), balki muvaffaqiyat, obro‘ va hashamat ramzi (konnotatsiya) sifatida ham talqin qilinishi mumkin.

- **Tanqidiy nazariya:** Ushbu yondashuv media-matnlarni, jumladan, vizual kontentni yaratish ortida turgan ijtimoiy, siyosiy va iqtisodiy manfaatlarni tahlil qilishga undaydi. "Bu tasvirni kim yaratdi?", "Uning maqsadi nima?", "Bu tasvirda kimning ovozi eshitilmoqda va kimniki chetda qolmoqda?" kabi savollar orqali o‘quvchilarda tanqidiy fikrlash rivojlanadi.

- **Vizual ritorika:** Bu soha tasvirlarning ishonitirish va ta’sir o‘tkazish vositasi sifatidagi rolini o‘rganadi. Kompozitsiya, ranglar psixologiyasi, rakurs, yoritish kabi vositalarning tomoshabin hissiyotlari va idrokiga qanday ta’sir qilishini tahlil qilish vizual ritorikaning asosiy vazifasidir.

2. Vizual kontentning ta’limdagi va jamiyatdagi o‘rni

Zamonaviy ta’lim jarayonini vizual materiallarsiz tasavvur etish qiyin. Infografikalar murakkab ma’lumotlarni sodda va esda qolarli tarzda taqdim etsa, o‘quv videolari mavhum tushunchalarni jonlantiradi. Biroq, vizual kontentning salbiy ta’sirlari ham mavjud:

- **Dezinformatsiya va feyk yangiliklar:** Professional dasturlar yordamida yaratilgan soxta fotosuratlar va "dipfeyk" (deepfake) texnologiyasi asosidagi videolar jamoatchilik fikrini osongina manipulyatsiya qilishi mumkin. Vizual



savodxonlik bunday yolgʻonlarni aniqlash uchun zarur boʻlgan "immunitet"ni shakllantiradi.

• **Stereotiplarni mustahkamlash:** Reklama va ommaviy madaniyatda muayyan ijtimoiy guruhlar (gender, irq, kasb egalari) haqidagi soddashtirilgan va koʻpincha notoʻgʻri tasavvurlar (stereotiplar) keng tarqalgan. Ularni tanqidiy tahlil qilish ijtimoiy bagʻrikenglikni tarbiyalashga yordam beradi.

• **Isteʼmolchilik madaniyatini targʻib qilish:** Yorqin va jozibali vizual obrazlar orqali doimiy ravishda yangi tovarlar va xizmatlarni xarid qilishga undovchi isteʼmolchilik madaniyati singdiriladi.

3. Xalqaro tajriba: Finlyandiya va Kanada modellari

Media savodxonlik, jumladan, vizual taʼlimni integratsiya qilish boʻyicha Finlyandiya va Kanada dunyoda yetakchi hisoblanadi.

• **Finlyandiya modelida** media savodxonlik alohida fan sifatida emas, balki barcha oʻquv fanlari (ona tili, tarix, sanʼat, matematika) tarkibiga singdirilgan. Oʻquvchilar matematikada statistik maʼlumotlarning grafiklardagi manipulatsiyasini, tarix darsida esa tarixiy fotosuratlarining propagandistik maqsadlarda ishlatilishini oʻrganadilar.

• **Kanada modelida** esa tanqidiy fikrlashga alohida urgʻu beriladi. Media-matnlarni tahlil qilish uchun maxsus "Kalit savollar" (Key Questions) metodologiyasi ishlab chiqilgan boʻlib, u mualliflik, format, auditoriya, mazmun va maqsad kabi jihatlarni oʻrganishga qaratilgan.

Muhokama: Oʻzbekiston taʼlim tizimiga vizual mediataʼlimni joriy etish bir qator afzalliklarga ega boʻlishi bilan birga, maʼlum qiyinchiliklarni ham yuzaga keltirishi mumkin. Asosiy muhokama talab qiladigan jihatlar quyidagilardir:

1. **Pedagog kadrlar masalasi:** Oʻqituvchilarning oʻzlari vizual savodxonlik boʻyicha yetarli bilim va koʻnikmalarga egami? Ularni yangi metodikalar boʻyicha qayta tayyorlash va malakasini oshirish tizimini yoʻlga qoʻyish zarur. Bu jarayonga nafaqat pedagogika, balki jurnalistika, sotsiologiya, sanʼatshunoslik va axborot texnologiyalari mutaxassislarini ham jalb etish maqsadga muvofiq.

2. **Integratsiya yoki alohida fan:** Vizual mediataʼlimni Finlyandiya kabi barcha fanlarga integratsiya qilish kerakmi yoki Kanada tajribasidan kelib chiqib, uni alohida kurs (masalan, "Media savodxonlik" yoki "Axborot madaniyati") sifatida oʻqitish samaraliroqmi? Ikkala yondashuvning ham oʻziga yarasha ustunlik va



kamchiliklari mavjud. Dastlabki bosqichda integratsiyalashgan kurslar va to‘garaklar tashkil etish orqali tajriba-sinov ishlarini olib borish mumkin.

3. **Milliy kontent va qadriyatlar:** Xalqaro metodologiyalarni "ko‘r-ko‘rona" ko‘chirish o‘rniga, ularni milliy o‘ziga xoslik, madaniy meros va an‘anaviy qadriyatlar bilan uyg‘unlashtirish lozim. O‘zbekiston tarixi, san‘ati, adabiyotiga oid vizual materiallar tahlili orqali o‘quvchilarda milliy iftixor tuyg‘usini shakllantirish va ayni paytda globallashuv chaqiriqlariga tayyorlash muhimdir.

Xulosa va takliflar

Raqamli dunyoda muvaffaqiyatli faoliyat yuritish uchun bugungi kun o‘quvchisi nafaqat bilimli, balki media savodxon, axborotni mustaqil tahlil qila oladigan shaxs bo‘lishi kerak. Vizual mediata‘lim bu borada hal qiluvchi rol o‘ynaydi. Tahlillar natijasidan kelib chiqib, quyidagi takliflar ilgari suriladi:

1. **Ta‘lim standartlarini yangilash:** Umumiy o‘rta, o‘rta maxsus va oliy ta‘limning davlat ta‘lim standartlari va o‘quv dasturlariga "media savodxonlik", xususan, "vizual savodxonlik" kompetensiyalarini kiritish.

2. **O‘qituvchilar malakasini oshirish:** Respublika ta‘lim markazi va pedagog kadrlarni qayta tayyorlash va ularning malakasini oshirish hududiy markazlari qoshida vizual mediata‘lim bo‘yicha qisqa va uzoq muddatli, amaliyotga yo‘naltirilgan kurslarni tashkil etish.

3. **Metodik baza yaratish:** O‘zbek tilida vizual mediata‘limga oid o‘quv-uslubiy qo‘llanmalar, dars ishlanmalari, onlayn resurslar va videodarslar platformasini yaratish. Bunda mahalliy va xalqaro ekspertlar hamkorligini yo‘lga qo‘yish.

4. **Fanlararo integratsiya:** Boshlang‘ich sinflarda san‘at va texnologiya darslarida, yuqori sinflarda esa ona tili, adabiyot, tarix, informatika va huquq fanlari doirasida vizual kontentni tahlil qilishga qaratilgan mavzularni va amaliy topshiriqlarni kiritish.

5. **Ommalashtirish va hamkorlik:** Ota-onalar, OAV vakillari va keng jamoatchilik o‘rtasida vizual mediata‘limning ahamiyati haqida tushuntirish ishlarini olib borish, "eng yaxshi media-dars", "feyklarni fosh qilamiz" kabi tanlov va loyihalarni tashkil etish.

Vizual mediata‘lim – bu shunchaki qo‘shimcha mashg‘ulot emas, balki axborot urushlari va raqamli manipulyatsiyalar avj olgan davrda millatning intellektual xavfsizligini ta‘minlovchi strategik ahamiyatga ega yo‘nalishdir.

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INTERBANK ACCOUNTING SYSTEM

Karshi State Technical University

Faculty of Economics and Management, Banking Department

1st year student **Berdiyeva Aziza Qalandar qizi**

Abstract : Commercial banks by credit to give further expanding They are going . period development with Shahdam step throw for the purpose and competition to the fight endure give in receiving own service types multiplication and development condition . This in turn commerce banks private capital national and international standards to the level zoom in according to scientific and practical importance has was research take to go question Credit operations done in increasing problematic of loans to the surface their arrival , accounting account international standards requirements based on order to put necessity as is putting . This out of necessity come out , commercial in banks loans according to pay and probable losses reserves processes account improvement current from issues one is considered .

Key words : Commercial bank,debit,credit , credit account , capital, reserve fund, account sheet , Credit transactions , contract , balance sheet .

ENTRANCE

Uzbekistan Republic to independence from what has been achieved next short time inside bank sector develop for big opportunities created and commerce banks activity this short time inside than expected also more efficient improved . Commercial banks activity improvement main from the reasons one Uzbekistan Republic of world in the economy place and international economic of connections expansion is considered . Market economy social of life all to the fields wide enter going current in the situation bank system modern requirements based on this in the system management processes to improve was need increasing is going on .

President Shavkat Mirziyoyev Uzbekistan Republic President's inauguration attitude with did in his speech in the future all in the fields actions strategy done increase and high to the results achieve the necessity emphasized : " our our task experience increase and development . This our international to practice based development and update our model solid is a symbol of this . attitude with we short and middle term in perspective designated to goals achieve for many labor let's do

" need " [1]. Indeed , the last in years our economy potential increase for many affairs In particular , the national currency free conversion to do system complete changed , business taxes reduced , credit to take opportunity expanded , free economic zones created , investors wide extensive benefits Also , the country currency in the sector from the news one this to the population currency operations done increase facilitating , as well as legal and physical individuals for edge hand currency free buy to take and sell opportunities creative new bank services current is to reach . hand currency .

Today on the day every one our day our country economy in development important factor divider to the news rich is happening , including the world banking and finance system intense at a pace developed progress as a result of the economy important from the network one calculated bank in the field also new modern information and communication from technologies to use further more need is being felt .

Indeed , commerce banks by information technologies used without being shown all of services speed , quality and transparency today's day is a requirement .

Now traditional bank services instead full occupying modern remote bank of services various appearances exactly this speed , quality and trust providing no to whom secret it's not .

LITERATURE ANALYSIS

Uzbekistan Decree of the President of the Republic of Uzbekistan No. PF-4947 dated February 7 , 2017 " On republic further develop according to actions strategy "On " decree bank system management mechanisms stream one element mutual related in the case study and analysis to grow through there is problems solution find and them own on time eliminate to reach requirement will reach .

Current on the day bank assets in the composition of loans share of 80 percent , credit portfolio in the composition far term of loans 95 percent share , foreign in currency of loans share of 55 percent close to be credit risk level from above and about him information fast and good quality formation out of necessity evidence gives .

Commercial banks by credit to give further expanding They are going . period development with Shahdam step throw for the purpose and competition to the fight endure give in receiving own service types multiplication and development



condition . This own in turn commerce banks private capital national and international standards to the level zoom in according to scientific and practical importance has was research take to go question is doing .

Uzbekistan " currency of the Republic" order to put "about" To the law appropriate commerce to banks internal and international (cross-border) currency operations done to increase permission [2]. National currency with operations in Uzbekistan Republic in the territory done is increased .

Outside hand currency with international (cross-border) transactions current international operations and capital flows (capital transfers) are divided into . Usually , currency operations the following own inside takes :

Own in turn , commerce in banks edge hand in the currency accounting transfers Uzbekistan Republic Justice Ministry of Education, Science and Technology, No. 15/3, dated July 17 , 2004 , " Uzbekistan" Republic of commerce in banks accounting in "accounts" register held . plan . Foreign hand in the currency operations calculations of the plan following accounts according to done is increased .

DISCUSSION AND RESULTS

The organization calculation in their accounts funds into account to take and control to do money his/her behavior right organization in organizations calculations and loans organization to grow for important . Economic activity done increase in the process organizations each other with economic to relationships they enter . Permanent accordingly done increaseable economic tools rotation various kind of calculations permanent to the update take is coming .

Calculations organizations by cash penniless calculations through done increased and money funds turnover funds of the cycle elementary and final stages is considered . Entrepreneurship activity efficiency mainly money flow from the speed is determined .

Cash money is absolute to liquidity has was turnover of funds only type , that is obligations pay tool as immediately work The ability of organizations current in their accounts there is was money amount the most important payment tool as payment ability determined-seller or buyer as working organizations financial of the situation from the characteristics one .

Current in the accounts organizations money currents available . External of calculations types of the following consists of : delivery providers and contractors



with accounts , customers and customers with accounts , banks with structured contracts according to employees with accounts , banks with loans according to calculations , state with taxes , fees , insurance awards are from calculations done increaseable of calculations external types .

Current on the day stream one commerce bank his/her own credit policy working out , credit their relationship this politics through they walk Central bank and credit according to general instructions gives . This in place credit lines about stopped Let's go . Foreign bank in practice of lending two method known . First of the method importance every one loan individual in order seeing Credit known on purpose need for funds to satisfy This is given . method clear for a period of time credit in separation is applied .

Second in a way credit bank by debt to the recipient in advance by designating placed credit limit according to is given , in which debt recipient to him/her placed payment document own on time pay obligation takes .

Lending this shape credit line that Opened credit line credit on account of all calculation money documents bank and customer in the mouth to the contract mainly payment for 1 year opens , but credit line from it short for a period of time also opening possible . Credit line deadline during customer bank with additional the agreement wanted on time credit to receive possible . But bank debt recipient's financial status weakened if it is determined , to the customer designated limit on the border credit from giving head weight possible . Credit line , usually , financial stable and considerate to customers opens . Client at your request according to credit limit again seeing exit possible .

Credit line - bank or other credit organization debt to the recipient known period during agreed limit within legal in terms of formalized credit to give is a liability . Credit of the line opening creditor and debtor's far term during cooperation means .

This in place international credit to the line definition giving let's go : international credit line this international on a scale debt to the recipient known period during agreed limit within legal in terms of formalized credit to give is an obligation .

Credit line one from the year not exceeded stream how for a period of time payment documents pay for is given , it is returned renewable and irretrievable to be possible . In this limit after completion after bank and debtor between attitude



own to the end This will given from definitions visible it is so credit on the line debt to give deadlines various T. Kosterina's in my opinion credit line short for a period of time opens , O.Lavrushin in my opinion term importance has it's not is the main attention of credit maximum to the amount is being corrected .

Of these conclusion did without international credit to the line as follows definition if we give to the goal appropriate will be : international credit line international finance institutes by debt to the recipients known one for a period of time credit limit within credit to give obligation means .

Continue deliverable and unattainable credit lines mutual differs . Continue unattainable credit line opened loan given and after return then customer and bank between connections will be terminated . Continued credit on the line credit designated limit based on automatic accordingly is given and If the bank by to the customer credit line known to goods one contract according to one year inside money pay for opened if , credit line targeted will be .

In banks loans account organization in doing accounting on account of generally accepted made from principles used : accounting account two side writing method management ; continuity ; economy operations , assets and passives in money estimation ; accuracy ; calculation ; advance according to knowledge (carefulness); content from the form superiority ; indicators comparability ; financial of the report neutrality ; report period income and expenses compliance ; assets and obligations real evaluation .

Credit operations into account to take for credit from their accounts and from the balance sheet outside from their accounts is used .

In this one disposable and credit from the line used without credit operations into account is taken .

Credit to take for at the bank stream one credit according to separately credit account opens . Client credit to take for to the bank designated in order documents package formalized submits . Credit commission to the decision according to credit to give necessary that if found bank and credit recipient between credit contract is compiled .

CONCLUSION

Brief as in other words , commerce banks currency operations into account to take and check for legal from procedures they use .

Commercial banks by currency operations into account to take and audit to do with related problems short term in the future Uzbekistan currency market development and currency operations of freedom increase as a result eliminate Their in development important from issues one bank , currency and accounting account in the field of employees scientific and practical potential development .

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ИҚТИСОДИЁТНИ СОЛИҚЛАР ОРҚАЛИ РИВОЖЛАНТИРИШ ВА ТАРТИБГА СОЛИШ МЕХАНИЗМИ МОҲИЯТИ

Бабахонов Жафар Мухиддинович

**Қарши давлат техника университети “Молия ва банк иши”
кафедраси доценти**

Аннотация. Мазкур мақолада солиқлар орқали тартибга солиш моҳияти, солиқ механизмининг ҳозирги шароитдаги таъсири, ҳозирги вазият таҳлили, солиқлар орқали тартибга солишнинг иқтисодий жараёнларга таъсир этиш омиллар таҳлили келтирилган. Шунингдек, иқтисодиётни солиқлар орқали тартибга солиш бўйича хулоса ва таклифлар берилган.

Калит сўзлар: солиқ, солиқ механизми, солиқлар орқали тартибга солиш, солиқ сиёсати

Кириш

Ҳар қандай тараққиётни солиқларсиз, аниқроғи солиқлар орқали тартибга солиш механизмлари таъсирсиз тасаввур қилиб бўлмайди.

Иқтисодиётни таркибий ўзгартириш жараёнларини чуқурлаштириш шароитида республикаимиз ўзининг давлат илмий-техник ва инновацион бюджет- солиқ сиёсатини ишлаб чиқиш ҳамда амалга оширишга алоҳида эътибор қаратган. Ўзбекистон Республикаси Президенти таъкидлаганидек, “Макроиқтисодий барқарорликни янада мустаҳкамлаш ва иқтисодий ўсишнинг юқори суръатларини сақлаб қолиш, жумладан, Давлат бюджети барча даражада мутаносиб, миллий валюта ва ички бозордаги нарх даражаси барқарор бўлишини таъминлаш – энг муҳим устувор вазифамиздир” [1].

Иқтисодиётни интеграциялашуви ва глобаллашуви тобора кучайиб бораётган шароитда солиқлар орқали тартибга солиш механизми унинг имкониятлари мамлакатнинг ижтимоий-иқтисодий ўсиши ҳамда рақобатбардошлигини таъминлашга қаратилиши муҳим аҳамиятга эга. Иқтисодиётни солиқлар орқали тартибга солиш механизми мамлакат ижтимоий иқтисодиётини ривожлантирувчи шартлардан бири бўлиб қолиши лозим. Ҳозирда солиқлар орқали тартибга солиш механизмини



такомиллаштириш ижтимоий-иқтисодий жараёнларни дунё андозалари даражасига кўтарилиш мавқеини мустаҳкамлашга хизмат қилмоғи лозим.

Мамлакатдаги инфратузилмаларни рақобатбардошлилигини сифатли инновацион маҳсулотларни ишлаб чиқариш билан таъминлашда, таркибий қайта қуришларни амалга оширишда солиқлар орқали тартибга солиш механизми ўта муҳим восита сифатида хизмат қилади. Маълумки, солиқлар орқали тартибга солиш кенг маънода ижтимоий-иқтисодий тараққиёт омили сифатида долзарбдир.

Адабиётлар таҳлили

Махсус иқтисодий адабиётларда, кундалик ҳаётимизда, турли ахборот воситаларида турмуш тарзига кириб келаётган ва асосий терминларга айланаётган “солиқ механизми”, “солиқ механизмини ташкил этиш”, “солиқ менежменти”, “солиқлар орқали бошқариш”, “солиқ механизми элементлари”, “инновацион солиқ механизми” ва шу каби бошқа терминларнинг мазмуни ва улун қабул қилинган солиқ концепцияларини қабул қилишга қаратилган бошқарув жараёнининг ажралмас қисмидир” [3].

С. Барулин солиқ орқали тартибга солишни амалиётда солиқ вазифалари ва солиқ концепцияларини қабул қилиш доирасида турли фойдали иш коэффициентларидан фойдаланишда солиқлар орқали тартибга солиш имкониятларидан фойдаланишда шахсларнинг субъектив фаолияти сифатида эътироф этади [4].

З.Ахроров солиқ орқали тартибга солиш – бюджетга солиқ тушумларини таъминлаш ва шу билан бирга хўжалик юритувчи субъектларнинг фойданинг бир қисмини қайта тақсимлаш орқали саноат корхоналарининг инновацион ва инвестицион фаолиятларини рағбатлантириш эканлигини таъкидлайди [5].

Тадқиқот методологияси

Мақолада илмий мушоҳада, абстракт-мантикий фикрлаш, қиёсий таҳлил, маълумотларни гуруҳлаш усулларида фойдаланилди.

Таҳлил ва натижалар

Бугунги кунда иқтисодиётни модернизация ва диверсификация қилиш, техник-технологик янгилаш, унинг рақобатбардошлилигини кескин ошириш, экспорт салоҳиятини юксалтириш, импортбоп товарлар ишлаб чиқариш, аҳолининг тўлов қобилиятини ошириш, хўжалик субъектларининг



самарадорлигини ошириш, инвестиция оқимларини турли манбалардан кириб келишини, инновацион маҳсулотлар ишлаб чиқаришга қаратилган муҳим устувор лойиҳаларни амалга ошириш каби вазифаларни ҳал этилиши солиқлар орқали тартибга солиш механизмини оқилона бошқарилишига боғлиқ.

Ўзбекистон Республикаси Президентининг 2018 йил 28 декабрдаги Олий Мажлис палаталарига қилган Мурожаатномасида “Бюджет маблағларидан самарали фойдаланиш тизимини янада такомиллаштириш зарур. Бюджет ҳисобидан маблағ ажратиладиган ҳар қандай дастур ёки лойиҳанинг сифат ва миқдор кўрсаткичларидан иборат, натижага йўналтирилган индикаторлари бўлиши керак” [6] деб таъкидлаб ўтди. Бу эса, бюджет сиёсати олдида турган вазифаларнинг нечоғли долзарб эканлигини акс эттиради.

Ушбу фикрдан мамлакатнинг ижтимоий-иқтисодий ривожланиш истикболларини аниқ белгилаш ва унга қаратилган вазифалар доирасида илмий- инновацион фаолиятни узоқ муддатли истикболга мўлжалланган ташкилий шароитларда рақобатли бўлишлигини таъминлаш бир вақтнинг ўзида солиқлар орқали тартибга солиш механизмини такомиллаштириб борилиши унинг ҳуқуқий асосларини ҳам ривожлантирилиб борилиши билан эътиборли бўлиши мақсадга мувофиқдир.

Иқтисодиётни солиқлар орқали тартибга солиш механизмини ҳуқуқий асосларини ривожлантиришда иқтисодиётни тузилмавий қайта қуришда ва турли хил рақобатбардош маҳсулот (товар, хизмат)лар билан бозорни тўйинтиришда катта аҳамият касб этмоғи лозим.

Солиқ механизми моҳиятини талқин этишда асосан 6 та йўналишдаги назарий қарашлар мавжуд:

солиқ механизми таркиби ва моҳияти, шунингдек унинг ижтимоий-иқтисодий жараёнларни ривожлантиришдаги вазифалари [7];

солиқ механизмлари орқали иқтисодиётни давлат томонидан тартибга солиш ва иқтисодий ўсишни таъминлаш [8];

солиқлар орқали тартибга солиш объектлари ва критерияларини аниқлаш [9];

бюджетга солиқ ва мажбурий тўловлар;

солиқ имтиёзларини тақдим этиш тартиби, шунингдек, қўлланиши мумкин бўлган санкциялар, маъмурий жарималар [10];

солиқлар миқдорини оптималлаштириш [11].

Қайд этилган 6 та талқин бир-бирига боғлиқдир, аммо улар солиқлар орқали тартибга солиш механизми моҳиятини, хусусиятларини ва ижтимоий-иқтисодий тараққиётдаги ролини тўлиқ узвий боғлиқликни таъминлаш орқали очиб бера олмайди.

Масалан, механизм бу техник соҳалардан иқтисодиёт соҳасига кириб келган иқтисодий воқелик бўлсада, механизм сўзи мазмун-моҳиятига хусусиятидан келиб чиқиб элементлардан, усуллардан, принциплардан иқтисодиётда рационал фойдаланишни англатади. У субъектив тушунча сифатида иқтисодий принциплар моҳияти билан боғлиқ бўлмаган ҳолда давлатнинг хоҳиши билан амал қилади. Шу боис давлат солиқ элементларига нисбатан қўшимчалар киритилиши ёки самара бермайдиган солиқ элементини солиқ муносабатларини шакллантирувчи омиллар таркибидан чиқариши мумкин. Шу боис ҳам юқорида механизм солиқ сиёсатини мақсадга эришилишини таъминловчи солиқ муносабатларининг қоидалари ва воситалари йиғиндиси деб таъкидлаб ўтилган эди. Бу бежис эмас, албатта.

Солиқлар орқали тартибга солиш механизмни ташкил этиш шундай бир солиқ муносабатларини яратилишини англатадики, қайсиким иқтисодий жиҳатдан (аммо маъмурий эмас) шундай бир муҳитни юзага келтирадики, унда давлат, корхона ва ишчи манфаатларини бир чизикда кесиши таъминланади. Айнан уларни бир нуқтага туташтириш эвазига ишлаб чиқариш самарадорлиги, инновацион тараққиёт, ижтимоий соҳаларда эса синергетик самара таъминланади.

Биз солиқ механизми ҳақида гапирганимизда солиқ элементларини, усулларини ва амал қилиш принципларини бевосита кўз олдимизга келтиришга ҳаракат қиламиз. Аммо бундай ҳаракатларимизни тўлақонли тўғри, унга асосланиб солиқларни тартибга келтириш механизмлари самара бермоқда деб фикр билдириш солиқ мураккабликларини янада мураккаблашиб кетишига ҳам сабаб бўлиши ҳам мумкин.

Бизнингча, иқтисодиётни солиқлар орқали тартибга солиш механизмнинг асосий мақсадлари қаторидан иқтисодий цикл тебранишларини юмшатиш, барқарор ЯИМ ўсишини таъминлаш, инфляциянинг мўътадил даражаси шароитида бандликнинг юқори



даражасини таъминлаш ҳам жой олмоғи лозим. Иқтисодий ислохотларни босқичма-босқич амалга оширилиши солиқлар орқали тартибга солиш механизми таъсирида макрокўрсаткичларни тўлиқ динамик силжишлари учун имконият яратиб берди.

Карантин шароитида босиб ўтилаётган ижтимоий-иқтисодий тараққиёт йўлининг мониторинги, ҳозирги пандемия коронавирус шароитида (COVID-19) жаҳон бозори конъюктураси кескин ўзгариб рақобат муҳитини янада кучайтириб бориш учун давлатимиз янада барқарор ва жадал суръатлар билан ривожлантириш учун мутлақо янгича ёндашув орқали солиқлар орқали тартибга солиш механизмларини ҳаётчанлик даражасини сақлаб қолиш ва такомиллаштириб боришни тақозо этади.

Хулоса ва таклифлар

ҳозирги шароитда солиқ тизимида амалга оширилаётган туб ўзгаришларда қуйидагиларни амалга ошириш мақсадга мувофиқ бўлади деб ҳисоблаймиз.

Биринчидан, иқтисодиётни модернизациялаш талабларига тўлиқ жавоб бера оладиган солиқ тизимини юзага келтириш ва амалда жорий этиш. Бунинг учун эса, ривожланган мамлакатларнинг солиқ тизимини ўрганиш тажрибалари асосида амалга ошириш лозим.

Иккинчидан, иқтисодиётда соғлом рақобатни муҳитини таъминлаш мақсадида солиқ юки адолатли тақсимланиши лозим.

Учинчидан, солиқ тизимида бажарилган ишлар асосан иқтисодий-ижтимоий ва географик жойлашув шарт-шароитларидан келиб чиққан ҳолда амалга оширилмоғи лозим.

Тўртинчидан, солиқ муносабатларининг ривожланиш жараёни иқтисодий муносабатларнинг қарама-қаршиликларини ҳисобга олган ҳолда амалга оширилиши керак. Шу шартдагина, ижтимоий-иқтисодий жараёнларни такомиллаштириш чора-тадбирлари самарали ҳисобланади ва белгиланган вазифалар бажарилади

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O'BEKISTONDA YURIDIK SHAXSLAR FOYDASINI SOLIQQA TORTISHNING JAHON TAJRIBASI

Babaxonov Ja'far Muhiddinovich

**Qarshi davlat texnika universiteti “Moliya va bank ishi” kafedrası
dotsenti**

Annotatsiya: Ushbu maqolada yuridik shaxslar foyda solig'ini undirishda soliq ma'muriyatchiligini takomillashtirish sohasidagi xorijiy mamlakatlar tajribasini o'rganildi va ushbu tajribani O'zbekistonda qo'llash imkoniyatlari tahlil qilingan.

Kalit so'zlar: foyda, investitsiyalar, xarajatlar, imtiyozlar, realizatsiya, transformatsiya.

Аннотация: В данной статье изучен опыт зарубежных стран в области совершенствования налогового администрирования при сборе налога на прибыль организаций и проанализированы возможности применения этого опыта в Узбекистане.

Ключевые слова: прибыль, инвестиции, затраты, выгода, реализация, преобразование.

Annotation: In this thesis, the experience of foreign countries in the field of improving the tax administration in the collection of profit tax of legal entities was studied and the possibilities of applying this experience in Uzbekistan were analyzed.

Key words: profit, investment, cost, benefit, realization, transformation.

Kirish.

Foydani soliqqa tortish bo'yicha xorijiy tajribani miqdoriy va sifat mezonlari bo'yicha qiyosiy tahlil qilish O'zbekiston soliq siyosatida muhim hisoblanadi va foydani soliqqa tortishni takomillashtirishning bir qator yo'nalishlarini aniqlashga kerakki, O'zbekiston soliq tizimi ma'lum darajada boshqa mamlakatlarning soliqqa tortish tizimlarining hosilasi bo'lib, bu quyidagi umumiy fikrlar mavjudligi bilan tasdiqlanadi: - O'zbekistonda 15% foyda solig'i stavkasi o'rtacha Yevropa darajasiga (27%) solishtirish mumkin – foyda solig'i bazasi barcha manbalardan



olinadigan yalpi daromad va belgilangan ishlab chiqarish xarajatlari o'rtasidagi farq soliqa tortiladigan daromadlarni hisoblashda har xil turdagi soliq imtiyozlarining mavjudligi, shu jumladan, o'xshash turdagi imtiyozlar.

Hozirgi davrda O'zbekistonning dunyo hamjamiyatiga chiqishi tezlashganligi jarayonida moliyaviy hisobotlarni tuzish va etkazib berish jarayonini xalqaro talablarga muvofiqlashtirish majburiyatini keltirib chiqarmoqda. Shuningdek, uning nazariy- huquqiy asoslarini moslash, chet-ellik investorlar talabiga javob beradigan hisobotlarni tuzish vazifasini qo'yadi.

Xorijiy mamlakatlarda va O'zbekistonda foyda solig'ini tartibga solish vositalarini sifat va miqdoriy mezonlar bo'yicha qiyosiy tahlil qilish uchun har bir mamlakatning soliq tizimi va ularning asosiy soliq vositalarini ko'rib chiqish zarur. Soliq mezonlari bo'yicha soliq tizimining progressivligida soliqlarning daromadlarga muvofiq soliq to'lovchilar o'rtasida qanday taqsimlanishini o'rganadi. Xorijiy mamlakatlarda progressiv soliqa tortish tizimi tez-tez qo'llaniladi, unda daromad oshishi bilan soliq stavkasi oshadi. O'zbekistonda ham progressiv soliqa tortish bor.

Adabiyotlar sharhi

Tahlilchi J.Mintz “foyda solig'i bo'yicha bir qator fikrlar ega bo'lib, unda foyda solig'i stavkasini pasaytirish bo'yicha J.Mintz iqtisodiy o'sishni rag'batlantirish uchun korxonalarga soliq yukini kamaytirishni qo'llab-quvvatlaydi. Uning fikricha, foyda solig'ining pastligi kompaniyalarni sarmoya kiritishga, yangi ish o'rinlari yaratishga va samaradorlikni oshirishga undashi mumkin. Soliq tizimini soddalashtirish bo'yicha J.Mintz soliq tizimini yanada shaffof va tushunarli qilish uchun soddalashtirishni yoqlaydi.”[1]

Rus olimi Y.B.Shuvalovning fikriga ko'ra, foyda solig'i ma'muriyatchiligi bo'yicha “ soliq hisobining har qanday tartibi yuridik shaxslardan olinadigan foyda solig'i bo'yicha soliq solinadigan bazani shakllantirish uchun ma'lumotlar tizimlashtirilgan buxgalteriya registrlariga asoslanadi. Buxgalteriya hisobi va soliq hisobi o'rtasidagi o'zaro munosabatlar birinchi navbatda buxgalteriya hisobining ikki turi parallel ravishda tashkil etilganda paydo bo'ladi. Olimning fikricha, kichik biznes sub'ektlari uchun, buxgalteriya hisobi tizimi va soliq hisobi tizimini imkon qadar yaqinlashtirish kerakligi to'g'risidagi fikrlarni ilgari surgan.” [2]



Tahlil va natijalar.

Singapurda foyda solig'i kompaniyaning moliyaviy natijalar to'g'risidagi hisobotining foyda solig'i solingunga qadar foyda ko'rsatkichiga tuzatishlar kiritish orqali hisoblab chiqiladi. Foyda solig'i stavkasi 2010 yildan boshlab 17%ni tashkil qiladi. Ungacha 18% bo'lgan. Singapur foyda solig'i bir pog'onali hisoblanadi, ya'ni rezident kompaniyalar uchun foyda solig'i to'langandan so'ng dividend uchun soliq undirilmaydi. Singapur davlatida foyda solig'i hisoblashning umumiy mexanizmini ko'rib chiqamiz. Foyda solig'i hisoboti quyidagi ko'rsatkichlardan iborat bo'ladi:

Foyda solig'i solingunga qadar foyda.

Bu ko'rsatkich kompaniyaning moliyaviy natijalar to'g'risidagi hisobotiga asoslanadi.

Soliq solinmaydigan daromadlar

Umumiy holda daromadlar ikkiga bo'linadi. Kapital daromadlar va tushumga oid daromadlar. Masalan, asosiy vositani sotilishidan daromad, valyuta pul mablag'ini kurs farqidan daromad, majburiyatni hisobdan chiqarishdan daromadlar kapital daromad hisoblanadi va soliqqa tortilmaydi. Tushumga oid daromadlar tovarlar va xizmatlarni realizatsiya qilishga oid daromatlarni o'zi ichiga oladi va soliqqa tortiladi. Bundan tashqari, rezident kompaniyaning chet elda olingan lekin Singapurga olib kelinmagan daromadlariga ham soliq solinmaydi.

Faoliyatga oid bo'lmagan daromadlar.

Bunday daromadlarga asosan banklardan olinadigan foizlar ko'rinishidagi daromadlar, dividendlar, ijaradan daromadlar va royalti ko'rinishida bo'lishi mumkin. Bu kabi daromadlar soliq solinadigan bazaga hisobot oxirida qayta qo'shiladi.

Xarajatlar chegirilishining asosiy shartlari bo'lib xarajatning faqat daromad olish maqsadida amalga oshirilgan bo'lishi, xarajatlar shartli majburiyatlar natijasida kelib chiqmagan bo'lishi (ya'ni rezerv emas), xarajat kapital xarakterga emas, tushum xarakteriga ega bo'lishi va Soliq aktida chegirilishi to'g'ridan-to'g'ri man qilinmagan bo'lishi lozim. Aks holda chegirilmaydi.

Kapital ajratmalar.



Kapital ajratmaning ma'nosi soliq maqsadlarida hisoblangan amortizatsiyani bildiradi. Buxgalteriya hisobidagi amortizatsiya yuqoridagi chegirilmaydigan xarajat sifatida bazaga qo'shilsa, bu erda soliq maqsadlari uchun hisoblangan kapital ajratmalar soliq bazadan chegiriladi.

O'tgan yillar soliq zararlari.

O'tgan davrlarda faoliyat natijasi bo'yicha soliq zararlari yuzaga kelgan taqdirda ushbu zararlar joriy davr soliq bazasini kamaytirish uchun foydalanilishi mumkin.

Xayriya sarflari bo'yicha chegirma

Xayriya sarflari chegirilmaydigan xarajat sifatida soliq bazasiga qayta qo'shilishiga qaramay mazkur bandga kelib xayriya xarajatlari 2.5 ga ko'paytirilgan holda chegirma beriladi. Buning uchun xayriya ijtimoiy xarakterdagi tashkilotga tegishli shaklda o'tkazilgan bo'lishi lozim.

Soliq imtiyozlari

Soliq bazasini kamaytirishi mumkin bo'lgan ikki xil imtiyoz mavjud. Qisman soliqlardan ozod qilish va yangi startaplar uchun imtiyoz.

Soliq solish bazasi (Foyda solig'i solingunga qadar foyda - Soliq solinmaydigan daromadlar - Faoliyatga oid bo'lmagan daromadlar + Chegirilmaydigan xarajatlari - Kapital ajratmalar - O'tgan yillar soliq zararlari - Xayriya sarflari bo'yicha chegirma - Soliq imtiyozlari) * Soliq stavkasi (17%) = Soliq summasi.

Kapital daromad va tushumga oid daromadni farqlash uchun ularning predmeti bo'lgan mulk sotilishini savdo sifatida qarash yoki qaramaslik uchun 6 ta alomat belgilangan.

Birinchi alomat. Realizatsiya predmeti. Ba'zi mulklardan asosan qayta sotish uchun foydalaniladi va undan shaxsiy maqsadlar uchun kamdan kam hollarda foydalaniladi. Masalan, pandemiya paytida bir savdo kompaniyasi 200 mingta niqob sotib olgan. Mazkur niqoblarni o'z ehtiyojiga olganligini ko'rsatib berishi qiyin bo'lishi mumkin. Chunki, bu kompaniya xodimlari har kun bittadan yangi niqob taqsa ham 10 yilga etadigan niqob sotib olingan.

Ikkinchi alomat. Egaliq qilingan davr. Mulkka qanchalik uzoq egalik qilinsa, uni sotish uchun olinganligi ehtimoli shuncha kam bo'ladi. Masalan, aksiyalarni



uzoq muddat ushlab turgandan so'ng sotilishi bu kompaniya uchun kapital daromadni yuzaga keltiradi va soliqqa tortilmaydi.

Uchinchi alomat. Operatsiyalar soni. Bir xil mulkka oid sotish operatsiyasini muntazam amalga oshirilishi uni tushumga oid operatsiya sifatida qaralishiga sabab bo'ladi. Masalan, kompaniya avtomobillarni import qilgan holda o'z ehtiyojlari uchun odatda 6-12 oy davomida foydalanadi va odatda hisobdan chiqaradi. Bunday muntazamlilik ushbu operatsiyalarni tushumga oid daromad sifatida qarashga sabab bo'ladi.

To'rtinchi alomat. Sotish uchun tayyorlash. Odatda tovarlar sotish uchun tayyorlanadi. Agar o'z foydalanishi uchun olingan mulkni ham bozorda sotish uchun alohida qo'shimcha sarflar amalga oshirilsa, ushbu operatsiyadan ko'zlangan asl maqsad undan foydalanish emas, balki bozorda sotish bo'lganini ko'rsatadi. Masalan, bino sotib olingan. Binoni biroz foydalangandan so'ng qayta ta'mirlashga kirishilgan. Mazkur holat kompaniyaning maqsadi aslida binoni qayta sotish maqsadi bo'lganini ko'rsatishi mumkin.

Beshinchi alomat. Realizatsiya uchun sabab bo'lgan holat. Ba'zan biror mulkni sotish zarurati kompaniyaga etishmayotgan pul mablag'i yoki kreditorlarning talabi natijasida bo'lishi mumkin. Bunday holatda foydalanish uchun olingan mulkni tovar realizatsiyasi sifatida qaralishi ehtimoli kam bo'ladi.

Oltinchi alomat. Foyda ko'rish istagi. Biror mulkni qayta sotish orqali foyda ko'rish istagi borligi ushbu operatsiyani tovar realizatsiyasi sifatida qaralishiga sabab bo'ladi.

Singapur davlatida foyda solig'i bo'yicha soliq imtiyozlarini ko'rib chiqamiz. Ushbu imtiyozlar faqat ikkita bo'lib, birinchisi yangi kompaniyalar uchun belgilangan miqdorgacha to'liq soliqdan ozod qilish, ikkinchisi belgilangan miqdorgacha qisman soliqdan ozod qilish hisoblanadi.

To'liq soliqdan ozod qilish imtiyozi

Tadbirkorlikni rivojlantirish va mahalliy kompaniyalarni qo'llab-quvvatlash maqsadida yangi tashkil etilgan kompaniyalar uchun ketma-ket 3 yil davomida imtiyoz beriladi. Bunda yangi tashkil etilgan kompaniya deganda Singapurda tashkil etilgan, Singapur rezidenti bo'lgan va aksiyadorlari 20 kishidan oshmaydigan



jismoniy shaxslardan iborat bo‘lgan kompaniyalar tushuniladi. Bunday kompaniyalar uchun soliq solinadigan daromad summasi quyidagi summaga kamaytiriladi:

Dastlabki 100 000 dollarga teng soliq solinadigan daromadning 75%i soliq solishdan ozod qilinadi;

Keyingi 100 000 dollarga teng soliq solinadigan daromadning 50%i soliq solishdan ozod qilinadi;

Qisman soliqlardan ozod qilish imtiyozi

Barcha kompaniyalar qisman soliqlardan ozod qilish imtiyozidan foydalanishi mumkin. Ushbu imtiyoz yuqoridagi imtiyoz bilan bir vaqtda qo‘llanmaydi. Ushbu imtiyoz summasi soliq solinadigan daromad summasini quyidagilar summasiga kamaytiriladi:

Dastlabki 10 000 dollarga teng soliq solinadigan daromadning 75%i soliq solishdan ozod qilinadi;

Keyingi 190 000 dollarga teng soliq solinadigan daromadning 50%i soliq solishdan ozod qilinadi;

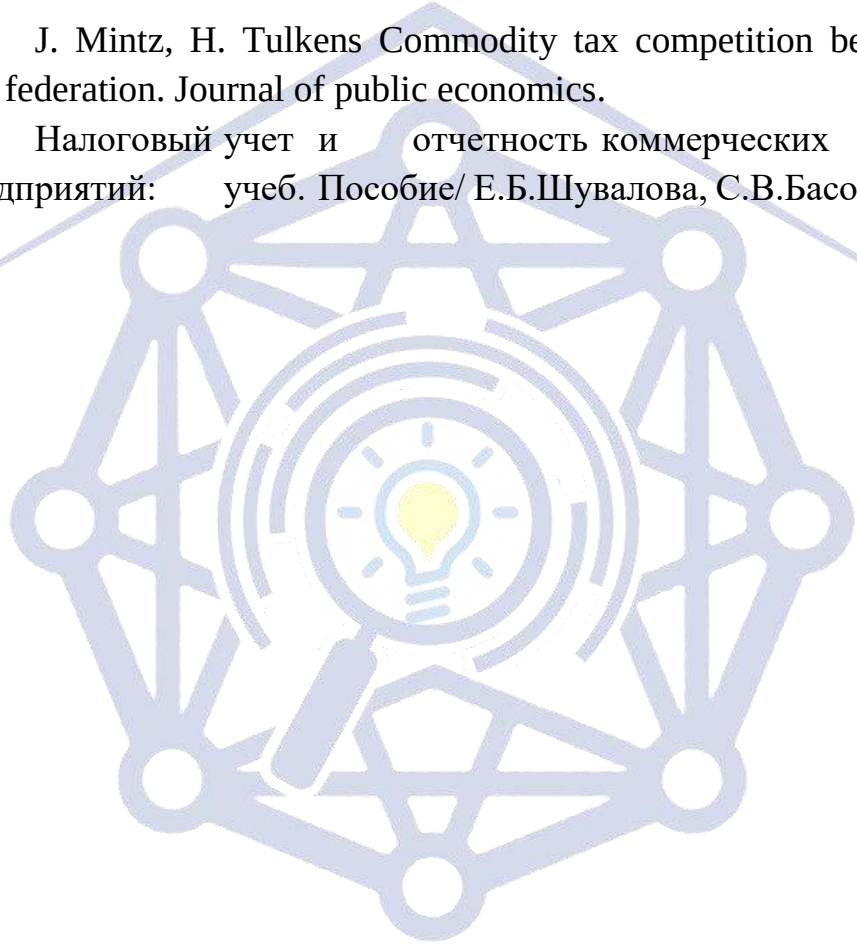
Xulosa.

Singapurning foyda solig‘i tizimi qulayroq va raqobatbardosh bo‘lib, past soliq stavkalari, soliq engilliklari va xalqaro soliq siyosatining kuchliligi bilan ajralib turadi. Yangi kompaniyalar va global biznes uchun Singapurda soliqqa tortish nisbatan engilroq. O‘zbekiston esa foyda soliq stavkasini pasaytirib, ayrim tarmoqlar uchun rag‘batlar yaratmoqda. Singapur va O‘zbekistonning foyda solig‘i tizimlari orasida ayrim o‘xshashliklar mavjud, lekin ular turli soliq siyosatlari va iqtisodiy sharoitlar asosida tashkil etilgan. Singapurda dividendlarga ikki martalik soliq solishdan qochish maqsadida, korporatsiyalar tomonidan berilgan dividendlar daromad solig‘iga tortilmaydi. O‘zbekistonda ham oxirgi yillarda bu borada o‘xshash siyosat mavjud, ya’ni ayrim holatlarda dividendlar soliqlardan ozod qilingan. Singapurda soliq qonunchiligi juda soddalashtirilgan va shaffof bo‘lib, tadbirkorlar va investorlar uchun tushunarli. O‘zbekiston ham soliq tizimini soddalashtirish orqali korxonalar uchun ortiqcha byurokratik to‘siqlarni kamaytirib kelmoqda.



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IMAGE DENOISING AND RECONSTRUCTION IN MEDICAL IMAGING

Khatamov Orif Yusupovich

2st year PhD student of Samarkand State University named after Sharof Rashidov

E-mail: orifxatamov07@gmail.com

Abstract. This article analyzes methods for detecting and effectively removing noise in medical images to restore high-quality diagnostic images. Common noise types such as Gaussian, salt and pepper, and speckle noise are examined in detail due to their frequent occurrence in MRI, CT, and ultrasound modalities. Both classical filtering methods (such as median and Gaussian filters) and advanced techniques (including Non-Local Means, Wavelet Denoising, and Deep Learning-based approaches) are discussed for their effectiveness in enhancing image clarity. Practical implementations using the Python programming language are provided to demonstrate the application of these techniques in real-world scenarios. The study also includes comparative visual results before and after denoising to assess improvements in image quality. This work serves as a practical guide for researchers and developers working on medical image processing and reconstruction.

Key words: noise reduction, medical imaging, reconstruction, Gaussian noise, median filter, Python, denoising, AI, CNN.

Introduction. Images used in medical diagnostics, such as MRI, CT, and X-ray images, are often contaminated with various noises. These noises negatively affect the accuracy of diagnosis. Therefore, the process of cleaning medical images from noise is an important step in improving their quality and ensuring diagnostic reliability.

Medical imaging plays a pivotal role in modern healthcare by enabling accurate and early diagnosis of diseases through visual analysis of internal body structures. However, during image acquisition and transmission, medical images such as MRI (Magnetic Resonance Imaging), CT (Computed Tomography), and ultrasound scans often suffer from various types of noise. This noise - originating from sensor limitations, patient movement, or transmission errors can obscure



critical anatomical details, potentially leading to misdiagnosis or the need for repeat examinations.

Common types of noise in medical imaging include gaussian noise, salt and pepper noise, and speckle noise. Each of these noise types has unique characteristics and requires specialized techniques for effective removal. For instance, while Gaussian noise can be smoothed using Gaussian or bilateral filters, salt and pepper noise is more effectively removed using median-based approaches. Speckle noise, particularly prevalent in ultrasound images, requires statistical or wavelet-based filtering methods.

In recent years, alongside traditional image processing techniques, advanced denoising methods such as Non-Local Means (NLM), wavelet transforms, and deep learning-based models like convolutional neural networks (CNNs) have demonstrated superior performance in restoring image quality without compromising diagnostic information.

This study explores a range of noise reduction techniques - ranging from classical filters to state-of-the-art AI models - using practical examples implemented in the Python programming language. The effectiveness of these methods is evaluated visually and quantitatively, highlighting their potential in enhancing diagnostic accuracy. The results and code examples presented aim to serve as a useful guide for researchers, engineers, and healthcare professionals engaged in medical image analysis and reconstruction.

Approaches to noise removal include approaches at different levels, from classical filtering methods to algorithms based on deep learning.[1]

Types of Noise and Methods of Combating Them. Gaussian noise:

Reason: Random movements in digital sensors.

Solution: Gaussian filter, Bilateral filter, DnCNN model.

Salt & Pepper Noise (Salt & Pepper):

Reason: Transmission errors.

Solution: Median filter, Adaptive Median Filter.

Speckle noise:

Reason: Long-distance echo and wave interference.

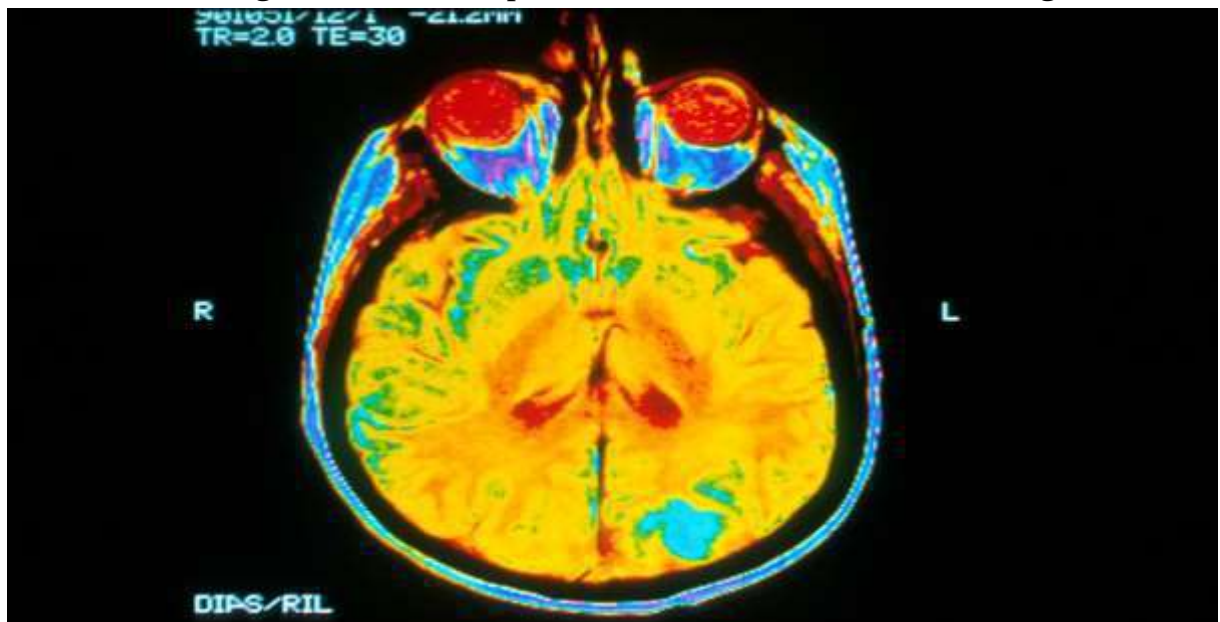
Solution: Lee, Frost and Kuan filters, Wavelet Transform.

Practical Examples in Medical Imaging Libraries used in the program:

```
import cv2
```



```
import numpy as np
import matplotlib.pyplot as plt
from skimage.restoration import denoise_nl_means, estimate_sigma
```



Adding and cleaning Gaussian noise:

```
# Tasvirni yuklash
i = cv2.imread('brain_mri.png', cv2.IMREAD_GRAYSCALE)
img = cv2.resize(i, (256, 256))
# Gauss shovqini qo'shish
mean = 0
var = 0.01
sigma = var**0.5
gauss = np.random.normal(mean, sigma, img.shape)
noisy = img + gauss*255
noisy = np.clip(noisy, 0, 255).astype(np.uint8)
# Non-Local Means Denoising
sigma_est = np.mean(estimate_sigma(noisy, multichannel=False))
den = denoise_nl_means(noisy, h=1.15 * sigma_est, fast_mode=True)
den = (den * 255).astype(np.uint8)
# Vizualizatsiya
plt.figure(figsize=(12,4))
plt.subplot(1,3,1); plt.imshow(img, cmap='gray'); plt.title('Asl')
```

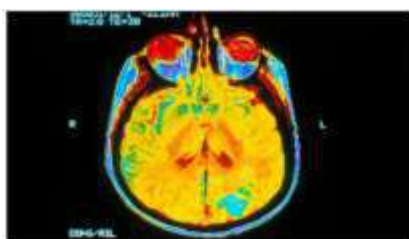



```
plt.subplot(1,3,2); plt.imshow(noisy, cmap='gray'); plt.title('Gauss shovqinli')
plt.subplot(1,3,3); plt.imshow(den, cmap='gray'); plt.title('Denoised')
plt.show()
```

Image Results

Original MRI Image

Clear in original
condition



Gaussian Noise Image

Contrast lost due to noise



Denoising Result

Smoothed, contrast restored



These results show that the accuracy of medical MR images can be significantly improved by removing noise.

Conclusion. Medical image restoration and denoising algorithms are of great importance in the healthcare industry. A good denoising algorithm increases diagnostic accuracy, helps in early detection of disease, and reduces the need for redundant analysis. Practical approaches in the Python programming language are an effective tool for achieving advanced results in this field.

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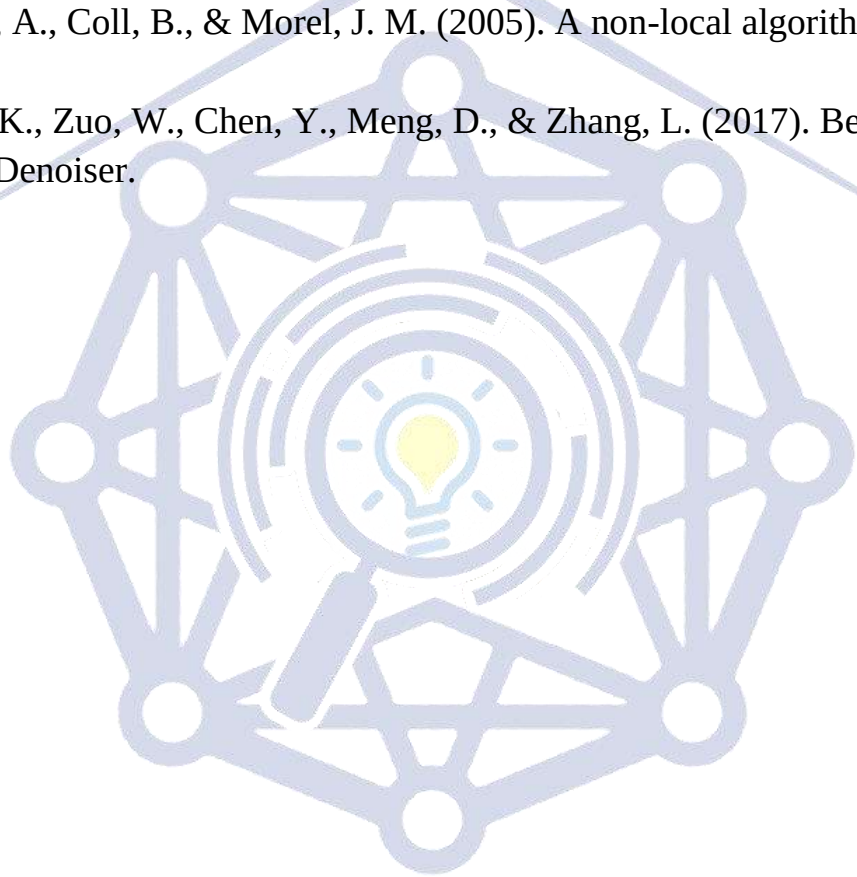
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BASED ON TECHNOLOGICAL PARAMETERS OF IMPROVED COTTON SEPARATORS

Maxmudova Gulshanoy Ozodjon qizi

Fergana State Technical University, Uzbekistan.gulshanoyislamova7@gmail.com

Аннотация: Ушбу мақолада пахтани ташувчи ҳаводан ажратиш жараёнида тола билан таъсирда бўлувчи ишчи қисмларнинг маҳсулот дастлабки сифат кўрсаткичларига таъсири ўрганилди. Унга кўра мавжуд қонуниятлар асосида назарий таҳлиллар олиб борилди. Реал шароитда мавжуд технология пневмотранспортига узатишдаги муаммолар ва уларнинг амалий ечимлари устида назарий изланишлар олиб борилган. Пахтани ҳаводан ажратиш жараёнга таъсири бўйича назарий изланишлар натижаларига асосланган хулоса ва таклифлар берилган.

Калит сўзлар: пахта хомашёси, сепаратор, ишчи юзалар, пневмотранспорт ускунаси, зарба кучи, ишқаланиш кучи, частота, узилишдаги узайиш, микронейр, сифат кўрсаткичи.

Аннотация: В данной статье изучено влияние разделительных заготовок, подвергающихся воздействию волокна в процессе отделения хлопка от несущего воздуха, на исходные показатели качества продукции. По нему проводился теоретический анализ на основе существующих закономерностей. В реальных условиях проведены теоретические исследования проблем передачи существующей технологии пневмотранспорту и их практические решения. Даны выводы и предложения, основанные на результатах теоретических исследований влияния отделения хлопка от воздуха на процесс.

Ключевые слова: хлопковое сырье, сепаратор, рабочие поверхности, пневмотранспортное оборудование, сила удара, сила трения, частота, удлинение при разрыве, микронейрон, индикатор качества.

Abstract: In this article, the influence of separation blanks exposed to fiber in the process of separating cotton from the carrier air on the initial indicators of product quality is studied. A theoretical analysis based on existing patterns was carried out on it. In real conditions, theoretical studies of the problems of transferring existing technology to pneumatic transport and their practical solutions have been

carried out. Conclusions and suggestions based on the results of theoretical studies of the effect of separation of cotton from air on the process are given.

Keywords: cotton raw materials, separator, working surfaces, pneumatic conveying equipment, impact force, friction force, frequency, elongation at break, microneuron, quality indicator.

INTRODUCTION

Every year, 23-24 mln. tons of cotton fiber is produced, and its annual consumption is 0.5-1.0 million tons more, and the insufficient amount of fiber is covered by raw material reserves. Therefore, cotton cultivation has become one of the promising branches of agriculture on a global scale, and the issues of ensuring the efficiency of cotton production by improving not only the main production, but also the auxiliary technological processes in the initial processing of raw materials, in particular, the separation of cotton from the carrier air, have risen to the level of issues that determine the current state and prospects of the industry.

The primary cotton processing process consists of a unique technological chain, which consists of the following sequential processes: preparation, storage, transportation, drying, cleaning, separation of fiber and lint, and packaging of the finished product. The performance and quality of each equipment and process in this chain are closely related to the performance and quality of the machines preceding it. The entire technological process is provided with raw cotton by air transport equipment.

In cotton ginning enterprises, pneumatic conveying of cotton between gins and workshops is mainly used by suction type. The advantage of suction pneumatic conveying equipment is that the working air pipeline system can be easily and easily changed depending on the location of the storage areas of cotton ginning enterprises, and its length can be extended or shortened by connecting additional pipes to the primary air pipelines, as needed. The performance of pneumatic conveying equipment depends on the total production capacity of the cotton ginning enterprise, that is, the amount of raw cotton processed per hour, and in most enterprises it is an average of 10 tons of raw cotton per hour.

METHODS

Initially, some changes were made to the "SS-15A" and "SS-15M" brand separators developed in 1956, but the basic structures of the construction were preserved [1].

In many literatures on the transportation of cotton by air, in particular, V.A. Schwab, F.G. Zuev, A.M. Korn, A.M. Dzyadzio, A.S. In chamber studies, it was shown that the resistance of the air mixture movement depends on the air flow rate.

In particular, in [2] the author proposed installing a wiper tilted at 45 degrees relative to the radial axis to reduce cotton sticking to the mesh surface and ensure faster separation from it. In this case, issues such as cotton compression between the mesh surface and the wiper and damage to the seed were not taken into account.

Amirov R. In his work [3], he showed that the flow velocity upon arrival at the separator depends not only on the magnitudes of the components and the initial velocity, but also on the coefficient "k" and the concentration of the substance being separated.

A number of scientists [4,5,6,7,8] who were engaged in improving the separator's operation tried to carry out the process of separating cotton from air by using the inertial force generated by the movement of the cotton, by sharply changing the direction of the air flow.

The main part of the separator is the separation zone, where the product is divided. of the material It has been shown that a large chamber is required to ensure its separation from the air during the process of its mass, as described in [9].

In his work on the separation of bulk materials [10], N.E. Avdiev theoretically and experimentally investigated the process of separation of fine particles through a mesh surface. Particles that are in constant contact with the mesh surface are more likely to be separated from the air.

In his work [11], J. Urban studied the process of moving particles of different sizes with air. The basic laws of mechanics were used to determine the changes in particle motion and pressure loss, and the relationship between the air flow velocity and the material transport rate during the transportation of

materials by air flow was studied.

As a result of theoretical and experimental studies of the process of transporting raw cotton by air by P.V. Baydyuk [12], a number of regularities were identified.

Academician of the Academy of Sciences of the Republic of Uzbekistan H.A. Rakhmatullin [13], taking into account the aerodynamic resistance of air to the horizontal movement of a cotton ball, determined the law of motion of cotton in a pipe and put forward the idea that cotton can be separated from air using inertial force. Based on the results of the conducted research, cotton separation1350 hectaresIt is scientifically proven that it occurs at an equal angle of rotation, and at the same time the flow velocity is 16 m/s.

Muradov R.In [14], the behavior of cotton on cone-shaped mesh surfaces was studied. According to the author, one of the main disadvantages of the transport device with the help of air flow is the high energy consumption in the cotton transportation process.

In the work of R. Muradov [15], the main reasons for cotton getting stuck between the blades of a vacuum valve and the walls of the chamber were studied.

General analyses show that the physical, mechanical and aerodynamic properties of cotton affect the process of separating it from air and that they should be taken into account when creating new separator designs.

Cotton enters the working chamber of the separator with an air stream. The main part moves straight in the working chamber of the separator, hits its walls, and falls under the influence of its own weight to the vacuum valve. The remaining part hits the mesh surface. Circular mesh surfaces are installed on the sides of the separator working chamber in the path of the air flow. A certain part of the cotton sticks to these surfaces. The installation of the mesh surface in a rotating manner makes it difficult for the cotton to settle on its surface. Also, the coefficient of friction between the moving support surface and the object on its surface is lower than that on a stationary surface. Therefore, when the mesh surface rotates, the cotton is forced to move outward from the surface under the influence of gravity and centrifugal forces. Part of the cotton falls off the mesh surface under the influence of these two forces. The rest is separated using a stationary separator.

The equation of motion of a piece of cotton in the polar coordinate system looks like this:

$$\left. \begin{aligned} m\ddot{r} &= -G \sin \varphi - F_i \cos \varphi + F_m \\ \varphi &= \omega t \end{aligned} \right\} \quad (1)$$

Here, $G = mg$ – weight strength of cotton, N; m – mass, kg; F_i – friction force, N; φ – angle of rotation of the surface, rad; ω – angular velocity, rad/s; t – time, s. F_m

$$\varphi = \omega t$$

The equation of motion of a piece of cotton in the polar coordinate system looks like this:

$$\left. \begin{aligned} m\ddot{r} &= -G \sin \varphi - F_i \cos \varphi - F_{is} \cos \varphi + F_m \sin \beta \\ \varphi &= \omega t \end{aligned} \right\} \quad (2)$$

Here, F_{is} – The coefficient of friction of cotton with an absorbent surface. It is found as follows:

$$F_{is} = fN$$

We determine the force N of the impact of the cotton ball on the eraser:

$$N = mg \cos(\omega t + \phi) f_1 P_x \frac{r\omega}{\sqrt{r^2 + r^2 \phi^2}} \geq 0 \quad (3)$$

Putting the result in (2.39) and after some transformations, we get:

$$\left. \begin{aligned} m\ddot{r} &= -mg \sin \varphi - \left[mfkvx + fmg \cos(\varphi - \beta) f_1 \frac{r\omega}{\sqrt{r^2 + r^2 \phi^2}} \right] \cos \varphi + mr^2 \varphi \sin \beta \\ \varphi &= \omega t \end{aligned} \right\}$$

Theoretical analyses of the process of separating a cotton sliver from a mesh surface from the literature show that under the influence of the absorbent, the cotton moves in a circular motion along the mesh surface in a radial direction from the center to the periphery, and its trajectory has the form of a spiral. It can also be concluded from these trajectory lines that if the holes on the surface are formed in the form of grooves corresponding to these trajectories, the resistance to their movement will decrease dramatically. From this point of view, the idea of forming the separator mesh surface in the form of a spiral from a steel wire or strip expanding radially from the center was born, and a technical solution based on this was developed.

Results

Experiments were conducted on the proposed separator, the appearance of impurities and defects in the technological process was determined, and samples were taken from the gin, the existing SS-15A separator, and the fibers after the



proposed separator, separating the cotton from the chaff, and the results of the research are shown in Table 4.3. The experiments were carried out in the HVI 900 SA instrumental laboratory system, which is designed to determine the fiber quality indicators according to the international universal cotton fiber standard. The terms and quality indicators in the HVI 900 SA instrumental laboratory system for fibers of the Andijan-35 selection variety are given based on the international universal cotton standard.

After the inclined mesh installed in the working chamber of the separator machine was tested, it was determined that positive results were obtained based on the results of testing fiber samples on the HVI-900SA laboratory system at the laboratory center of the Namangan regional branch of the State Enterprise "Agro-Industrial Complex Service Center".

For example, the Mic - Microneural fiber parameters did not change, Str - relative breaking strength decreased from 38.9 gs/tex in the existing separator to 36.5 in the new one, to 38.8 gs/tex, SFI - short fiber content increased from 2.6 in the existing separator to 3.4 in the new one, to 2.7%, Elg - relative elongation at break decreased from 6.9 in the existing separator to 6.0 in the new one, to 6.7 in the new one, Cnt - the amount of impurities decreased from 18 units in the existing separator to 15 units in the new one.

The positive results obtained are the result of the reduction of impact forces on the cotton in the new separator, the creation of the possibility of additional cleaning of the cotton, and the elimination of cotton getting stuck between the vacuum valve wings and the wall.

Quality indicators of cotton fiber samples obtained after the gin and separator were determined using the HVI 900 – SA laboratory system

Table 1

N o.	The name of quality indicators in the international universal standard system of cotton fiber	S 65-24 selection grade cotton fiber		
		Natural quality indicators of cotton fiber	Fiber from the existing SS-15A separator	Fiber from advanced separator equipment
1	Mic Microneur	4.4	4.1	4.4



2	Str Relative breaking strength, gs/tex	38.9	36.5	38.8
3	Len Upper average length, inches, mm	1.18	1.15	1.18
4	Unf. Uniformity index along the length, %	83.6	83.1	83.5
5	SFI- Short fiber content, %	2.6	3.4	2.7
6	Elg - Relative elongation at break, %	6.9	6.0	6.7
7	Trash Dirty code	4	2	2
8	Cnt Contaminant quantity	18	15	14
9	Area of impurities	0.9	0.8	0.8
10	CG Sort by color	31 – 4	31 - 4	31-4
11	Rd- fiber reflection coefficient, %	75.1	75.1	75.1
12	+b Fiber yellowness level	8.6	8.6	8.6

Discussion

An analysis of the relevant scientific literature has shown the need to identify a number of shortcomings of existing separators and conduct research on additional cotton cleaning in the separator, reducing mechanical damage to cotton and fiber loss.

Based on theoretical studies, the laws of air parameters change in the pneumotransport system depending on the pipe diameter, different constructions of the transition parts of the pipe, and different initial parameters of the fan have been determined. As a result of studies of the movement of cotton along the surface of the moving mesh of the separator, the effect of the speed of rotation of the surface, the angle of deviation of the fixed strainer in the vertical plane on the speed of cotton leaving the mesh surface was determined.

As a result of theoretical and practical research, a separator design with a rotating mesh surface and a fixed wiper was created. As a result of studying the dynamics of cotton interaction with a moving mesh surface, the trajectory of cotton



movement, the time of its interaction with the mesh surface, and the rational value of the angle of inclination of the fixed wiper relative to the vertical axis of the mesh surface were determined.

When a production model of the new separator equipment was tested under production conditions at the Kosonsoy Cotton Cleaning Enterprise, it was found that the amount of impurities in cotton was reduced by 1.2%, and the damage to the seed was reduced by 1.7% (in absolute value) compared to the current situation.

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The Role of Civil Society Organizations in Strengthening Parliamentary Oversight in Uzbekistan

Azamat Norov, Independent researcher in Parliamentary Law at
Parliamentary Research Institute under the Legislative Chamber of the Oliy Majlis
of the Republic of Uzbekistan; +99891 977 06 98

Abstract. This article explores the pivotal role civil society organizations (CSOs) can play in enhancing transparency and accountability in the parliamentary oversight system of Uzbekistan. Drawing exclusively from the existing literature review on transparency in parliamentary oversight, the paper highlights the mechanisms through which CSOs contribute to effective oversight before, during, and after government action. It also outlines practical recommendations for institutionalizing CSO participation and aligning national practice with international standards.

Keywords: civil society, parliamentary oversight, transparency, accountability, citizen engagement

Introduction. Parliamentary oversight is a critical function in democratic systems, ensuring that governments remain accountable and transparent. In Uzbekistan, while legislative reforms such as the Law on Parliamentary Oversight (2016) and the Development Strategy for 2022–2026 have provided a legal foundation for such oversight, practical implementation remains limited (BTI, 2022). Civil society organizations (CSOs) have the potential to address these gaps by acting as intermediaries between the public and parliament, and by providing technical expertise, monitoring activities, and advocating for reforms (Transparency International, 2023).

Yet, the reality in many post-Soviet countries, including Uzbekistan, reflects a formalistic implementation of legal norms, with symbolic rather than substantive engagement with the public (Turdiev, 2020). The Global Parliamentary Report (IPU, 2017) and the UNDP Handbook (2009) have repeatedly emphasized that transparency and public participation should not be mere procedural formality, but a practical and continuous element of governance. Thus, empowering CSOs in oversight processes is a logical step toward democratization and effective state accountability.

Theoretical and Legal Context

Transparency in parliamentary oversight is not only a democratic ideal but also a legal obligation, as emphasized in the UNDP's Handbook on Transparency and Accountability of Parliament (UNDP, 2009). The principle of participatory governance is supported by mechanisms such as public hearings, petitions, and online consultations—all of which are regularly utilized in the Uzbek context (Yusupov, 2021; Turdiev, 2020). CSOs can bridge this gap by institutionalizing feedback loops and monitoring the follow-up of parliamentary recommendations.

The report by Transparency International (2023) highlights three essential phases of oversight: before, during, and after government action. CSOs are uniquely positioned to intervene at each stage, contributing to more inclusive and evidence-based parliamentary practices. International examples underscore that CSO involvement fosters legitimacy and enhances the quality of governance, especially in developing countries.

CSO Engagement at Different Stages of Government Action

•Before Government Action

CSOs can contribute during the pre-legislative phase by facilitating public consultations, supporting participatory budgeting, and submitting independent impact assessments. For instance, in Uganda, CSO involvement in budget review led to substantive revisions and greater public satisfaction (Transparency International, 2022). In Uzbekistan, however, there are currently no established norms for pre-legislative scrutiny by CSOs, and existing laws and legal practices lack clarity on how citizen engagement should be operationalized.

Moreover, Transparency International (2022) reports that in Armenia and Zimbabwe, pre-legislative CSO involvement is formally acknowledged and integrated into the parliamentary calendar. These models demonstrate that structured and timely engagement mechanisms, combined with adequate information access, lead to more coherent and accepted legislative outcomes. Uzbekistan can adopt similar protocols by mandating the involvement of CSOs in early policy formulation stages.

•During Government Action

During policy implementation, CSOs can exert pressure for compliance with parliamentary commitments through media campaigns, public hearings, and cooperation with parliamentary committees (Wang & Rakner, 2005). Civic engagement initiatives allow citizens to directly participate in deliberative processes, improving responsiveness and inclusivity.

Examples from Indonesia and South Africa highlight that opening parliamentary sessions to the public and involving CSOs in hearings dramatically increase the accountability of both the legislature and executive branches (UNDP, 2009). Broadcasting sessions, facilitating online engagement, and publishing accessible documents are essential enablers of this process.

In Uzbekistan, these practices remain limited. According to the BTI (2022) report, parliamentary committees rarely invite external stakeholders, and public access to committee activities is sporadic. Without systemic interaction, CSOs can only exert limited influence. Institutionalizing formal avenues for their participation can ensure that implementation of laws and government policies align with public expectations.

•After Government Action

Post-legislative scrutiny by public is not a regular practice in Uzbekistan. CSOs can support this phase by evaluating the implementation of laws, tracking executive actions, and providing simplified public reports. The UK's model of post-legislative scrutiny offers a useful benchmark (Transparency International, 2023).

Additionally, the Transparency International (2022) report outlines how CSOs in the Gambia and Ghana contributed to assessing whether parliamentary resolutions had tangible outcomes. They followed up with parliamentarians, analyzed government compliance, and translated their findings into citizen-friendly formats. In Uzbekistan, enabling such post-legislative audits could be transformative in enhancing the integrity and sustainability of oversight.

Challenges in the Uzbek Context



Despite legal provisions for openness, Uzbek legal system lacks specific organizational procedures for CSO engagement in parliamentary oversight (Karimov, 2023). Public hearings and advisory mechanisms are irregular and often symbolic. Another constraint lies in the political culture surrounding CSO engagement. As noted by Yusupov (2021), government bodies often did not perceive CSOs as collaborative stakeholders, which is now changing. This perception may discourage cooperation, while the lack of legal insurance for transparency measures may further weaken the accountability initiatives.

Additionally, technical barriers such as limited access to legislative drafts, lack of publicly available records, and insufficient capacity in policy analysis restrict CSO effectiveness. Bridging these capacity gaps is essential for sustainable democratic reform.

Recommendations

To institutionalize CSO engagement in parliamentary oversight in Uzbekistan, several actionable reforms can be proposed:

- **Legislative Reform:** Amend parliamentary laws to define roles for CSOs in oversight processes. This may include their participation in public hearings, access to information, and submission of policy assessments.

- **Regular publicity:** Develop and maintain the oversight records on the designated online platform for publishing oversight findings, and committee proceedings, and enable feedback submission.

- **Monitoring & Evaluation Units:** Establish collaborative oversight taskforces comprising MPs and CSO experts to track government implementation of parliamentary recommendations and the results of parliamentary oversight.

Conclusion. For parliamentary oversight in Uzbekistan to be effective, the involvement of civil society must be more inherent than symbolic. Drawing from international practices and grounded in existing legal frameworks, CSOs can substantially strengthen transparency, accountability, and citizen trust in governance. Their institutional engagement represents not only a democratic necessity but also a strategic tool to improve the government accountability and transparency in parliamentary processes in the Republic of Uzbekistan.

The potential of CSOs is not merely aspirational but demonstrable, as seen in comparable reforming democracies. Enabling this potential requires both political will and legal innovation. If these challenges are addressed, it will be another

significant step forward in institutionalizing participatory and transparent governance on top of the existing legal frameworks that already pave the way for public engagement and participation in the review process of the results of parliamentary oversight on Uzbekistan.

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Assessment Techniques for English Language Learners: Enhancing Equity and Accuracy in Language Evaluation

Egamberdieva Khusnora- Teacher of the Department of Foreign Language
Practice and Theory

Abstract

This article explores effective assessment techniques tailored for English Language Learners (ELLs). Traditional testing methods often fail to capture the full range of skills and knowledge that ELLs possess due to language barriers, cultural gaps, and unfamiliar formats. The paper presents a variety of inclusive and formative assessment strategies, such as portfolio-based assessment, peer review, performance tasks, and scaffolding in test instructions. Practical classroom-based examples demonstrate how these approaches provide a more accurate reflection of ELLs' abilities while also promoting motivation and learner autonomy. The article argues that equitable assessment is not just a technical concern but a cornerstone of inclusive education.

Introduction

As classrooms become increasingly multilingual and multicultural, assessing English Language Learners (ELLs) effectively has become a pressing concern for educators worldwide. Many ELLs face challenges not because they lack understanding of the subject matter, but because traditional tests do not account for their language development stage. When learners are assessed in unfamiliar linguistic contexts or formats, their results may reflect language difficulties rather than actual knowledge or skills. Assessment, therefore, must be both fair and flexible. Educators need to balance the dual goals of measuring content mastery and supporting language acquisition. This article outlines key assessment techniques that acknowledge ELLs' linguistic journey, while still maintaining academic rigor. With the right tools, teachers can make assessments more accessible, meaningful, and empowering for all learners.

1. Formative Assessment through Observation and Checklists

Observational assessment allows teachers to monitor students' progress in real time during classroom activities. Teachers can note students' participation in pair or group work, their use of English in authentic settings, or their improvement in



pronunciation and vocabulary usage. Instead of relying solely on written tests, educators can use behavior checklists, speaking rubrics, and performance tracking charts to record observations over time.

Example:

A teacher kept a weekly checklist of how frequently students used target vocabulary during class discussions. Over a month, several quieter students showed notable improvement in speaking, which would have been missed in a written test alone.

2. Portfolio Assessment

Portfolios allow learners to compile their work over time and reflect on their development.

This technique promotes autonomy and metacognition. Portfolios can include writing samples, audio recordings of speaking tasks, grammar reflections, self-assessments, and corrected drafts. Learners actively participate in selecting pieces that show growth and progress, making assessment a process rather than a one-time event.

Example:

In a writing-focused class, each student selected one composition per month to include in their personal portfolio. At the end of the semester, they wrote reflections on how their writing had improved in organization, vocabulary, and grammar accuracy.

3. Scaffolding in Summative Assessments

Summative tests can be made more ELL-friendly by scaffolding language and instructions. This includes using visual aids, simplified instructions, glossaries of key terms, and bilingual support where appropriate. Sentence starters, word banks, and graphic organizers can help students structure their answers more confidently.

Example:

In a history exam, the teacher added pictures and vocabulary boxes to the test paper. Instead of asking, “Describe the causes of the Industrial Revolution,” students were guided with: “First cause: __. Second cause: __,” supported by timeline visuals and simplified explanations.

4. Performance-Based Assessment

This method allows learners to demonstrate their skills through real-world tasks. Instead of answering questions, students complete projects, presentations,



dialogues, or role-plays. These tasks require the integration of language skills (reading, writing, speaking, and listening), and they closely reflect authentic language use.

Example:

For a unit on food, students created menus, described dishes, and role-played a restaurant scene. Assessment focused on fluency, pronunciation, appropriate vocabulary, and cultural awareness—all in a naturalistic setting.

5. Peer and Self-Assessment

Involving students in the evaluation process builds responsibility and awareness of learning goals. Students can be trained to use simple rubrics to assess each other's speaking, writing, or group collaboration. Self-assessment checklists encourage reflection on strengths, challenges, and strategies for improvement.

Example:

During a group discussion activity, students used a checklist to note their own and their partner's use of phrases like “I agree,” “Can you explain?”, or “What do you think?” This made them more conscious of interactional language and active listening.

6. Digital Assessment Tools

Technology can provide engaging and varied assessment formats for ELLs.

Apps like Quizlet, Kahoot, and Edmodo offer gamified or interactive testing. Voice-recording tools such as Flipgrid or Vocaroo allow speaking practice and teacher feedback. Online writing platforms like Google Docs allow for real-time peer editing and teacher comments.

Example:

One teacher used Flipgrid for a speaking assignment where students recorded one-minute videos describing their weekend. The format allowed for multiple practice attempts and reduced anxiety, leading to better performance than live speaking tests.

7. Culturally Responsive Assessment Practices

Cultural context matters in assessment. When tests contain unfamiliar idioms, holidays, or norms, ELLs may feel alienated. Teachers should ensure that assessment content respects diverse backgrounds and avoids bias. Inviting students to share cultural examples in their work enriches classroom inclusion and validates their identities.

Example:

In a personal narrative assignment, students were encouraged to describe a holiday or celebration from their home country. This both honored cultural identity and gave the teacher insight into the students' descriptive writing skills.

8. Differentiated Rubrics for Language Proficiency Levels

Rubrics should match the language level of learners and show progression.

Instead of penalizing lower-proficiency learners for errors, rubrics can be tiered to reward effort, clarity, and partial accuracy. As students move from A2 to B1 or higher, rubrics can become more demanding, matching their development.

Example:

In a speaking exam, beginner-level students were scored on pronunciation, fluency, and basic vocabulary use, while advanced students were also evaluated on coherence, complex grammar, and topic development.

Conclusion

Assessing English Language Learners requires thoughtful design and a deep understanding of language acquisition. When teachers use diverse, flexible, and inclusive techniques, assessment becomes a tool for growth rather than a barrier. A well-planned assessment not only measures language proficiency, but also builds learner confidence, highlights strengths, and fosters autonomy.

By embracing observation, portfolios, scaffolding, performance tasks, and technology, educators can ensure that assessments reflect what ELLs can do—not just what they can't do yet. Ultimately, fair assessment practices are essential for creating classrooms where all students, regardless of language background, have the opportunity to succeed.

Glossary of Terms (Optional):

ELL English Language Learner

Formative Assessment Ongoing assessment during instruction to improve learning

Summative Assessment Final evaluation after instruction, usually in test or project form

Portfolio A collection of student work that shows progress over time

Scaffolding Supportive techniques to help students perform more difficult tasks

Performance-Based Tasks Assessments requiring students to demonstrate real-life skills

Peer Assessment When students assess each other's work

Self-Assessment When students evaluate their own performance

Differentiated Rubrics Scoring guides that adapt to various language proficiency levels

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Enhancing Educational Effectiveness: Strategies to Improve Prediction Skills, Motivation, Classroom Dynamics, and Homework Completion

Sodiqjonova Gulhayo Akbar qizi -Teacher of the Department of Foreign Language Practice and Theory
gulhayosodiqjonova@gmail.com

Abstract

This article explores four interconnected pillars of effective education: prediction skills, learner motivation, classroom dynamics, and homework completion. Drawing on practical strategies and classroom-based evidence, it examines how educators can nurture critical thinking, create motivating environments, and foster responsibility among learners. By combining learner-centered techniques with real-life examples, the article offers practical insights for improving both student engagement and academic outcomes across diverse educational contexts. This research-based approach emphasizes teacher adaptability, student empowerment, and classroom inclusion as the foundation for sustainable academic success.

Introduction

Modern education goes beyond delivering information—it is about equipping students with cognitive and social tools to succeed. Among the most essential components of this holistic approach are prediction skills, motivation, classroom dynamics, and homework practices. These areas, although distinct, are interrelated. When students can think ahead, are driven to learn, feel supported by their peers and teacher, and practice independently, their chances of success increase dramatically.

Many classrooms struggle with low engagement due to passive learning models. This article addresses such concerns with a student-centered mindset. Educators who embed critical thinking and self-direction into daily tasks help students become more autonomous and confident. It is also critical to create classrooms where students feel psychologically safe and socially connected. Assignments given outside the classroom must feel purposeful and manageable to prevent stress and procrastination. By targeting these four pillars simultaneously, teachers can generate positive ripple effects in both academic and behavioral outcomes.



Improving Prediction Skills

Prediction allows students to engage actively with content by anticipating outcomes, which improves comprehension and critical thinking.

To help students improve their prediction skills, teachers can begin by encouraging them to guess the meaning of unfamiliar words using context rather than immediately checking a dictionary. Before reading a text, learners can write their own endings or predict the main ideas based on the title and pictures. During listening tasks, teachers can pause audio and ask students what they think will come next, which keeps them actively engaged. Visual cues from book covers or charts can also serve as great discussion starters. Signal words such as “however” or “as a result” can be taught to guide students in anticipating ideas in texts. Teachers may also show video clips without sound and let students imagine what’s being said. Headlines can be turned into open-ended questions to encourage critical discussion. In science classes, students can be asked to guess the outcomes of experiments. Creative activities like “story chains” where one group begins a story and others continue it build logical sequencing and narrative skills. Even asking students to predict the teacher’s next instruction can make routine lessons more dynamic.

Example:

In an English class, before reading a story called *The Secret Door*, students were shown only the title and a mysterious picture. They discussed whether the story would be scary, magical, or adventurous. Some even predicted characters and settings. This activity not only stimulated their imagination but also increased attention and emotional investment during reading.

Boosting Student Motivation

Motivated students are more likely to attend class, participate, and take initiative in learning tasks. Motivation can be fostered by letting students set their own academic goals and track their progress over time. Teachers can celebrate success by displaying student work around the classroom, which builds pride and motivation. Mini-challenges or classroom competitions with fun rewards often increase energy levels. Self-assessment tasks help learners take responsibility for their growth and learning. Storytelling can be a powerful tool to make lessons more meaningful and relevant. Tasks that have a clear and visible outcome give students a sense of purpose. A class culture that welcomes mistakes as learning opportunities creates a positive learning environment. Verbal encouragement from teachers,



especially when sincere and timely, boosts student confidence. Inviting guest speakers who align with student interests can show the real-world value of what they're learning. Finally, making connections between classroom topics and students' career dreams or hobbies adds a strong layer of personal investment.

Example:

One teacher allowed students to design their own weekly project around their hobbies, such as sports, cooking, or fashion. For example, a student interested in fitness created a workout blog in English, which integrated vocabulary, grammar, and creativity. Motivation soared because tasks felt authentic and personal.

Enhancing Classroom Dynamics

Healthy classroom dynamics reduce anxiety, support social learning, and create a cooperative atmosphere. To improve classroom dynamics, lessons can start with simple team-building games to reduce tension and help learners feel at ease. Pair and share activities before group or whole-class discussions ensure that everyone has a voice. Changing where students sit regularly can help them get to know more classmates and break up social barriers. When group norms are established together with students, it builds a shared sense of responsibility. During group work, it's important to assign roles that allow each student to contribute meaningfully. Teachers can recognize student effort, not just high scores, to support emotional development. Celebrating cultural or linguistic diversity through events or themed days helps build inclusivity. Anonymous class surveys on the learning atmosphere can provide teachers with honest feedback for improvement. When conflicts arise, addressing them openly and calmly teaches students important life skills. Teaching active listening and respectful disagreement further enriches classroom dialogue and relationships.

Example:

A teacher working with a mixed-ability class used regular peer collaboration. Stronger students took turns mentoring peers in specific topics. Students reported feeling more valued and less afraid of mistakes. The classroom atmosphere became more relaxed, and group accountability improved markedly.

Increasing Homework Completion Rates

Homework consolidates learning and builds independent study habits.

Homework completion improves when students understand why an assignment is important and how it connects to their learning. Teachers should maintain

consistent deadlines and expectations so that students can plan ahead. Giving students some choice in the type of homework they complete increases their sense of control. Assignments that are short and focused help prevent overwhelm and support better concentration. Feedback should be prompt and constructive so that students learn from mistakes. Online platforms and apps can be used to manage homework, send reminders, and even allow students to submit work digitally. A peer review system helps students support each other and improve quality before handing in work. Involving families in setting regular study routines at home also makes a difference. Offering one flexible deadline per term shows understanding and builds trust. Finally, asking students for feedback about the difficulty or interest level of assignments gives teachers insight into how to make homework more meaningful and engaging.

Example:

One school implemented a point-based system where completing homework earned students digital badges and extra break time. Each class had a homework progress chart displayed publicly. Over one term, completion rates rose from 56% to 83%, and students expressed greater responsibility toward assignments.

Conclusion

Educators seeking to raise learning standards must focus not only on what is taught, but also on how students engage, interact, and practice. Strengthening prediction skills nurtures deeper comprehension and curiosity. Motivation techniques enhance learner autonomy and enthusiasm. Healthy classroom dynamics promote inclusion, empathy, and peer support. And when homework is purposeful and manageable, students are more likely to develop independent learning habits.

Importantly, these strategies do not require advanced technology or major funding. They require reflective teaching, flexible planning, and a genuine connection with learners' needs. As classrooms become more diverse and learner-centered, teachers must adopt adaptable methods grounded in both psychology and pedagogy to make meaningful change.

Glossary (For Learners):

Motivation Internal or external drive to accomplish goals

Classroom Dynamics Interactions and relationships between students and the teacher

Homework Completion Rate The percentage of students regularly completing their assigned homework

Learner Autonomy The student's ability to take charge of their own learning

Peer Collaboration Students working and learning together through shared tasks

Formative Feedback Feedback given during learning to help students improve

Task Ownership When students feel responsible and invested in their learning tasks

Differentiation Adapting teaching to meet different learners' needs

Constructive Atmosphere A classroom environment where students feel safe, respected, and motivated

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- Prediction Skills** Ability to guess or anticipate outcomes based on available clues



RESEARCH ON THE PRODUCTION OF MEDICAL SUITS BASED ON FLAX FIBER FABRICS

Isroilova Navruza Bakhtiyorjon kizi

Fergana State Technical University, e-mail: navruzaisroilova357@gmail.com

Annotation : This article examines the possibilities of using linen gauze in the production of medical gowns. The naturalness, ecological purity and hygienic properties of flax fiber have been evaluated as a suitable material for use in the field of medicine. In the study, aspects such as air permeability, natural protective properties against bacteria and the ability to protect the skin of the linen fabric are analyzed.

Keywords: Flax fiber, medical gown, environmentally friendly, hygiene, tolerance, feature, natural.

Linen has the most valuable, truly unique hygienic properties, such as high air permeability and the ability to remove heat and moisture. Flax is good for residents of both southern and northern regions. In hot weather, the skin temperature of a person wearing linen clothes is 3-4 degrees lower than that of clothes made of cotton or silk fabrics.

The distinctive properties of linen fabrics are: smoothness, moderate hardness, the ability to absorb moisture droplets from the surface it comes into contact with, minimal electrification, low stickiness, which creates a pleasant feeling in a person when his skin comes into contact with linen. Sufficient air permeability, hygroscopicity and moisture capacity ensure rapid removal of heat and moisture from the human body. Even the presence of a small amount of flax fiber (up to 10%) completely eliminates the electrification of the fabric. Therefore, fabrics blended with linen are very popular now.

Scientists have proven that the use of linen prevents a number of diseases, since linen has rare bacteriological properties - neither bacteria nor fungi can penetrate it. This completely clean ecological fabric is a natural antiseptic. Linen kills germs, infections, suppresses harmful microflora, wounds under linen bandages heal faster. Flax contains silica, which inhibits the growth of bacteria. Now flax is an invaluable and unique plant material used in surgery for internal sutures: instead of rejecting it, our body accepts it and gradually dissolves it completely. Linen fabric made from

flax is the most appropriate material to choose in every way, especially for children, due to their unique health benefits. In addition, since ancient times, wrapping a newborn baby in linen has been considered a guarantee of the baby's future health.

Studies conducted by the Ministry of Health of the Republic of Belarus have shown that the high hygiene, durability, and comfort of products made from linen fabrics help to further activate blood circulation, stimulate the body, and reduce fatigue. Doctors believe that flaxseed helps reduce colds. Scientists recently conducted a very interesting experiment. Comparative studies have shown that sleeping on linen sheets helps increase the level of immunoglobulin A in the blood, which restores the immune system. As a result, a person feels more refreshed and healthier. Neither synthetics nor cotton give such an effect.

Recent studies have shown that linen clothing reduces radiation levels several times, reduces gamma radiation by half, and protects against chemically aggressive environments. In addition, it turned out that flax is able to partially suppress electromagnetic waves, radiation from household and industrial equipment. For people prone to skin diseases and various allergies, bronchial asthma, rhinitis, dyes, bleaches, antistatic agents, artificial fibers and simply woolen fabrics are contraindicated, nothing can be compared with linen. Scientists have proven that every object, every material, has its own energy. Linen has perhaps the strongest energy of all materials. It evokes in a person a sense of calm concentration, thoughtfulness, and measuredness. Psychotherapists are convinced that flax fibers protect a person from depression, neurosis, and mental illness. Therefore, flax is relevant now, in times of constant stress. In addition, flax threads are an excellent filtering material that protects not only from chemically aggressive environments, noise, dust, radiation, but also from mental irritants.

**Research Science and
Innovation House**



Figure 1 Samples of women's medical gowns made of linen fabric.

Using linen fabric for medical gowns has several advantages. Linen is a natural fiber, known for its environmental friendliness and high quality. The main advantages of using linen fabric in the medical field are:

1. **Air permeability** : Linen fiber has high air permeability, providing good ventilation inside the robe. This helps keep doctors and healthcare workers comfortable, even when they need to wear gowns for long periods of time.
2. **Moisture absorption and dryness** : Linen fiber absorbs moisture quickly and releases it quickly, which prevents sweating and ensures dryness.
3. **Antibacterial and antimicrobial properties** : Flax has natural antibacterial and antimicrobial properties, which play an important role in ensuring hygiene, especially in medical environments.
4. **Ecological purity and naturalness** : Flax is a natural product, and its production process does not harm the environment. This helps ensure stability.



5. **Endurance** : Linen fiber is strong and durable and can withstand multiple washes. This ensures long-term use of the gowns.

6. **Anti-allergic properties** : Linen fabric is hypoallergenic, does not harm the skin and does not cause allergic reactions. This is especially useful for healthcare workers and patients with sensitive skin.

7. **High temperature resistance** : Flax fiber can withstand high temperatures, which makes it suitable for disinfection processes, such as boiling or sterilization. This is very important in maintaining hygiene in a medical environment.

8. **Nice structure** : Linen fabric feels pleasant against the body and provides comfortable wear, especially for those who have to wear medical clothing for long periods of time.

9. **Biodegradation** : Because linen is made from natural fibers, it is biodegradable. This helps ensure environmentally friendly and sustainable production.

The following are the main requirements for the production of medical gowns:

1. Material requirements:

- Hygienic and anti-allergenic: Medical gowns should be made of antibacterial, anti-allergenic, and skin-friendly materials. This is important for maintaining the health of patients and medical staff.

- High breathability: Gowns should be made of breathable material, which provides comfort during long-term use.

- Water and liquid resistance: Medical gowns must have the property of repelling or not absorbing liquids.

- Sterility: Gowns intended for operations must be sterile and resistant to sterilization processes.

2 Ergonomic and design requirements:

- Freedom of movement: Gowns should be sewn in a way that allows healthcare workers to move freely. They should have a broad chest and shoulders, and comfortable sleeves.

- Sizes and fit: Gowns should come in a variety of sizes. Comfort is ensured with elastic cuffs and ties.

- Closure methods: Robes should be tied or closed with a zipper, which helps maintain cleanliness and safety.

3. Safety requirements:

- Protection level: Gowns used in operational and other high-risk environments must have a specific level of protection, such as protection against biological agents.

- Flammability protection: Gowns must be flame-resistant or made of low-flammability materials.

4. Compliance with standards:

- Medical gowns must comply with international and local medical standards (such as EN 13795, ASTM F2407).

- Meet environmental requirements: Gowns must meet specific environmental standards to be recyclable or environmentally friendly.

Conclusion: This study aims to study the possibilities of using flax fiber fabrics in the production of medical gowns. During the study, it was found that the natural and ecological purity, hygienic properties, and high air permeability of flax fiber make it very suitable for the medical field, especially in the production of medical clothing. Linen fiber has a number of advantages for medical gowns, including its natural antibacterial properties, high breathability, and skin-drying ability. In addition, the minimal presence of chemicals in flax fiber makes it less likely to cause allergic reactions, which is important in creating safe clothing for medical workers and patients.

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**Солиққа тортишнинг ташқи савдодаги ўрни:
назарий ва амалий ёндашувлар**

Алмурадов Неъмат Абдуллаевич
мустақил тадқиқотчи

Аннотация: Мақолада ташқи савдо фаолиятини солиққа тортишнинг назарий асослари ва Ўзбекистондаги амалий ёндашувлар таҳлил қилинади. Глобал иқтисодиёт шароитида экспорт-импорт операцияларини солиқлаштиришдаги муаммолар ва миллий солиқ сиёсатидаги устувор йўналишлар кўриб чиқилади. Шунингдек, божхона тўловлари, акциз ва ҚҚС тизимидаги ўрин, солиқ маъмуриятининг рақамлаштирилиши ва халқаро солиқ ҳамкорлигининг аҳамияти ёритилади. Илмий таҳлиллار асосида хорижий тажриба билан таққослаш орқали амалий таклифлар берилган.

Калит сўзлар: ташқи савдо, экспорт, импорт, солиққа тортиш, божхона тўловлари, фискал сиёсат, рақамлаштириш, халқаро тажриба.

Кириш. Ташқи савдо фаолияти ҳар қандай миллий иқтисодиётнинг муҳим бўғини ҳисобланади. Глобаллашув ва рақобатбардош бозор шароитида ташқи бозорлар билан тўғридан-тўғри иқтисодий алоқаларни йўлга қўйиш орқали миллий ресурслар самарали йўналтирилади. Бундай фаолиятнинг ривожланиши солиқ-бюджет тизимида ҳам мувофиқлаштирилган ёндашувларни талаб қилади. Айниқса, ташқи савдо амалиётларида солиққа тортиш механизмлари, божхона сиёсатининг самарадорлиги ва халқаро конвенцияларга мувофиқ ҳуқуқий асослар муҳим аҳамият касб этади.

Ўзбекистонда сўнгги йилларда ташқи савдони либераллаштириш, янги экспорт бозорларини ўзлаштириш ва инвестициявий муҳитни яхшилаш борасида кенг қўламли ислохотлар амалга оширилди. Айниқса, 2017 йилдан кейин ташқи иқтисодий фаолиятнинг эркинлашуви ва фаолиятини қулайлаштириш чоралари ташқи савдони солиққа тортиш тизимида янгиликлар киритилишига олиб келди. Бу, ўз навбатида, миллий солиқ сиёсатини ташқи бозор талабларига мувофиқлаштиришни талаб этмоқда.

Халқаро амалиётда ташқи савдо муносабатларини солиққа тортиш божхона ва фискал сиёсатнинг таркибий қисми сифатида қаралади. Солиқ

ставкаси, солиқ имтиёзлари ва рақамлашган тизимларни жорий қилиш орқали ташқи савдо фаолиятининг тартибга солиниши нафақат бюджет тушумларини ошириш, балки экспортни рағбатлантириш ва иқтисодий ўсишни таъминлаш воситасига айланмоқда.

Иқтисодий назарияда ташқи савдо фаолиятини солиққа тортиш масаласи турли ёндашувлар асосида таҳлил қилинган. Адам Смитнинг абсолют устунлик назарияси ва Давид Рикардонинг нисбий устунлик назарияси мамлакатлар ўртасидаги савдо афзалликларини очиб беришга қаратилган бўлса, Хекшер-Олин модели ташқи савдони ресурслар тақсимооти ва нисбий фарқлар билан изоҳлайди. Ушбу назариялар ташқи савдо сиёсатининг самарадорлигини оширишда назарий пойдевор вазифасини бажаради.

Муаллифлар Масгрейв ва Стиглицнинг ишларида ташқи савдо билан боғлиқ солиқ сиёсатининг ижтимоий адолат, ресурсларни қайта тақсимлаш ва иқтисодий барқарорликка таъсири кўрсатилган. Улар ташқи савдо билан боғлиқ фискал сиёсатни мамлакат ички бозоридаги тенгсизликни юмшатишда муҳим механизм сифатида кўришган. Бу қарашлар Ўзбекистон солиқ сиёсати учун ҳам долзарб ҳисобланади.

Халқаро ташкилотлар — ЖСТ, ОТБ ва ХВЖ каби институтлар ташқи савдо муносабатларида солиқ шаффофлиги, қонун устуворлиги ва рақамли мониторинг тизимларини жорий қилиш бўйича тавсиялар бериб келмоқда. Уларнинг ҳисоботлари ва тавсиялари, айниқса, ривожланаётган мамлакатлар учун амалий аҳамият касб этади.

Ўзбекистон Республикасининг Солиқ кодекси ва Божхона кодекси ташқи иқтисодий фаолиятнинг асосий солиқ-ҳуқуқий базасини ташкил этади. Экспорт амалиётлари ҚҚСдан озод қилиниши, экспортчилар учун қайтариш механизмлари мавжудлиги экспортни рағбатлантирувчи асосий омиллардан ҳисобланади. Импорт товарлари эса акциз, божхона божи ва ҚҚСга тортилади, бу эса ички ишлаб чиқарувчиларни рақобатдан ҳимоя қилиш вазифасини бажаради.

Ўзбекистонда ташқи савдо операцияларига оид лицензиялаш, товарларни сертификатлаш, валюта назорати ва статистик ҳисоботлар бўйича юридик нормалар амал қилади. Бу қоидалар солиққа тортишдаги ҳуқуқий аниқликни таъминлашга ва солиқдан қочиш ҳолатларининг олдини олишга хизмат

килади. Шунга қарамай, баъзи амалиётларда турли органлар ўртасида функциялар такрорланиши кузатилади.

Солиқ-ҳуқуқий тизимни такомиллаштириш учун солиқ маъмурияти ва божхона органлари ўртасида ягона ахборот платформаси, лицензиялашда бюрократик тўсиқларни камайтириш ва ҳуқуқий актлар ўртасида уйғунликни таъминлаш долзарб вазифалардан ҳисобланади.

Сўнгги йилларда ташқи савдо фаолияти орқали шаклланган солиқ тушумлари Ўзбекистонда давлат бюджети даромадларининг аҳамиятли қисмини ташкил этмоқда. Хусусан, импорт операциялари орқали ҚҚС ва акциз тўловлари ҳажми ортиб бормоқда. Экспорт операцияларида эса ҚҚС қайтариш механизми орқали тадбиркорлик субъектлари молиявий оқимни эркин бошқариш имкониятига ега бўлмоқда.

Ҳозирда Давлат солиқ қўмитаси томонидан жорий этилган рақамли платформа — my.soliq.uz ва E-aktiv каби ахборот тизимлари солиқ ҳисоботларини электрон шаклда қабул қилиш ва таҳлил қилиш имконини яратди. Бу орқали ташқи савдо билан боғлиқ операцияларда шаффофлик ошди, қўлбола маълумот тақдим этиш ҳолатлари камайди.

Бундан ташқари, Солиқ қўмитаси ва Божхона қўмитаси ўртасидаги ҳамкорлик механизмлари яхшиланиб, ҳисоботлар интеграция қилинди. Бироқ, амалиётда ҳанузгача маълумотлар алмашинуви бир томонлама амалга оширилади, бу эса таҳлил сифатини пасайтиради.

Халқаро амалиётда ташқи савдо муносабатларини солиққа тортишда автоматик ҳисоб-китоб тизимлари, соддалаштирилган божхона тартиблари ва экспортни рағбатлантирувчи фискал сиёсат устувор аҳамиятга ега. Жанубий Корея ва Туркияда экспортчилар учун махсус ҚҚС қайтариш марказлари фаолият кўрсатади. Бу марказлар орқали тадбиркорлар минимал ҳужжат билан фойда кўради.

Малайзияда эса “Солиқ ва божхона шериклиги” механизми асосида фаолият юритувчи тадбиркорлар солиқ ва божхона органлари билан битим асосида ишлайди. Бу битимда экспорт ҳажми, солиқ интизоми ва шаффофлик даражасига қараб имтиёзлар белгиланади. Ушбу модел ҳам Ўзбекистон учун долзарб ҳисобланади.

Шунингдек, Европа Иттифоқи мамлакатларида ташқи савдо ҳисоботлари автоматик тарзда EORI рақами орқали юритилади. Бу ҳисоботлар ички солиқ

тизимига боғланган бўлиб, солиқ мажбуриятларини шаффоф ва онлайн кузатиш имкониятини яратади.

Хулосалар ва амалий таклифлар:

1. Солиқ қонунчилигида ташқи савдо муносабатларига оид ҳар бир операция учун аниқ таърифлар, ставка ва имтиёз механизмлари яққол белгилаб қўйилиши керак. Бу тадбиркорлар учун ҳуқуқий аниқлик ва солиқ маъмурияти учун самарали назорат имкониятини яратади.

2. Импорт операцияларида тадбиркорлик субъектларига солиқ юкини аниқ ҳисоблаш имконини берадиган интерактив солиқ калькуляторлари, мобил иловалар ва онлайн маслаҳат тизимлари жорий этилиши лозим. Бу экспорт-импорт операцияларида иштирок этувчи субъектлар учун прогнозлаш имкониятини ҳам яратади.

3. Экспортни рағбатлантириш мақсадида ҚҚС қайтариш тизимида автоматлашган ва дискриминациядан ҳоли механизмлар жорий қилиниши керак. ҚҚС қайтариш муддати, тартиби ва ҳужжатлар рўйхати аниқлаштирилиши, ушбу жараёнда «бир дарча» тизими кенг жорий этилиши мақсадга мувофиқ.

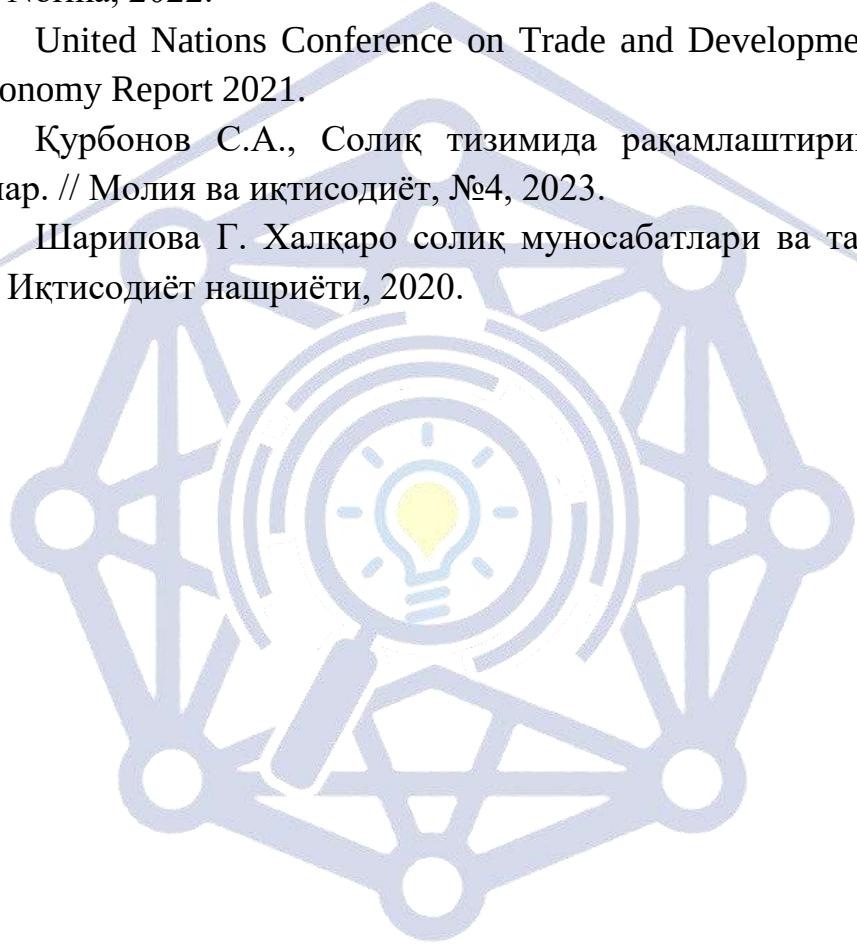
4. Божхона ва солиқ органлари ўртасида маълумотлар интеграциясини таъминловчи ягона институционал платформа шакллантирилиши зарур. Бу платформа орқали декларация, товар йўлхати, сертификат ва лицензиялар автоматик равишда текширувдан ўтказилиши мумкин.

5. Солиқ маъмуриятида ташқи савдо бўйича ихтисослашган таҳлил гуруҳлари ташкил этилиши керак. Бу гуруҳлар ташқи бозорлардаги ўзгаришлар, фискал таваккаллик ва солиқ интизомини таҳлил қилиш, ҳамда тегишли норматив-ҳуқуқий таклифлар тайёрлаш билан шуғулланади.

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ANALYSIS OF MODERN METHODS OF PRODUCT PROCESSING IN THE LEATHER-SHOE INDUSTRY

Raxmonova Malohat Mirkomilovna

Fergana davlat texnika universiteti, assistant

+998902730731malohatraxmonova@mail.ru

Abstract: This article analyzes the leather footwear industry, leather footwear production processes, processing stages, their importance in improving product quality, and types of modern processing technologies.

Key words: leather, natural, artificial, cutting, sewing, laser, 3D technology, quality, smart, green technology.

Leather processing: new technologies in the production of natural and artificial leather, improving their quality. Materials used in product processing: high-quality leather, artificial leather, and new technological materials, for example, thermosetting plastics, elastomers, etc.

Product processing steps: Cutting: laser technologies and CNC (Computer Numerical Control) machines for accurate and efficient cutting of material.

Sewing: sewing works using automatic sewing machines and robots.

Laser processing of leather and other materials: using laser technologies to ensure the aesthetics and durability of shoes.

Basic Design and Shaping: Creating precise and perfect shoe shapes through 3D modeling and digital technologies.

Modern Processing Technologies

1. 3D Technologies and Digital Design:

3D modeling and printing: the use of digital technologies in the creation of leather shoes, the precise consideration of every detail and its creation with the help of a computer. 3D printing: quick and accurate preparation of shoe parts or decorative elements.

2. Laser and CNC Technologies: Ceramic laser engraving is the process of using a laser marking machine to engrave a ceramic product. Because ceramics can

break easily, a single crack can quickly destroy the entire material, laser marking ceramic materials is often a safe option. Unlike older ceramic engraving choices, the laser does not strongly interact with the ceramic. Laser machines remove the ceramic material with high heat absorption and leave a noticeable design. Laser cutting: high-precision cutting and modification of shoe parts. This technology allows the material to be processed with minimal waste. CNC machines: automated machines for high precision machining of complex shapes of shoe parts.

3. Robotics and Automation:

Automation processes: automation of every stage of shoe production, making production processes efficient.

Robotic sewing and processing: robots are used for high-quality and fast processing.

4. Biotechnologies:

Ecological processing of natural leather: processing of leather and other natural materials in ecologically clean ways. Reducing the ecological footprint by using natural materials with the help of new biotechnological methods

Methods of Product Quality Improvement

1. Quality control: Optical scanning and lighting technologies: inspecting the surface of materials, identifying any defects and eliminating them.

Thermal inspection: measurement of thermal conductivity and quality of shoes.

2. High quality workmanship: Shoe strengthening: special chemicals and layers are used to increase the strength of the treated materials.

High elasticity and durability: new elastic materials and technologies are used to ensure long-term performance of the shoe.

New Innovations and Future Industry Development

1. Green Technologies: Eco-friendly materials: use of recycled materials, bio-based and eco-friendly models.

Water conservation and waste reduction: technologies aimed at saving environmental resources in the production process.

2. Smart Shoes: Sensors and IOT technologies: monitoring the performance of the shoe depending on the user's condition with the help of sensors integrated into the shoe.

Smart materials: by adapting the materials of the shoe, for example, to change the shoe according to the weather conditions or the user's needs.

In conclusion, modern technologies are significantly changing the processes of product processing in the leather-shoe industry. With the help of 3D modeling, laser cutting, robotics and ecological technologies, it is possible to improve the quality and efficiency of shoe production.

In the future, the leather-shoe industry will be more innovative and environmentally friendly, and it is expected that high-tech and sustainable development methods will be used in the production of shoes.

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APPLICATION OF METHODS FOR CONTROLLING AND REDUCING YARN DEFECTS IN A SPINNING PLANT.

Urishev M.M

Fergana Polytechnic Institute

urishvmurodjon3@gmail.com

Abstract: This article presents the fact that unevenness has negative properties of products produced in a spinning enterprise, often negatively affects the technical and economic indicators of the enterprise, as well as the physical and mechanical properties of yarn, the importance of testing and controlling unevenness of products in spinning production, and the causes and timing of unevenness are determined.

Keywords: Unevenness, yarn quality, Dispersion, quadratic inequality, geometric irregularity, quantitative structure of the product, unevenness index

Abstract: V dannoy state konstatiruetsya chto neravnomernost otritsatelnykh priznakom produktsii na pryadilnom predpriyatii, it often has a negative influence on the technical and economic indicators of the predpriyatii, and also on the physical and mechanical properties of the pryaji, it is necessary to check and control the neravnomernost produktsii pryadilnogo proizvodstva, ukazyvayutsya chiny i vremya vozninoveniya predpriyatii.

Keywords: Irregularity, quality of yarn, Dispersion, quadratic irregularity, irregularity of geometric structure, quantitative composition of products, indicator of irregularity

Annotation: In this article, it is stated that unevenness is a negative feature of production products in a spinning enterprise, often negatively affects the technical and economic indicators of the enterprise, as well as the physical and mechanical properties of yarn, it is important to test and control the unevenness of products in spinning production, the reasons and time of causing unevenness are specified.

Keywords: Unevenness, yarn quality, Dispersion, quadratic unevenness, geometric structure unevenness, quantitative structure of the product, unevenness index.

Unevenness is a negative property of products produced in a spinning enterprise, often negatively affecting the technical and economic performance of the enterprise, as well as the physical and mechanical properties of the yarn. Testing and

controlling the unevenness of products in spinning production is of great importance, determining the causes and timing of unevenness.

The more yarn breaks during winding and forming in spinning machines, the higher the yarn unevenness. As a result of the increase in yarn breaks, the labor supply of workers increases, and the productivity of the machines decreases. In carding machines, the unevenness of the nature of the processing, that is, the degree of cleaning and separation of the fiber, is not the same. In addition, an unevenly combed wick is formed. If a product with uneven structure or linear density enters the stretching device of various machines, the area of the stretching force and friction force changes. If the unevenness of the yarns cooked in linear density is high, defects are formed in the appearance and structure of the fabric, as a result, the surface of the fabric becomes striped, chipped, mohair or frame-like. These defects can also be observed in knitted fabrics. If the yarns have high unevenness in terms of strength and other properties, then the woven and knitted fabrics will have high unevenness in terms of strength, elongation and elasticity. Unevenly spun yarns in terms of linear density lead to the formation of specific defects in production. Therefore, it is important to study and control the unevenness of spinning products under production conditions in accordance with the above factors. Control of the unevenness of the product in terms of linear density. The conditions imposed on the quality of spinning products are called unevenness.[1]

The analysis of the unevenness of spun products is very complex. There are many types of unevenness for spun products: those that are formed in the first stage of spinning, and those that change in the subsequent stages and add new types of unevenness to them. Yarn unevenness combines several components and affects the unevenness of different stages of spinning production. Different types of unevenness are interconnected. The above factors make it difficult to distinguish the causes of unevenness. The following types of irregularities are determined by the change in specific properties along the length: linear density, unevenness in the number of fibers in the product section or unevenness in the weight of the section of different lengths, unevenness of the product in terms of its bulk density (density), unevenness in the physical and mechanical properties of the product (strength, elongation, elasticity, moisture, air permeability, electrical resistance, size of electric charges, etc.). The change in the structure of the product along the cross-sectional area and length characterizes the arrangement of elements in the product and changes in its



properties and determines two groups of structural irregularities: qualitative structural and geometric structural irregularities. The distribution of irregularities based on the type, color and other properties of the fibers along the cross-section of the product. The quantitative assessment of this type of unevenness is carried out by determining the sectoral and radial unevenness, as well as the fiber migration coefficient. The second group includes geometric structural irregularities, which are divided into the following forms: Ply, i.e. a dense arrangement of fibers of one type and color, passing along the cross-section and the entire length of the product. This form of irregularity is formed in the form of pile obtained from fibers of different types and colors on pile machines. The quantitative structure of the product, i.e. the quantitative arrangement of fibers in the pile in a large number of successive degrees of flattening and straightening, is formed in the form of structural irregularities. The arrangement of fibers in groups, i.e. the uneven arrangement of the fiber layer of different groups in terms of fiber size along the cross-section and length of the product, is manifested in the form of uneven structure, layer, warp and weft of spinning products and in the form of fiber layers on the inter-machine and inter-machine. During the stretching of fibers located in groups, a new type of irregularity in linear density is created.[2]

Structural irregularities of various types of products and their properties have different characteristics. Depending on the nature, the nature of the change in the structure and properties of the product is: periodic, random, functional, that is, a one-sided increasing deviation (quality indicators constantly increase or vice versa); local (random, a sudden increase in the linear density of the product); combined (a combination of several types of irregularities). The size and nature of the product's unevenness depends on the production conditions and the type of machinery. The unevenness is distinguished as follows:

- internal-intrinsic unevenness of the packaging during production;
- outer-between the average values of the product in all packages unevenness;
- general-unevenness in the entire package. [3]

SuchThe division of unevenness is determined in the working parts of the machine, and a product with high unevenness is produced. Unevenness by linear density is one of the main indicators of the quality of spun yarns and other products of the spinning process. Unevenness index and degree. In technological processes,

namely, combing, mixing and carding, operations are carried out. Therefore, a “random” arrangement of fibers is assumed in the layer or pile. Sometimes, the actual arrangement of fibers differs from random.

The product unevenness of the real fibers is always higher than the unevenness of the randomly arranged fibers. Therefore, the Poisson distribution is assumed for the distribution of the number of fibers in the cross-section of the high-level product, and the squared unevenness of the product over its cross-sectional area is determined by the following formula.[4]

$$C_g = \frac{100}{\sqrt{m_{yp}}} \sqrt{1 + 4 \left(\frac{C_d}{100} \right)^2} \quad (1.1)$$

where: m_{yp} -number of fibers in the product cross-section; C_d -squared unevenness of the fiber along the diameter. The above formula can be written in abbreviated form as follows:

$$C_g = \frac{100 \cdot K_0}{\sqrt{m_{yp}}} \quad (1.2)$$

where: K_0 is a coefficient depending on the type of fiber, which is 1.06 for cotton fiber, at $C \leq 35$ percent; 1.1 g for wool fiber at $C \leq 50$ percent; 1.02 for viscose fiber; and 1.3 for flax fiber; C_r is the high degree of product unevenness. [5]

The unevenness index is the ratio of actual product unevenness to the maximum product unevenness, which is determined using the following formula:

$$I = \frac{C_g \sqrt{m_{yp}}}{100 \cdot K} \quad (1.3)$$

In this

$$K = \sqrt{1 + \left(\frac{C_g}{100} \right)^2} \quad (1.4)$$

As the actual product becomes more uneven, the unevenness index also increases. The unevenness index proposed by G.M. Barnet serves to compare the unevenness of yarns of different linear densities.[6]



$$L = \frac{C_g \sqrt{M}}{100 \cdot K} \quad (1.5)$$

where: M is the average number of fiber groups in the cross section of the yarn, which is determined using the following formula:

$$M = \frac{m_{yp}}{m_{yp\bar{p}}} \quad (1.6)$$

The final formula proposed for determining the unevenness of a spun yarn is as follows:

$$L = \frac{C_g \sqrt[3]{M}}{50 \cdot K} \quad (1.7)$$

This formula is only used for fibers with a cross-section of m. If the number of fibers is $64 < m$, then the unevenness index is used. GMBernet developed a value for the degree of unevenness of a spun yarn to assess the unevenness. $[7] \geq 64$

Notekislik bahosi	Karda ip	Taroqli ip	Viskoza va atsetat ip
A'lo	1,7 dan kam	1,4 dan kam	1,5 dan kam
Juda yaxshi	1,7-2,0	1,4-1,6	1,5-1,7
Yaxshi	2,0-2,3	1,6-1,8	1,7-1,9
Qoniqarli	2,3-2,6	1,8-2,0	1,9-2,1
YOmon	2,6 dan yuqori	2,0 dan yuqori	2,1 dan yuqori

In conclusion, the structural unevenness of different types of products and their unevenness in terms of their properties will have different characteristics. The unevenness of different sizes and characteristics of products will vary depending on the production conditions and the type of machines. The product unevenness of real fibers is always higher than that of randomly arranged fibers, and the unevenness of yarns will be affected by the unevenness of different stages in the spinning process, adding several components to it. The unevenness of different types will be related to each other.



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Development of the technology of preliminary processing of flax plant, long and short fiber extraction in the territory of Fergana region

Urishev Murodjon Musulmonqul ogli

Assistant, FSTU

Abstract: Contemporary researchers have specified that natural flax fiber is comparable with synthetic fibers due to its unique physical and mechanical characteristics which have been recognized for decades. Flax fiber-reinforced composites have the potential for wide usage in sport and maritime industries, and as automotive accessories. In addition, this composite is in the development stages for future applications in the aeronautical industry. However, designing the flax composite parts is a challenging task due to the great variability in fiber properties. This is caused by many factors, including the plant origin and growth conditions, plant age, location in the stem, fibers extraction method, and the fact that there is often a non-uniform cross section of the fibers. Furthermore, the water and moisture absorption tendency of the flax fibers and their composites and the consequent detrimental effects on their mechanical performance are also major drawbacks. Fibers may soften and swell with absorbed water molecules, which could affect the performance of this bio-composite. Flax fibers' moisture absorption propensity may lead to a deterioration of the fiber-matrix interface, weakening the interfacial strength and ultimately degrading the quality of the composite. This review represents a brief summary of the main findings of research into flax fiber reinforced composites, focusing on the challenges of its water and moisture absorption behavior on their performance.

Keywords: Flax fiber composites, moisture absorption, mechanical properties, interfacial strength, water diffusion

Structure and composition of flax fiber.

A flax stem has the constituents of bark, phloem, xylem, and a void at the center. The fibers are located as fiber bundles in the outer surface of the plant stem as shown in Figure 2. The flax plants can grow to heights of 80 to 150 cm in less than 110 days since the plants are fast-growing by nature. The bundles (technical fibers) are between 60 and 140 cm long and their diameter ranges from 40 to 80 μm . A flax stem contains 20–50 bundles in its cross section. Each bundle consists of



10–40 spindle-shaped single (elementary) fibers 1–12 cm long and 15–30 μm in diameter. Charlet et al reported that the elementary fiber diameters are different if taken from the bottom, the middle, and the top part of the flax stems. The mean fiber diameter was found to decrease from the bottom to the top of the stems.

The elementary fiber (Figure 3) denotes a single cell in the flax plant. Each elementary fiber is composed of concentric cell walls that are different from each other in terms of thickness and the arrangement of their constituents. Each cell wall consists of what is known as a primary (outer) and a secondary cell wall. These are concentric cylinders with a small open channel in the middle called a lumen. The primary cell wall can be up to 0.2 μm thick and the lumen can be as small as 1.5% of the fiber cross section. The secondary cell wall contains three sub-layers S_1 , S_2 , S_3 . The single flax fibers have been shown to possess different shapes within cross sections along the fiber axis, which some researchers approximated to hexagonal or pentagonal cross sections. However, the fibers vary in their non-uniform geometrical shapes along the axis. Owing to these irregularities in the thickness of the cell walls, the fibers vary greatly in strength.

The main constituents of flax fibers are cellulose, hemicellulose, lignin, and pectin. A small percentage of wax, oil, and structural water are also found. Both primary and secondary cell walls are composed of cellulosic materials. Cellulose fibrils (diameter between 0.1 μm and 0.3 μm) are surrounded by concentric lamella, composed of about 2% pectin and 15% hemicellulose, which contribute to the thermal degradation and water uptake behavior of the fibers. The secondary cell wall is the major part of the fiber diameter and S_2 layer is its dominating constituent. This layer consists of highly crystalline cellulose microfibrils bounded by lignin and hemicellulose. The microfibrils in the S_2 layer follow a spiral pattern at an angle of 5–10° along the fiber axis, which explains the stiffness and strength of the fiber in the axial direction. The middle lamella is considered to be the matrix which bonds the cell together described the technical fibers, which are extracted by partially separating the fiber bundles in the flax plant and can be as long as the stem length (approximately 1 m). The technical fibers (i.e. the bundles of elementary fibers) consist of 10–40 elementary fibers in the cross section. The elementary fibers overlap for a considerable length and are glued

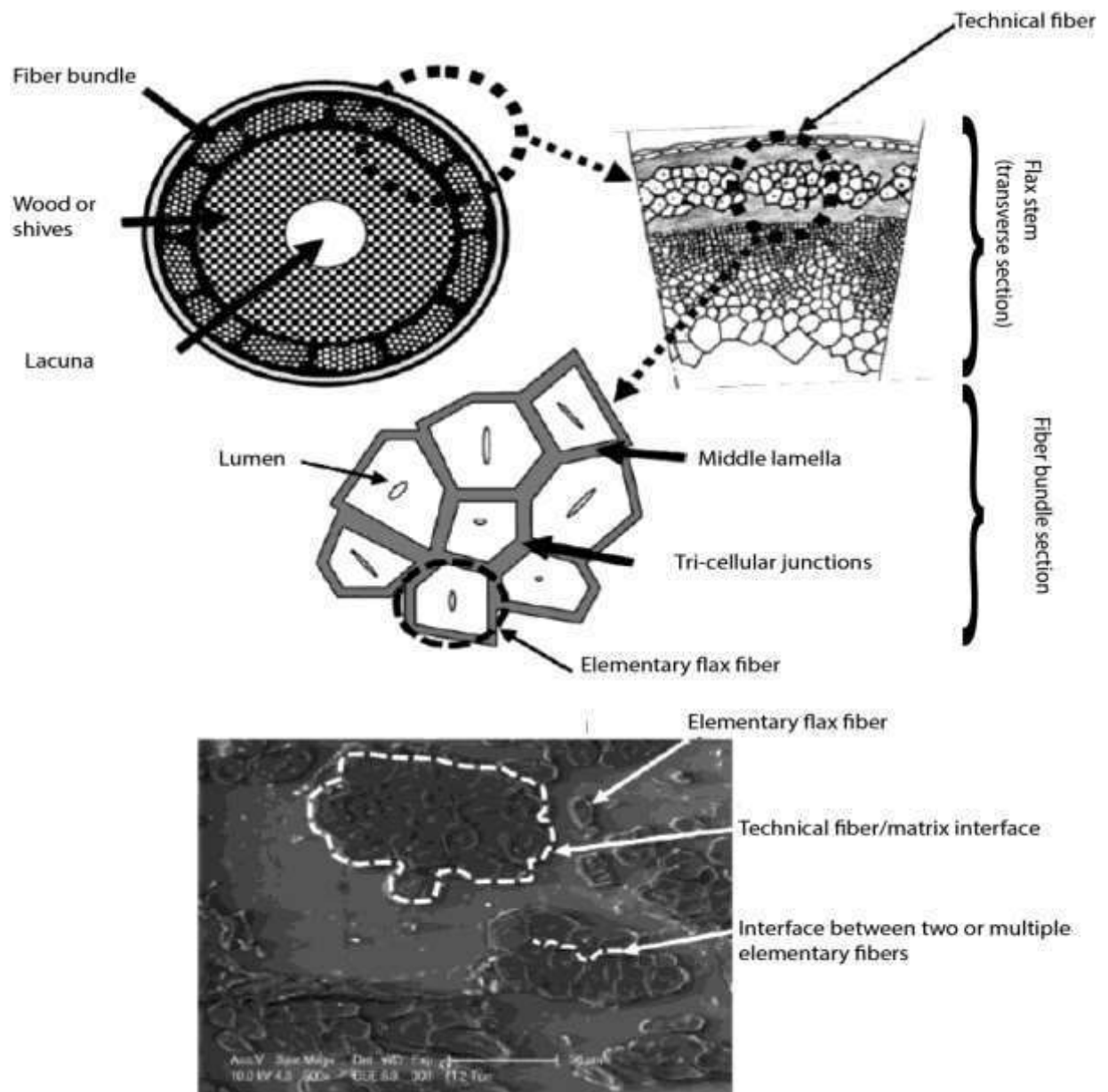
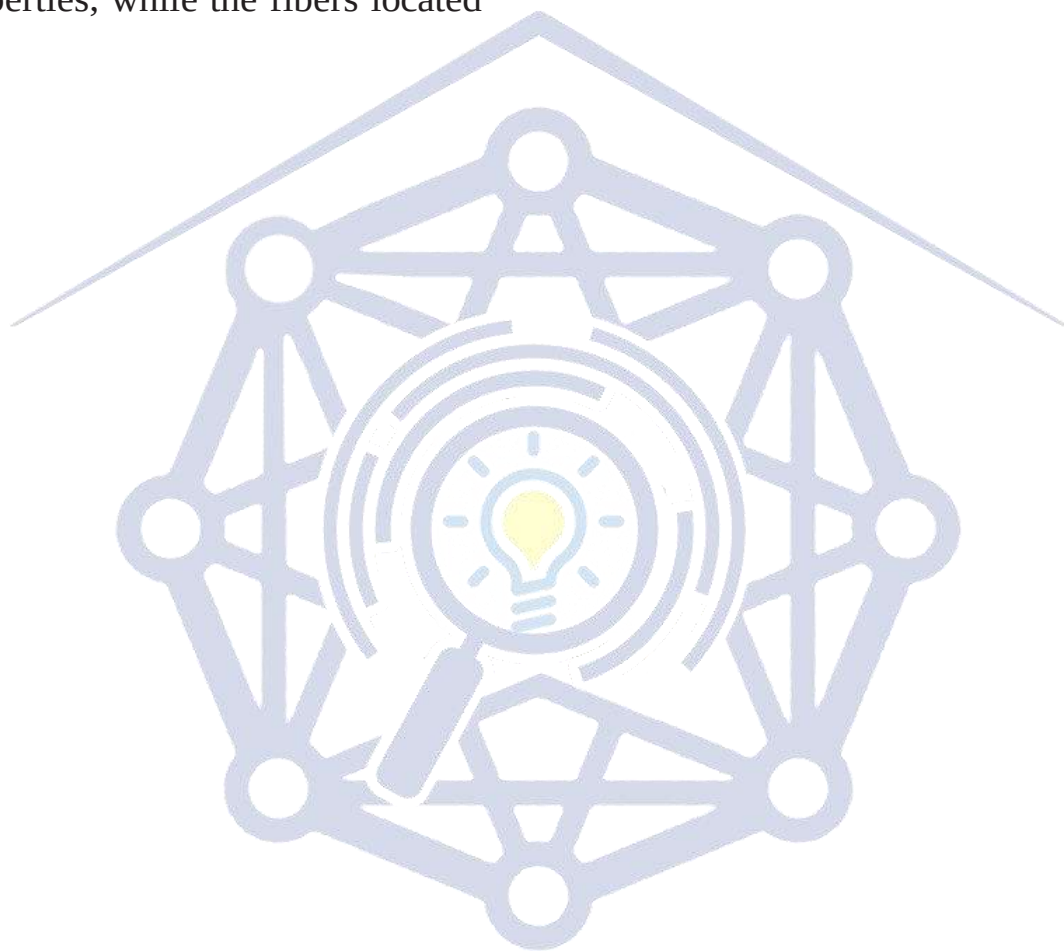


Figure 1. Structure of the flax fiber: (a) cross section of flax plant stem and position of the bundles of elementary fibers and technical fibers after extraction, (b) SEM image of a technical fiber with its constituting elementary fibers.

Factors affecting the properties of flax fibers

Flax is investigated at the elementary and technical fiber level. The great variability reported for flax fiber properties (tensile strength and modulus of elasticity, among others) is a consequence of many factors, including plant origin

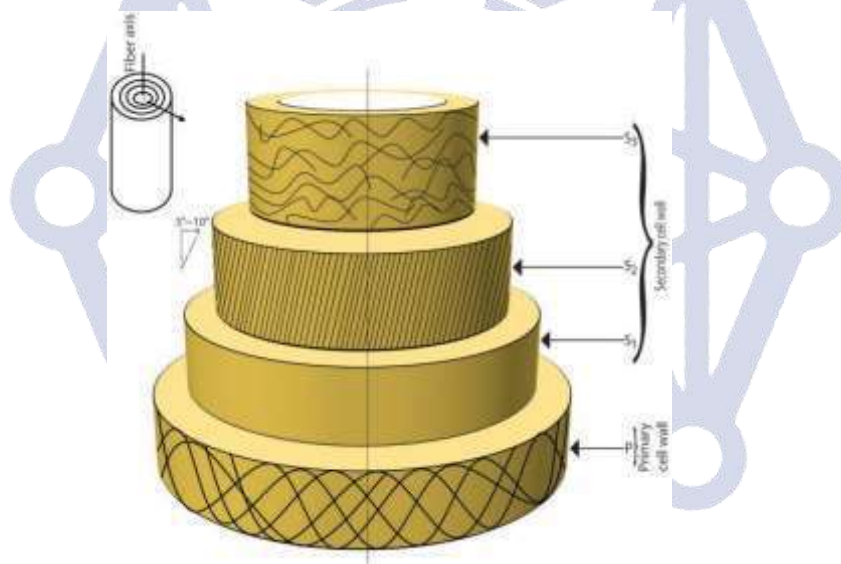
and growth conditions, plant age, location in the stem, and a non-uniform cross section of all the fibers. Due to this inherent variability, a Weibull distribution function was used to describe the tensile strength of the flax fibers found that mechanical properties of flax fibers were influenced by the location in the stem. Flax fibers located at the bottom of the stem display the poorest mechanical properties, while the fibers located



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in the middle are the ones that show the best mechanical performance. The biochemical analysis confirmed that both cellulose and non-cellulosic polymers are to be found prolifically in most extensive contents of the middle fibers. Cellulose is considered as the equivalent reinforcing material of a composite structure, whereas non-cellulosic materials are the matrix constituent that supports the exchange of load from one microfibril to another. Bos et al.²⁷ reported that the technical fiber strength decreases when the clamping length increases because of the similar composite-like structure of this fiber. They performed tensile tests to determine the strength of elementary and technical flax fibers and found that elementary flax fibers showed a considerably higher strength than technical fibers of the same length due to a bundling effect. During testing of the technical fiber bundle,



it was found that all elementary fibers are not firmly bonded with the matrix

Figure 2. An elementary fiber structure.

constituents, which happens especially in the secondary cell wall region. As a result, less-efficient stress transfer was found in the tensile tests, producing reduced strength as compared to elementary fibers. These results are quite consistent with that.

Fiber extraction methods also influence the mechanical properties of the flax fibers. Bos et al.²⁷ revealed that the tensile strength of the fibers is



dependent on the isolation procedure, with manually isolated fibers being stronger than mechanically isolated ones. The mechanical processes of fiber extraction were found to induce kink bands in the fibers, thus reducing their tensile strength. However, they noted that the scatter in strength is much larger for the elementary fibers isolated by hand than for the standard mechanically isolated ones. They claimed that the mechanical fiber processing methods generate a number of large defects, which reduces the scatter in the fiber strength, although the fibers show a lower mean strength. In a different study³⁸ of elementary flax fiber tensile tests, it was found that fibers separated by enzyme treatment may receive less damage than those by mechanical processes introduced a new method of fiber extraction from 35% aqueous ammonia pre-treated flax stems, comparing this with a standard extraction process. They found both tensile and flexural properties of flax fibers were increased due to the ammonia treatment. The average tensile strength of ammonia-treated fibers was almost 50% higher than the one obtained with the commercial extraction processes. In addition, higher flexural toughness was also evident for the ammonia-treated fibers.

The tensile strength of the elementary flax fibers was tested who found that fiber kink bands and micro-compression defects were the main cause of strength reduction. These two defects act as points of fracture initiation during fiber failure. Both the tensile strength and Young's modulus decreased when the fiber diameter was increased, with associated fiber

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Table 1. Bast fibers: compositions, physical and mechanical properties

	(%)						Young 's	Tensile	
Bast fibers	Cellulo se	Hemicell ulose	Ligni n	Pecti n	W ax	Densit y (gm/c c)	modul us (GPa)	strengt h (MPa)	Elongat ion at break (%)
Flax	60–81	14–20.6	2–3	1.8– 5	1.7	1.5	27.6	345– 1500	2.7–3.2
Hemp	70–92	17.9–22.4	3–5.7	0.9	0.8	1.4– 1.5	17–70	368– 800	1.6–4
Jute	51–84	12–20.4	5–13	0.2	0.5	1.3– 1.4	10–30	393– 773	1.2–1.5
Kenaf	31–57	13.6–21	5.9– 19	2	–	1.2	14–53	240– 930	1.6
Ramie	68.6– 76.2	13–16.7	0.6–1	1.9– 2	–	1.5– 1.56	27– 128	400– 1000	1.2–3.8
Banana	60–65	6–19	5–10	3–5	–	1.3– 1.35	27–32	529– 914	1–3

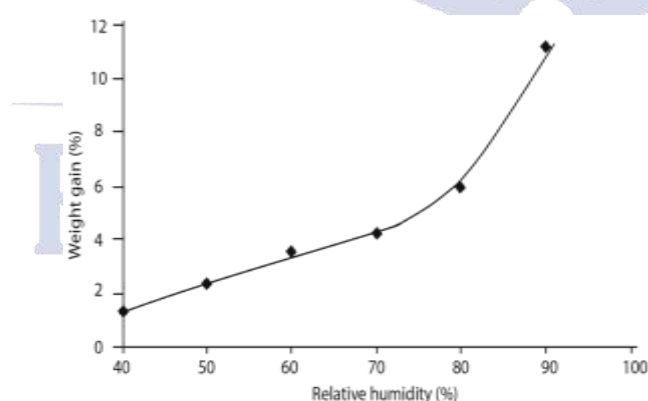


Figure 3. Effect of fiber diameter on fiber strength

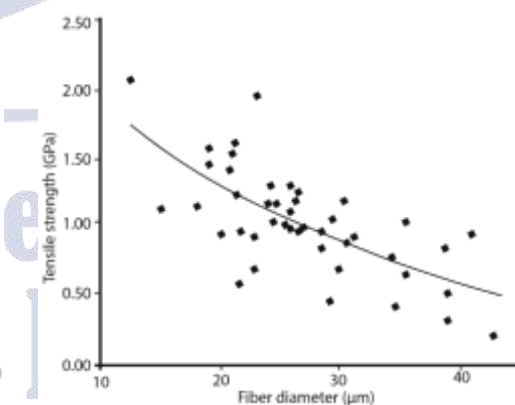


Figure 4. Equilibrium
different RH.



Fiber conditions and humidity	Matrix used	Diffusion coefficient, D (cm ² /s)	Manufacturing methods and other conditions Reference
UD and twill fibers at 55°C and 75% RH	UP	0.00104×10^{-3} 0.02	Hand lay-up, 8.89% water uptake 73
Green flax	PP	1.3×10^{-2}	for UD flax composites and 10.24% uptake for twill 45
Treated flax	PP	7.8×10^{-3}	in treated flax composites (duration 14 days) 74
Treated flax Flax at 23°C, 80% RH	MAPP	5.0×10^{-3} 0.002×10^{-3}	Extrusion 74
Flax at 25°C, maximum immersion 40 days	Bio epoxy	37.1	Hand lay-up, Equilibrium moisture content, 9.61% 70
Flax at three orientations (0°, 45°, 90°), immersion at room temperature 0°/90° flax at 40 and 55 wt%, immersion at room temperature, 32 days immersion test	Epoxy	6.67×10^{-9} for 0° 12.45×10^{-9} for 45° 14.19×10^{-9} for 90° 1.63×10^{-8} for 40% 2.32×10^{-8} for 55%	Press platen process, maximum moisture uptake 13.70% by 45° fiber orientation 68
Twill flax, immersion at room	Acrylic	7.7×10^{-9} 0.03	RTM, Saturation water absorption 8.71% and 6.23% by 55% and 40% fiber volume, respectively Vacuum infusion, moisture at 69

temperature	Epoxy	8.1×10^{-9} 0.04	equilibrium, 6.6% for flax- acrylic and 7.31% for flax- epoxy composites
Flax fiber bundles, immersion	PP	2.23×10^9	Compounding, saturated mois- ture content, 9.09% for flax-PP and 8.53% for flax- MAPP composites
test at room temperature (212 days), 40% fiber volume	MAPP	0.92×10^9	

Table 3. Diffusion coefficients of flax fiber composites according to literature.

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O'ZBEKISTONDA SOLIQ TIZIMIDAGI ISLOHOTLAR

DJURAYEV ANVAR MEYLIEVICH

Qarshi davlat texnika universiteti

“Moliya va bank ishi” kafedrası o'qituvchisi

Annotatsiya: O'zbekistonda soliq islohotlari amalga oshirilishi va natijalari tarixiy jarayoni tahlil qilingan.

Kalit so'zlar: byudjet, soliqlar, soliq konsepsiyasi, soliq tizimi, soliq yuki, tadbirkorlik subyetlari

Jismoniy va yuridik shaxslardan olinadigan soliqlar, yig'imlar, bojlar va boshqa majburiy to'lovlar va ularning tuzilishi tamoyillari, usullari, soliq nazoratining yig'indisi soliq tizimi asosini tashkil qiladi. Bu ta'rif soliq tizimini keng manoda tushunishdir. Soliq qonunchiligida soliq tizimi tor manoda talqin qilinib, bir xil mohiyatga ega bo'lgan va markazlashgan pul fondi tashkil etadigan soliq, yig'im, boj va boshqa majburiy to'lovlarning yig'indisi soliq tizimi deb ataladi.

Takidlash joizki, soliq tizimiga nisbatan bunday ta'rif ayrim adabiyotlarda ham keltirilgan. Qayd etilgan ta'rifda soliq va yig'imlar yagona mohiyat, ya'ni “majburiy harakterga ega bo'lgan munosabat” va ularning bir-biri bilan bog'liqligini ko'rsatadi. Bu esa O'zbekiston Respublikasi Soliq Kodeksi mazmuniga mos keladi. Soliq islohotlari - soliq nazariyasi va amaliyotini muvofiqlashtirish asosida soliq yukini kamaytirish, soliqqa tortishni soddalashtirish, soliq yordamida iqtisodiy rivojlanishni ta'minlash maqsadlarida amalga oshiriladigan davlat tadbirlari. Iqtisodiyotni isloh qilishining asosiy, ajralmas qismidir.

O'zbekiston Respublikasida amalga oshirilayotgan Soliq tizimidagi islohotlar strategiyasi huquqiy va demokratik davlatni barpo etish konsepsiyasi asosida shakllanmoqda. 1991 yildan boshlab 2017 yilgacha O'zbekistonda o'tkazilgan soliq islohotlarini 3 asosiy bosqichga bo'lish mumkin:

Birinchi bosqich: 1991-1994-yillarda soliqqa oid qonun hujjatlarini yaratish; tamomila yangi soliqlar va to'lovlar tizimini barpo etish va ularni xo'jalik amaliyotiga joriy etish; moliyaviy mablag'lar infratuzilmasini rivojlantirish, o'zo'zini strategik resurslar bilan ta'minlashga erishish maqsadlarida qayta taqsimlash; narxlarning o'sishi va pasayishi sharoitida aholining turmush darajasi

pasayib ketmasligi va ijtimoiy barqarorlikni saqlash; mustaqil tizim sifatida davlat soliq xizmatini shakllantirish vazifalari bajarildi.

Ikkinchi bosqich: 1995-1999-yillarda soliq tizimini takomillashtirish va korxonalarga nisbatan soliq yukini kamaytirish bo'yicha Soliq islohotlari amalga oshirildi. Bu davrda soliqlarga doir mavjud qonun hujjatlari asosida O'zbekiston Respublikasining Soliq kodeksi ishlab chiqildi va 1997 yilda qabul qilindi.

Uchinchi bosqich: 2000-yildan 2017-eilgacha soliq islohotlari qonunchilikka kiritilayotgan o'zgarishlar asosida fuqarolar va korxonalar uchun soliq, yukini yanada kamaytirish, ayrim soliq turlarini bekor qilish, kichik va o'rta tadbirkorlik subyektlarini soliqqa tortish tizimini soddalashtirish, samarali soliq tizimi tamoyillarini yana-da to'liq ro'yobga chiqarish, jahon andozalariga mos soliq tizimini bosqichma bosqich barpo etishga yo'naltirilgan edi.

Jahondagi rivojlangan mamlakatlarda Soliq islohotlari doimiy va davriy o'tkazib turiladi. Aynan bir soliq turini joriy etish yoki bekor qilish, ayrim shakildagi soliqlar ulushini oshirish yoki kamaytirish, soliq daromadlarini qayta taqsimlash va boshqa ko'rinishlarda amalga oshiriladi. Mamlakatimiz taraqqiyotini yangi, yuksak bosqichga ko'tarishimiz, buning uchun yangi islohotlarni amalga oshirish hozirgi davrda hayotiy zarurat hisoblanadi. Bu jarayonda iqtisodiy zanjirning muhim halqalaridan biri bo'lgan soliq tizimi barchaga teng va erkin raqobat sharoitini yaratishda tayyor bo'lishi kerak.

Prezidentimiz tashabbusi bilan 2018 yilda yangi soliq konsepsiyasining qabul qilinishi ana shu maqsadlarga erishishning strategiyasini belgilab berdi. Tizimda yangi islohotlarni boshlab bergan ushbu konsepsiyadan oldingi holatga nazar tashlasak, 97 foiz soliq to'lovchilar soddalashtirilgan rejimda faoliyat yuritib, mamlakatimiz yalpi ichki mahsulotida ularning ulushi qariyb 60 foizga yetgani, byudjet tushumlaridagi hissasi bor-yo'g'i 9,2 foizga teng bo'lgan yaqqol namoyon. Umumbelgilangan soliq to'lovchilar zimmasiga tushgan asosiy soliq yuki atiga 3 foizni tashkil etgan. Yaqingacha nafaqa, maktab ta'limi va yo'l jamg'armalariga soliq to'lash, sug'urta badali, mol-mulk, QQS (qo'shilgan qiymat solig'i) stavkalarining yuqoriligi mamlakat taraqqiyotini yaratuvchilar bo'lmish tadbirkorlar zimmasidagi katta yuk edi. Shuning uchun ularning o'zlari istamagan holda, soliqdan qochish shaklini tanlashga yoki soddalashtirilgan tizimda qolish uchun korxona ishchilari soni, ularga to'laydigan ish haqini sun'iy yashirishga hamda "konvert" orqali to'lashga majbur bo'lar edilar.



2017-yildan boshlab soliq tizimiga o'zgacha yondoshilmoqda. Tadbirkorlikda mutloq boshqacha muhit. Davlatimiz rahbari tashabbusi bilan adolatli, shaffof va uzoqqa mo'ljallangan tizimni yaratishga qaratilgan islohotlarning amalga oshirilishi natijasida butunlay yangi soliq ma'murchiligi tashkil topdi.

Birinchi navbatda, soliqlar turi 16 tadan 9 taga, nazorat shakllari 13 tadan 2 taga kamaytirildi. Prezidentimiz joriy yil 20 avgust kuni tadbirkorlar bilan o'tkazgan tarixiy muloqotida soliq sohasidagi ko'pchilikning esidan ko'tarilgan holatlarni yodga solgani bejiz emas. Chunki, yaqingacha tadbirkorlarga og'ir yuk bo'lib kelgan nafaqa, maktab va yo'l jamg'armalariga 3,2 foizli yig'imlar bekor qilindi. Byudjetdan tashqari jamg'armalarga mazkur yig'imlarni bekor qilish hisobiga har yili qariyb 6 trillion so'm mablag' qoladigan bo'ldi. Qisqa vaqtda sohani raqamlashtirish, jumladan, ma'lumotlarni qayta ishlash markazini bosqichma-bosqich takomillashtirish, aniqroq aytganda modernizatsiya qilish o'z navbatida, soliq to'lovchilarga ro'yxatdan o'tish, soliq tizimini tanlash, byudjet bilan munosabatlarini masofadan kuzatish, hisobotlarni shakllantirish va topshirish, shaxs o'z shaxsiy kabineti orqali dunyoning istalgan burchagidan soliq majburiyatlarini elektron tarzda bajarish imkoniyatini berdi.

Umumiy hisobda soliq organlarining elektron davlat xizmatlari portali - my.soliq.uz da 50 ga yaqin shu kabi masofaviy xizmatlar yo'lga qo'yildi. Bularsiz bugungi soliq ma'muriyatchiligini va umuman, bugungi tizim faoliyatini tasavvur etib bo'lmaydi.

Davr shiddat bilan o'zgarib boryapti. Yuqorida amalga oshirilgan keng ko'lamli ishlarga qaramay, iqtisodiy islohotlarni yanada chuqurlashtirish soliq ma'murchiligini soddalashtirishni, soliq idoralarining nazorat funksiyalarini takomillashtirish bo'yicha jiddiy choralarni ko'rilmoqda. Bir so'z bilan aytganda, soliq ma'muriyatchiligida yangi tizim yaratildi. Navbatdagi vazifa uni amaliyotga to'liq tatbiq qilishdir. Ta'kidlash lozimki, hozirgi soliq islohotlari zaminida soliq tushumlari oshirilishininig bosh yo'li soliq bazasining iqtisodiy o'sish asosida mustahkamlanishi ekanligi yotadi.

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TOLALI VA YOG‘LI ZIG‘IRNI FARG‘ONA VILOYATIDA YETISHTIRISHNING IMKONIYATLARI VA AHAMIYATI

A.O.Ibragimov

M.M.Odilov

Annotatsiya: Ushbu maqolada Farg‘ona vodiysida zig‘ir tolasini va urug‘ini yetishtirish imkoniyatlari ilmiy asosda yoritilgan. Zig‘ir ekinining agroiklim sharoitiga moslashuvi, tola, urug‘ hosildorligi va sifati bo‘yicha dala tajribalari o‘tkazildi. Natijalarga ko‘ra, zig‘ir ekologik toza, kam resurs talab qiluvchi va iqtisodiy jihatdan foydali ekin sifatida baholandi. Zig‘ir yetishtirish Farg‘ona vodiysida to‘qimachilik xomashyo va oziq ovqat bazasini diversifikatsiya qilishda muhim omil bo‘lishi mumkinligi isbotlandi.

Kalit so‘zlar: Zig‘ir tolasini, Farg‘ona vodiysi, agroiklim, hosildorlik, ekologik tozalik, to‘qimachilik.

Аннотация: В данной статье научно обоснована возможность выращивания льна в Ферганской долине. Проведены полевые испытания по адаптации льна к агроклиматическим условиям региона, а также по урожайности и качеству волокна. Результаты показали, что лен является экологически чистой, мало ресурсоёмкой и экономически выгодной культурой. Выращивание льна может сыграть важную роль в диверсификации сырьевой базы текстильной промышленности Ферганской долины.

Ключевые слова: Льняное волокно, Ферганская долина, агроклимат, урожайность, экологическая чистота, текстиль.

Abstract: This article scientifically substantiates the feasibility of cultivating flax fiber in the Fergana Valley. Field experiments were conducted to assess the adaptation of flax to agro-climatic conditions, as well as fiber yield and quality. The results demonstrated that flax is an environmentally friendly, low-resource, and economically viable crop. Flax cultivation could play a key role in diversifying the raw material base of the textile industry in the Fergana Valley.

Keywords: Flax fiber, Fergana Valley, agro-climate, yield, ecological sustainability, textile industry.

KIRISH

Zig‘ir – zig‘irdoshlarga mansub bir yillik va ko‘p yillik o‘simliklar turkumi, tola va moy olish uchun ekiladigan ekin. Mo‘tadil va subtropik mintaqalarda tarqalgan. Tolali zig‘ir tola olish uchun ekiladigan bir yillik o‘simlik. Poyasi ingichka, silliq, tik o‘sadi, och yashil rangli, bo‘yi 60-120 sm. O‘simlik yetilganda poyasi sarg‘ish yashil rangli. Bargi oddiy, bandsiz, navbatma-navbat joylashadi, rangi yashil. Gul to‘plami poyaning uchida joylashadi, zangori rangda, o‘zidan changlanadi.

Gullash davri 6-10 kun davom etadi. Urug‘i yassi, silliq, seryog‘ (42-49%), 1000 ta urug‘ining vazni 2,8-8,7 g. Urug‘i 5°C issiqda unib chiqadi. Maysasi -3-5° sovuqqa chidaydi. Vegetatsiya davri 75-90 kun, yetilishi uchun 1100-1500°C samarali harorat talab qilinadi. Tolali zig‘ir uzun kunlik o‘simlik. Kun yorug‘ bo‘lsa shoxlanishi ko‘payadi, ammo soya joylarda poyasi yotib qoladi.

Zig‘irdan yuqori sifatli tola va moy olinadi. Tolasi pishiq, mustahkam, egiluvchan. Oziq-ovqatda, lok-bo‘yoq sanoatida, tabobatda qo‘llanadi. Kunjarasi chorvachilikda sifatli ozuqa hisoblanadi. Bir ekilgan dalaga zig‘ir 5-7 yildan keyin ekiladi. Zig‘ir (*Linum usitatissimum* L.) – qadimiy va universal texnik ekinlardan biri bo‘lib, uning tolasi va yog‘i qimmatli sanoat xomashyosi hisoblanadi. Zig‘ir tolasidan sifatli matolar, texnik to‘qimalar va tibbiyot sanoatida ishlatiladigan materiallar tayyorlanadi. Shuningdek, urug‘idan olinadigan yog‘ oziq-ovqat, farmatsevtika va kimyo sanoatlarida keng qo‘llaniladi. O‘zbekiston sharoitida, ayniqsa, Farg‘ona vodiysi singari agroiqlimiy imkoniyatlari yuqori bo‘lgan hududlarda zig‘ir yetishtirish istiqbollari mavjud.

O‘zbekistonda asosiy tola manbai bo‘lib kelayotgan paxta ekinining intensiv yetishtirilishi suv resurslariga yuqori bosim keltirmoqda, shuningdek, tuproqning degradatsiyalanishi va monokultura muammolari kuchaymoqda. Shu nuqtai nazardan, resurs tejankor va ekologik jihatdan barqaror ekinlarni yetishtirish dolzarb masalalardan biri bo‘lib qolmoqda. Zig‘ir ushbu talablarga javob beruvchi muqobil texnik ekin sifatida e‘tiborga loyiq. Biroq, Farg‘ona vodiysi sharoitida zig‘ir yetishtirishning agrotexnik asoslari, rentabelligi va amaliy natijalari kam o‘rganilgan. Mazkur maqola ushbu ilmiy bo‘shliqni to‘ldirishga qaratilgan.

Tadqiqot davomida zig‘irning ikki xil navi – “Pskovskiy” va “VNIL” Farg‘ona vodiysining turli agroiqlim hududlarida (Farg‘ona, Andijon va Namangan



viloyatlarida) ekilib, vegetatsion davri, hosildorlik ko'rsatkichlari, tola sifat parametrlari tahlil qilindi.

METODOLOGIYA

Ushbu tadqiqotda amaliy dala sinovlari lariga asoslangan eksperimental yondashuv qo'llanildi. Zig'irning ikki navi – “SEZR” va “VNIIL” Farg'ona viloyatining oltiariq tumanida ikki marta takrorlangan tajriba asosida ekildi. Tadqiqot 2025-yil vegetatsiya davrini qamrab oldi.

Ma'lumot yig'ish usullari

Ma'lumotlar yig'ish uchun quyidagi parametrlar muntazam ravishda o'lchab borildi:

- **Vegetatsion davr davomiyligi** (kunlarda);
- **Tola hosildorligi** (s/ga);
- **Urug' hosildorligi** (s/ga);
- **Tuproq harorati va namligi;**
- **Iqlim omillari** (havo harorati, yog'ingarchilik miqdori, quyosh nuri soatlari)

Eksperiment joylari

- **Oltiariq tumani**– qumloq tuproq, mo'tadil namlik;



TADQIQOT NATIJASI

Zig'irning vegetatsion davri va agroiklimga moslashuvi



Tadqiqotda ishtirok etgan “SEZR” va “VNIL” navlari Farg‘ona vodiysining Oltiariq tumanida ekildi. Dastlab urug‘lar tuvaklarga qadaldi va undirildi so‘ngra varanka usulidan foydalanildi va yerga 5-10 sm o‘sgandan keyin ko‘chirilib ekildi. Vegetatsion davr 85–100 kun oralig‘ida kechdi, bu esa mintaqaning agroiklimiy sharoitlariga to‘liq mos kelishini ko‘rsatadi. Zig‘ir erta bahorda (mart oyi boshida) ekilganda yuqori hosildorlik qayd etildi, bu esa vegetatsiya davrida optimal harorat (18–25°C) va namlik miqdori bilan izohlanadi.



Hosildorlik natijalari

Tadqiqotga ko‘ra oltiariq tumanida ekilib kerakli agrotexnik tadbirlar natijasida ekilgan urug‘lik zig‘irdan hosil olindi.

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Tadqiqot davomida Farg‘ona vodiysining har xil tuproq va iqlim sharoitlariga olib borilgan dala tajribalari shuni ko‘rsatdiki, zig‘ir navi va agrotexnik tadbirlar



mos tanlanganda 1 gektardan o‘rtacha 7–9 sentner sifatli tola va urug‘ olish mumkin. Bu natijalar Rossiya va Belarusda o‘tkazilgan tadqiqotlar bilan (Beketov, 2015; Khisamutdinov, 2019) qiyoslanganda raqobatbardosh hisoblanadi.

Zig‘ir ekini paxtaga nisbatan kam suv talab qilishi, o‘g‘it va ishlovga kam xarajat ketishi bilan ajralib turadi. Shu bilan birga, tola sifati ekologik toza biologik xomashyo sifatida xalqaro talablarni qondiradi. Tola gigroskopikligi, elastikligi va uzunligi bo‘yicha GOST 10332-76 talablariga mos kelgani zig‘irni to‘qimachilik sanoati uchun istiqbolli xomashyo sifatida tavsiflaydi

Xulosa

Farg‘ona vodiysi sharoitida zig‘ir yetishtirish bo‘yicha olib borilgan tadqiqotlar shuni ko‘rsatdiki, mintaqaning agroiqlimiy omillari (mo‘tadil iqlim, unumdor yerlar, etarli sug‘orish imkoniyatlari) zig‘ir yetishtirish uchun qulay hisoblanadi. Tadqiqotda ishtirok etgan “SEZR” va “VNIIL” navlari yuqori hosildorlik urug‘ va sifatli tolalar berishi bilan ajralib turdi.

Zig‘irning tolasi va urug‘i ham iqtisodiy, ham ekologik jihatdan foydali bo‘lib, to‘qimachilik, oziq-ovqat va farmatsevtika sanoatlarida qo‘llaniladi. Ayniqsa, kam resurs talab qilishi va qisqa vegetatsiya davri uni muqobil texnik ekin sifatida yetishtirishni asoslaydi.

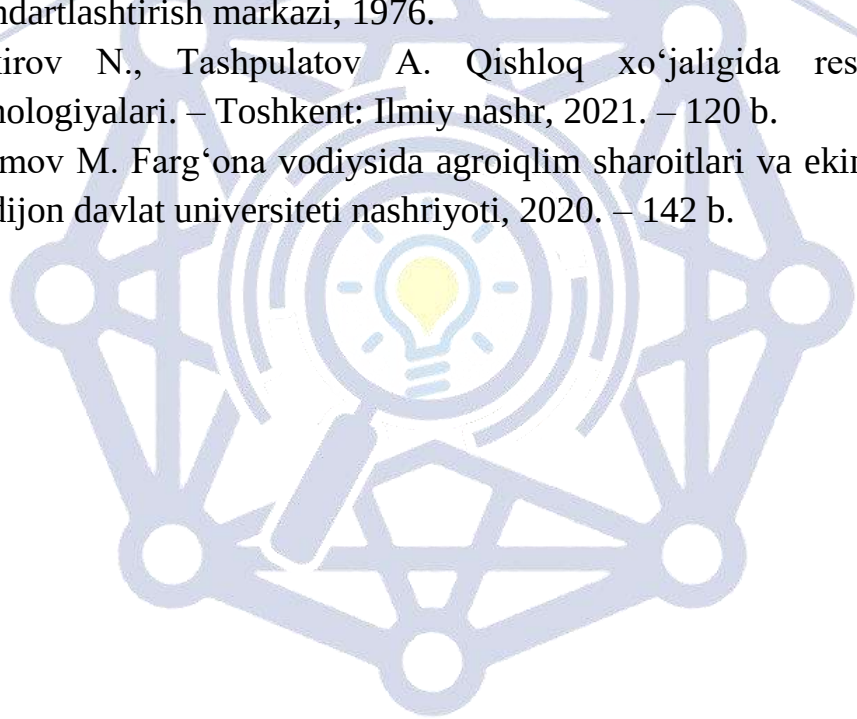
Muammo yechimi sifatida, zig‘ir yetishtirishni Farg‘ona vodiysida kengroq joriy etish, agrotexnik xizmat ko‘rsatish tizimini takomillashtirish va seleksion-tajriba ishlarini yanada kengaytirish lozim. Bundan tashqari, mahsulotni qayta ishlash zanjirini yaratish orqali mintaqada yangi ish o‘rinlari yaratilishi va iqtisodiy foyda ortishi ta‘minlanadi.

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ANALYTICAL STUDY AND FORMATION OF THE ASSORTMENT OF WOMEN'S LIGHTWEIGHT CLOTHING

Isroilova Navruza Bakhtiyorjon kizi

Fergana state technical university, assistant

inavruza006@gmail.com

Abstract: This scientific work examines the main aspects of analyzing and forming the assortment of women's casual clothing. The study analyzed the diversity of clothing types based on modern fashion trends, women's needs, and aesthetic requirements. It is also noted that fabric selection, approach to styling, color harmony, and seasonal factors play an important role in shaping the assortment. During the work, existing assortments on the market and consumer preferences were studied, and effective methods for creating an optimal model and assortment were proposed. The results of the research will serve to increase the efficiency of women's clothing production in light industry enterprises.

Keywords: Women's clothing, light clothing, assortment, fashion, design, style, fabric selection, consumer demand, seasonality, clothing types, modern styles, light industry.

Today, light industry, in particular the garment industry, plays an important role in the socio-economic development of society. Due to the increase in the population's standard of living, its cultural level, and its growing interest in modern fashion, the demand for clothing products is also increasing day by day. When creating a range of lightweight clothing, especially for women, not only functional comfort is taken into account, but also factors such as aesthetic appearance, modernity, individuality, and health.

Women's casual clothing includes a variety of products such as dresses, blouses, skirts, pants, suits, and tunics. They are designed to suit the season, age, lifestyle, and work activity. When forming an assortment, it is important, first of all, to thoroughly analyze the needs of the population, study fashion trends, and ensure harmony of color and shape. Designers, fashion designers, marketing specialists, and manufacturers work together.

Given the diversity of fashion trends, especially in the field of modern fashion clothing, we examined women's coats presented at fashion shows by world fashion

designers. Modern women's summer clothing looks come in a variety of styles, models, and materials. Fashion is certainly present in many areas of human activity, such as changing patterns of cultural heritage, but primarily fashion helps us shape our appearance. [2] Modern man, on the one hand, prefers high-quality, simple, comfortable clothing, on the other hand, he wants to emphasize his individuality and ability to express himself. The fashion world is focused on experimentation - the search for new designs, technologies and materials; an attempt to look into the future or search for unknown forms; choosing unconventional form solutions. Therefore, many designers use innovative and natural materials, fashion designers experiment with new shapes and previous forms, thereby creating new projects, which means that such experiments achieve high results in the fashion industry.

Design is one of the most subjective things in the world. Everyone considers the perception of form and color at the psychophysical level, and this perception is the author's emphasis.

A wide range of eco-friendly clothing recommended by designers for the 2024-2025 season is an integral and active part of women's wardrobe, available in light and dark colors.

The main palette of the summer season: A characteristic that is appropriate for this season, a departure from accepted norms and standards, and completely new proposals for the color range. [3] Achromatic colors and soft, highly hygroscopic, lightweight, and environmentally friendly, durable fabrics will become popular.

Seasonal fabrics: Breathable, environmentally friendly, and durable fabrics.

Seasonal colors: white, air color, green and pink colors.

As decorative elements of women's casual clothing: *decorative and utilitarian ornaments:* patch pockets and buttons;
decorative-constructive ornaments: drapery and small planks.

Seasonal color palette: [1] A modern women's casual wear collection is an integral and active part of the wardrobe, and its color palette matches the colors used for modern tailoring. These colors are: white, air color, gray and green.

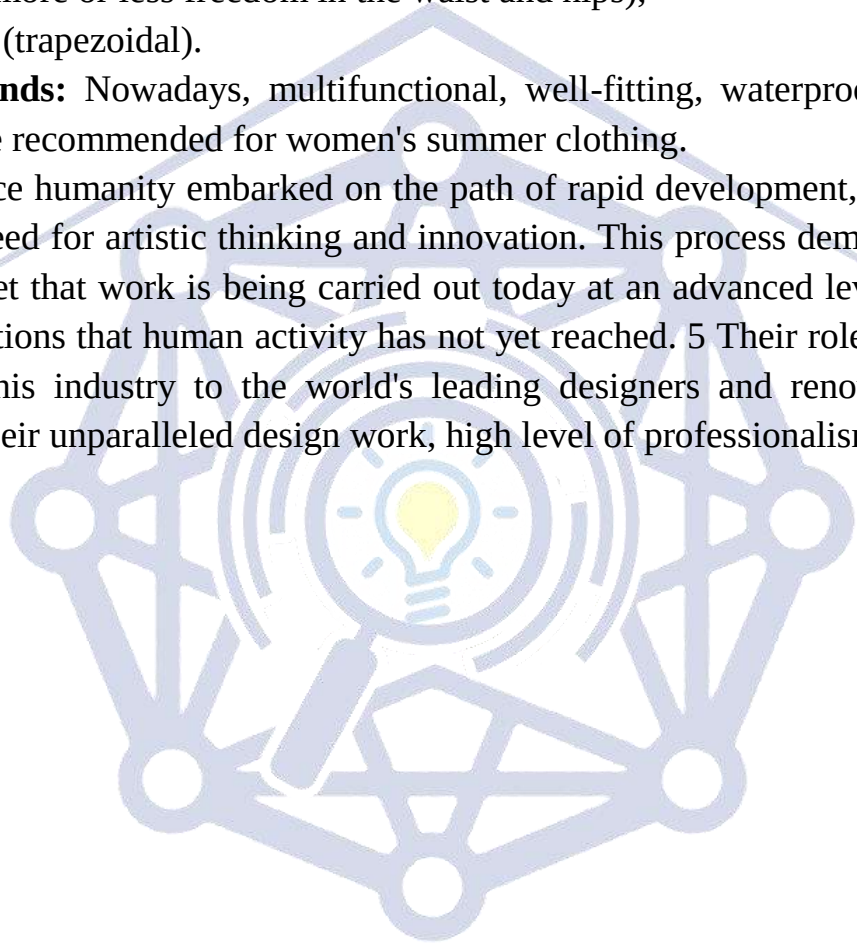
Basic silhouettes: oversized, trapezoidal, oval and straight-cut clothes. The main focus is on trapezoidal and straight-cut clothing.

Silhouette lines The proportions of a garment not only characterize its volume and appearance, but also determine its silhouette. For example, there are several types of silhouettes depending on the position of the waist of the garment:

- tight (the volume of the fabric and the skirt may vary);
- half-baked (various degrees of sticking to the waist);
- straight (more or less freedom in the waist and hips);
- extended (trapezoidal).

Trends: Nowadays, multifunctional, well-fitting, waterproof, and durable fabrics are recommended for women's summer clothing.

Since humanity embarked on the path of rapid development, it has begun to feel the need for artistic thinking and innovation. This process demonstrates that it is no secret that work is being carried out today at an advanced level in areas and new directions that human activity has not yet reached. 5 Their role is to provide a taste of this industry to the world's leading designers and renowned countries through their unparalleled design work, high level of professionalism, and aesthetic appeal.



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Table 1.

A collection of models for women's summer clothes.

Clothing description	Clothing appearance
1. Women's summer clothing made of linen fabric. This clothing set consists of two pieces and is designed for everyday use for women. The set includes a loose-fitting shirt and wide, elastic-waisted pants. The model is made of natural linen fabric, which is environmentally friendly, breathable, and comfortable for healthy skin. The shirt has a button-down front, a classic collar, and one chest pocket. The sleeves are wide and the cut is loose, providing ease of movement. The bottom of the dress is slightly longer and has a straight cut. The pants are wide-cut and have elastic bands and a drawstring at the waist. This allows it to adapt to different body types. Thanks to the linen fabric, this garment keeps the skin cool in hot weather, dries quickly, and is non-allergenic. This model provides comfort and lightness when worn at home, on vacation, or on summer trips. The natural texture of linen gives the garment a sense of simplicity and modernity.	

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2. Women's cotton shirt .This white women's jacket is designed for the summer season and is made in a light, elegant and comfortable style. The dress is full-length, has a flared silhouette at the bottom, a defined waist, and is tailored to give women elegance and freedom. The sleeves are short and slightly rolled up, so they don't restrict movement in warm summer weather.

The dress is made of cotton-based broderie fabric, and its entire surface is decorated with decorative openwork patterns - embroidery. These patterns give the outfit elegance and a unique romantic style.

The main composition of the fabric is 100% natural cotton, which has air permeability, lightness, and hygienic properties. The shirt does not irritate the skin, has no allergic effects, and is environmentally friendly. This model is perfect for daily walks, weekends, traveling or going to the beach. It perfectly embodies the summer image when worn in harmony with a straw bag and open sandals.



3. Classic style combination women's shirt.This dress is a long suit-set for women, designed in a modern oriental style, combining sophistication and simplicity. The set consists of two parts: a long shirt and wide skirt-like pants (or palazzo-type bottoms). The model is not suitable for the warm season, but for the office, meetings or formal events in the fall or spring season.

The top has a high collar, long sleeves, and ties on the side. The sleeves are loose and straight-cut, adding a little drama and elegance to the model. The side ties at the waist make the waist look slimmer and give the dress a silhouette. The model is made of lightweight fabric. **polyviscose suit fabric** can be prepared. It contains viscose, polyester, and possibly some elastane fiber.



Women's linen dress. This white women's jacket is designed for the summer season and is made in a light, elegant and comfortable style. The outfit consists of two parts: a blouse and pants. It is sewn in a way that gives women elegance and freedom. The sleeves are medium length and slightly rolled up, which does not restrict movement in warm summer weather. This model is sewn from linen. This model is made of linen, which feels pleasant on the skin, is breathable, and reduces sweating. Due to its natural composition, it does not cause allergies and is an environmentally friendly product. The look of the shirt is in the style of modern minimalism and can be comfortably worn as casual wear, on a walk or at work. The pants have an elastic waistband for ease of movement. This set stands out in a woman's wardrobe with its simple yet elegant design.



Conclusion:

Analytical study of the assortment of women's casual clothing is an important stage in their formation. In this direction, it is necessary to combine aesthetic, economic and environmental criteria when creating an assortment. Research shows that market needs are constantly changing, and manufacturers need to adapt to these needs with modern designs, quality fabric selection, and reasonable pricing policies.

When forming an assortment, taking into account marketing analysis, competitor activities, fashion trends, and technological capabilities ensures product success. For light industry enterprises, research in this area will help produce competitive products and increase their share in the domestic market.

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RAQAMLI TEXNOLOGIYALARNI IQTISODIYOTGA JALB QILISHNING MOLIVAVIY JIHATLARI

SHODIYEV ODILJON SALIM O'G'LI
QARSHI DAVLAT TEXNIKA UNVERSITETI
“MOLIYA VA BANK ISHI” KAFEDRASI O'QITUVCHISI

Annotatsiya: Maqolada raqamli iqtisodiyotning mohiyati, unga xos bo'lgan xususiyatlar, uning yutuqlarini milliy iqtisodiyotga keng joriy qilishning ijtimoiy-iqtisodiy ahamiyati, dunyoning ayrim davlatlari, jumladan O'zbekiston oldida bu borada turgan dolzarb masalalar bilan bog'liq bo'lgan muammolar va ularning yechimini ko'rsatib berishga harakat qilingan.

Kalit so'zlar: Raqamli iqtisodiyot, milliy iqtisodiyot, raqamli texnologiyalar, axborot-kommunikatsiya texnologiyalari, elektron biznes, mobil tarmoq aloqalari, internet, elektron savdo, elektron hukumat.

Fan, texnika va texnologiyalar yo'nalishlarida amalga oshirilayotgan yangiliklar, ayniqsa axborot-kommunikatsiya texnologiyalari sohasida erishilgan yutuqlar jamiyatimiz taraqqiyotini va ijtimoiy-iqtisodiy hayotimizning barcha jabhalarini misli ko'rilmagan darajada miqdoriy va sifatiy jihatdan o'zgartirib yubormoqda.

Hozirgi zamon raqamli texnologiyalari insonlarning umumiy manfaatlari uchun xizmat qilishi va barcha jabhalarni keng miqyosda qamrab olishi - hozirgi dunyoning talabiga aylanib, ilmiy adabiyotlarda axborot texnologiyalari, hozirga kelib esa raqamli texnologiyalar (raqamli iqtisodiyot) nomini oldi.

Bunday iqtisodiyot ko'plab yangi bilim va ko'nikmalarga, ijtimoiy himoya qilishning tubdan yangi yo'llariga, mehnat va dam olish o'rtasidagi sifat jihatidan yangi munosabatlarga o'z ta'sirini o'tkazib kelmoqda. Bu muammolar bilan shug'illanmagan birorta fan sohasi qolmadi.

Raqamli iqtisodiyot insonlarning umumiy manfaatlari uchun xizmat qiladigan va uning barcha jabhalarini keng miqyosda qamrab oladigan o'zgarishlarni keltirib chiqarmoqda. Bunday o'zgarishlar butun insoniyat jamiyatining barqaror rivojlanishi maqsadlariga erishishida muhim hissa bo'lib qo'shilishi va shu bilan birga ulkan imkoniyatlarni yaratib berishi muqarrar, albatta.

Dunyodagi barcha ilg‘or kuchlarning sa’y-harakatlari samarasi o‘laroq aholining raqamli texnologiyalar olamiga kirib borishi hamda uning natijalaridan o‘z mamlakatlari ravnaqi yo‘lida foydalanish imkoniyatlari kengaymoqda. Zero, bugungi taraqqiyotimizni va albatta, insoniyat hayotining serqirra jihatlarini raqamli texnologiyalarsiz tasavvur qilib bo‘lmaydi. Mazkur maqolada hozirgi zamon raqamli texnologiyalarni mamlakatimiz milliy iqtisodiyoti tarmoqlariga keng joriy qilish bilan bog‘liq masalalar qarab chiqiladi va ularning yechimlari to‘g‘risida fikr-mulohazalar qilinadi.

Dunyo miqyosida raqamli texnologiyalarning yangi avlodi paydo bo‘lib, uning rivojlanish ko‘lami tufayli fanda “simsiz texnologiyalar”, “mobil texnologiyalar”, “internet”, “sun‘iy intellekt”, “robototexnika” kabi turli terminlar paydo bo‘ldi.

Aqlli mexanizmlarni ishlab chiqarishga bo‘lgan shart - sharoitlar ham o‘zgarmoqda. Aqlli mexanizmlar deganda odamlar va texnologik tizimlarga ulangan va muvofiqlashtirilgan aqlli ekotizimlarda ochiq o‘zaro ta’sir qiladigan raqamli muhit tushuniladi. Bunga “aqlli shaharlar”, “aqlli uylar”, “aqlli gaz, svet, suvni o‘lchagichlar”, “raqamlashgan aqlli ish o‘rinlari” kabilar misol bo‘la oladi. Bularning barchasi raqamli iqtisodiyotning namoyon bo‘lish shaklidir.

Raqamli iqtisodiyot tovarlar ishlab chiqarish va xizmatlar ko‘rsatish sohalari, elektron tijorat bilangina cheklanib qolmasdan, milliy iqtisodiyotning sog‘liqni saqlash, fan va ta’lim, qurilish, energetika, qishloq va suv xo‘jaligi, transport, geologiya, kadastr, arxiv, internet-banking kabi tarmoqlariga, huquqni muhofaza qilish sohalariga jadal kirib bormoqda va ularning har birida yuqori samara berishi ta’minlanmoqda.

Raqamlashtirishning ta’rifi, holati va uni yanada rivojlantirish masalalari xorijda va mamlakatimizda nashr qilingan bir qator yozma manbalarda va ilmiy tadqiqotlarida o‘z aksini topgan. Ularda jumladan, raqamlashtirishga raqamlashgan axborot texnologiyalari yoki iqtisodiy agentlar o‘rtasidagi o‘zaro ta’sir usullaridagi o‘zgarishlar (1), boshqasida raqamli texnologiyalar va tegishli mahsulotlar va xizmatlarni yaratish, tarqatish va ulardan foydalanish bo‘yicha faoliyat (2) degan ta’riflar berilgan.

Ko‘pincha raqamlashtirishni uning mamlakat milliy iqtisodiyoti va ijtimoiy faoliyatning tarmog‘i, ularga ta’siri nuqtai - nazaridan baho beruvchilar ham bor, jumladan, jahon banki ma’lumotlarida, “raqamlashtirish - bu internet, shuningdek,



mobil va sensorli tarmoqlar kabi platformalar tomonidan qo'llab - quvvatlanadigan iqtisodiy va ijtimoiy faoliyatning global tarmog'idir" (3) degan ta'rif berilgan.

Raqamlashtirishning "fan, texnologiya va innovatsiyalar bilan bog'liq rivojlanishini inobatga olgan holda, uni - raqamli texnologiyalar, tegishli mahsulotlar va xizmatlarni yaratish, tarqatish va ulardan foydalanish bo'yicha faoliyat yoki ma'lumotlarni to'plash, saqlash, qayta ishlash, qidirish, uzatish va elektron shaklda taqdim etish texnologiyalaridir", degan ta'rif ham bor (4).

O'zbekistonda raqamli iqtisodiyot masalalariga davlat siyosati darajasida e'tibor berilayotganligi va uni taraqqiy toptirishning dolzarbligi muammolari bo'yicha Gulyamov S.S., Abdullayev O.M., Ayupov R.H., Baltabayeva G.R., Ergashev R.X., Hamroyeva S.N. kabi mahalliy olimlarimiz ham ilmiy izlanishlar olib borganlar, jumladan, Gulyamov C.C. va boshqalar "Raqamli» iqtisodiyot bu - gibridd dunyo sharoitlarida mavjud bo'lgan iqtisodiyotdir" (5), R.X.Ergashev va S.N.Hamroyevalar "Raqamli" iqtisodiyot bu - axborot, jumladan, personal axborotdan foydalanish hisobiga barcha qatnashchilarning ehtiyojlarini maksimal darajada qondirish, uning o'ziga xos xususiyati bo'lgan iqtisodiyotdir (6), degan ta'riflar berishgan.

Raqamli texnologiyalarga berilgan boshqa ta'riflarni ham keltirish mumkin. Yuqoridagilardan kelib chiqqan holda, raqamli iqtisodiyotga - milliy iqtisodiyot tarmoq va sohalariga raqamli texnologiyalar yutuqlarini keng joriy qilish va ulardan faol foydalanish, deb ta'rif berilsa maqsadga muvofiq bo'lar edi, deb hisoblaymiz.

Nashr qilingan ayrim manbalarda iqtisodiy rivojlantirishda dunyoda yetakchilik qilib kelayotgan davlatlardan biri hisoblanmish Buyuk Britaniyada raqamli iqtisodiyotning yalpi ichki mahsulotdagi ulushi 12 foizni tashkil qilgani holda, mamlakatimizda bu ko'rsatkich 2019 yilda 2 foizni tashkil qilgan, xolos. 2024 yilga kelib, bu ko'rsatkichni 3 martaga oshirish ko'zda tutilgan (7).

Raqamli texnologiyalarni joriy qilish katta moliyaviy resurslarni talab qilishi tabiiy hol, albatta. O'zbekiston Respublikasi Prezidenti Sh.M.Mirziyoyev 2020-yilning 24 - yanvari kuni Oliy Majlisga Murojaatida "Albatta, raqamli iqtisodiyotni shakllantirish kerakli infratuzilma, ko'p mablag' va mehnat resurslarini talab etishini juda yaxshi bilamiz. Biroq qanchalik qiyin bo'lmasin, bu ishga bugun kirishmasak, qachon kirishamiz, ertaga juda kech bo'ladi. Shu bois, raqamli iqtisodiyotga faol

o'tish - kelgusi besh yildagi eng ustuvor vazifalarimizdan biri bo'ladi" deb ta'kidlab o'tdi (8).

“ERGO Research and Advisory” konsalting xizmati tahlilchilarining fikriga ko'ra, mamlakatimizda raqamli texnologiyalarni keng qo'llashdagi asosiy muammolar telekommunikatsiya infratuzilmasi, aloqa sifatining talab darajasida emasligi va davlat byudjetidan hozircha yetarli mablag'larning ajratilmayotganligidir.

Raqamli iqtisodiyotga jadal o'tishga to'sqinlik qilayotgan bir qator muammolar hanuzgacha saqlanib qolinmoqda. Xususan, davlat axborot tizimlarini rivojlantirishning yagona tamoyillari hali ishlab chiqilmagan, ushbu sohadagi tadbirlar boshqa axborot tizimlari bilan uzviy bog'lanmagan holda amalga oshirilib kelinmoqda.

O'zbekistonning iqtisodiy erkinlik indeksi bo'yicha 140 - o'rinni band etib turganligi ham raqamli iqtisodiyotni joriy etishda qilinishi kerak bo'lgan ishlarning hali ko'pligini anglatadi. Raqamli savodxonlikni ta'minlaydigan va global tendensiyalarga javob beradigan o'quv dasturlarini ishlab chiqishda ham amalga oshirilayotgan ishlarni talab darajasida, deb bo'lmaydi.

Uzoq muddat davomida byudjet tashkilotlaridagi texnik xodimlarning axborot texnologiyalari sohasidagi mutaxassislariga to'langan maoshlarning kamligi ham bu boradagi muammolardan biri bo'lib qolgan edi. Natijada malakali mutaxassislar bu lavozimga ko'ra xalqaro tashkilotlar, qo'shma korxonalar, chet ellik buyurtmachilar uchun ishlashni ma'qul ko'rishganlar.

Mamlakatimiz aholisi 2017 - yilda iste'mol tovarlari xaridining 34 foiz hisobini raqamli to'lov shaklida amalga oshirgan bo'lsa, bu ko'rsatkich B.Britaniyada 96 foizni tashkil qiladi. Shuning uchun ham bu ko'rsatkichni hozirgi zamon nuqtai - nazaridan yetarli deb hisoblab bo'lmaydi.

Bundan o'n yil oldin O'zbekiston internet tezligi bo'yicha MDH mamlakatlaridagi o'rtacha ko'rsatkichdan ikki barobar past bo'lib, bu ko'rsatkich bo'yicha mamlakatimiz dunyo reytingida 129 - o'rinni egallab turgan bo'lsa, 2023 yilga kelib mobil internet tezligi bo'yicha dunyoda 91 - o'ringa ko'tarildi. Bu O'zbekiston 2023 yilga kelib 38 pog'onaga yuqoriladi deganidir (9).

Shu bilan birga, O'zbekistonni IT-xabga aylantirish uchun internet tezligini oshirish bo'yicha hali juda ko'p ish qilishishi kerakligini ta'kidlashni joiz, deb hisoblaymiz



Mamlakatimizda terminal orqali to'lovlar miqdorini oshirib borishga keng imkoniyatlar yaratilmoqda, undan faqat oqilona foydalanish kerak bo'ladi. Shu boisdan ham mamlakatimiz raqamli texnologiyalar natijalaridan tobora unumli foydalanish yo'lini tanladi. Bu tanlangan yo'l milliy iqtisodiyotimiz taraqqiyoti uchun yangidan-yangi imkoniyatlar va yo'nalishlar eshigini ochib berishi, tabiiy.

Hozirga kelib, raqamli iqtisodiyotni faol rivojlantirish, barcha tarmoqlar va sohalarda, eng avvalo, davlat boshqaruvi, ta'lim, sog'liqni saqlash, sanoat, qishloq xo'jaligida zamonaviy axborot-kommunikatsiya texnologiyalarini keng joriy etish bo'yicha kompleks chora-tadbirlar amalga oshirilmoqda.

O'zbekiston Respublikasi Prezidentining “Raqamli iqtisodiyot va elektron hukumatni keng joriy etish chora-tadbirlari to'g'risida”gi 2020 yil 28 apreldagi PQ-4699-sonli qarori talablaridan kelib chiqqan holda 2025 yilga kelib, raqamli iqtisodiyotning mamlakat yalpi ichki mahsulotidagi ulushini 2 barobarga ko'paytirish nazarda tutilgan (10), chunki raqamli texnologiyalarni iqtisodiyot va ijtimoiy sohaga jadal joriy etishni ta'minlash milliy rivojlanishning maqsadlaridan biridir.

2020 yilning 5 oktyabrida O'zbekiston Respublikasi Prezidentining “Raqamli O'zbekiston-2030” strategiyasini tasdiqlash va uni samarali amalga oshirish chora - tadbirlari to'g'risida”gi PF-6079 - sonli Farmonida elektron hukumat tizimini takomillashtirish, dasturiy mahsulotlar va axborot texnologiyalarining mahalliy bozorini yanada rivojlantirish, respublikaning barcha hududlarida IT-parklarni tashkil etish, shuningdek, sohani malakali kadrlar bilan ta'minlashni o'z ichiga olgan 220 dan ortiq ustuvor loyihalarni amalga oshirish ko'zda tutilgan bo'lib, Toshkent, Nukus, Buxoro, Namangan, Samarqand, Guliston, Urganch va kabi shaharlarda zamonaviy infratuzilmaga ega bo'lgan IT parklarining barpo etilishi (11) bu borada bajarilishi yuzasidan qo'yilgan qadamlarning debochasidir.

O'zbekiston Respublikasi Prezidentining 2020 yilning 28 aprelida “Raqamli iqtisodiyot va elektron hukumatni keng joriy etish chora - tadbirlari to'g'risida”gi Qaroriga ham milliy iqtisodiyot tarmoqlarini raqamlashtirish, IT parklarni tashkil etish, yangi loyihalarning moliyaviy manbalarini ta'minlash uchun 1,3 trillion so'mlik 104 ta, iqtisodiyotning real sektorida 5,3 trillion so'mlik 87 ta, telekommunikatsiyalar sohasida 15,1 trillion so'mlik 35 ta, agrar sohada 24 ta, alohida IT parklar bo'yicha 18 ta loyihalarni amalga oshirish belgilab qo'yilgan (12).



Raqamli texnologiyalar sohasiga investitsiyalarni kiritish natijasida tayanch aloqa stansiyalarning zichligini oshirish, internet, mobil xizmatlarining yaxshi ishlashini ta'minlash natijasida iqtisodiy o'sishni ta'minlashdan iborat vazifalar kelib chiqadi.

Mamlakatimiz milliy iqtisodiyotiga raqamli texnologiyalarni joriy qilishdagi holat va uni yanada jadallashtirish yuzasidan quyidagi xulosalarni qilish mumkin:

-bugun jadallik bilan kechayotgan raqamlashtirish jarayonlari tubdan yangi iqtisodiyotni vujudga keltirmoqda. Joriy qilinishi kun tartibiga kiritilgan bu iqtisodiyot tadbirkorlik va ijtimoiy sohalarida xarajatlarni minimal miqdorda kamaytirib, maksimal foyda olishda katta imkoniyatlar yaratib berishi isbot talab qilmaydigan tabiiy holatga aylandi;

-raqamli texnologiyalar - iqtisodiy taraqqiyotning asosiy manbai hisoblanib, raqobat, sarmoya va innovatsiyalarni rag'batlantiradi, bu esa iste'molchilar tanlovini kengaytirishga, yangi ish o'rinlarini yaratishga, pirovard natijada davlat taraqqiyoti va xalq farovonligini tubdan ijobiy tomonlarga o'zgartirishga olib keladi;

-O'zbekiston Prezidenti va hukumatining raqamli texnologiyalarni milliy iqtisodiyot tarmoqlariga keng joriy qilish yuzasidan olib borayotgan sa'y-harakatlari bir qator yangi samarali yo'nalishlarning yaratilishiga zamin tayyorlamoqda;

-raqamli iqtisodiyotga o'tish dunyoning barcha mamlakatlari uchun birinchi darajali vazifa bo'lib turgan bir paytda O'zbekiston milliy iqtisodiyotining barcha sohalarini raqamlashtirish jahon hamjamiyatiga integratsiyalashuv, dunyo bozorida o'z o'rniga ega bo'lish, iqtisodiy barqarorlikni ta'minlash, samaradorlikka erishish va fuqarolarimizga yetarli qulayliklar tug'diradi;

-raqamlashtirish natijasida to'plangan axborotlar asosida ijtimoiy - iqtisodiy rivojlantirish parametrlarini bashoratlashga va tegishli qarorlar qabul qilishga katta imkoniyatlar yaratilmoqda;

-raqamli texnologiyalar asta - sekinlik bilan inson mehnatining o'rnini egallab borishi bilan bir qatorda pirovard natijalarning ijobiy tomonlarga siljib borishini ta'minlaydi, bu esa raqamli texnologiyalarning namoyon bo'layotganligini anglatadi;

-milliy iqtisodiyot tarmoqlarida va sohalarida tubdan yangi o'zgarishlarning ro'y berishi, insonlar mehnatining yengillashtirilishi, ishlab chiqarish samaradorligining keskin oshib borishi zamonaviy raqamli texnologiyalarning pirovard natijasini anglatadi;



-mamlakatimizda raqamlashtirish sohasida xorij tajribasini o‘rganish asosida istiqbolda ularni yanada rivoj toptirishning asosiy parametrlarini ishlab chiqish uchun keng imkoniyatlar paydo bo‘lmoqda

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Analysis of the design of stone holders in cotton cleaning processes

Assistant:

Imomnazarov Khurshidbek Khushnazar's boy

Student of group 88-21

Tojimatova Feruza Mamaro'zi's girl

Abstract: This article analyzes the design of stone holders used in cotton ginning technological processes and proposes an improved design of stone holders.

Keywords: cottonseed, stone crusher, heavy mixture, pockets, pneumatic transport, speed, air pressure

Introduction. Comprehensive measures are being implemented to develop the cotton sector, modernize and technically re-equip cotton ginning enterprises, increase the profitability of production and processing of cotton raw materials, as well as the competitiveness of manufactured products.

Because the ever-increasing demand for cotton and its products indicates the need to use modern equipment and technologies in the cotton ginning industry. One of the current goals is to radically improve the management system of the cotton sector, expand the production of competitive and high-quality finished products with high added value, and further export them to major foreign markets. And a number of new projects are being developed in this direction.

The efficiency of the equipment installed in the technological process of cotton ginning enterprises, their uninterrupted operation, has a significant impact on the composition of cotton. Heavy impurities in the cotton content cause damage to the working parts of the ginning machines and the teeth of the saws of gins and linters during its processing. Such a change leads to damage to the seeds and fibers during the separation of fiber from the seed in the gin. This in turn leads to a decrease in the cleaning efficiency of cotton ginning machines and the inclusion of more cotton pieces in the waste. In addition, heavy impurities can cause fires as a result of hitting the metal and working bodies of the processing machines. Therefore, the ingress of heavy impurities into the working chambers of cotton processing machines has always been the focus of attention of scientists and industry experts in this field, and they have been looking for ways to completely retain heavy impurities in the air-carrying device.

D.L. Kelbert [1] conducted a study on the causes of fires in the process of separating fiber from the grain in the saw teeth of cotton ginner, gins and linters. It was determined that this was mainly caused by metal fragments (nails, nuts, washers) in the composition of heavy alloys. The composition of heavy alloys trapped by stone traps installed in the technological process of cotton ginner is shown.

The principle of operation of the air-assisted conveyor is that atmospheric air, under the flow formed due to the pressure difference, carries the transported material along with it and pushes it into the pipe. The cotton moves in a suspended state inside the pipe and reaches the separator. The separator separates the material from the carrier air and transfers it to the next technological unit.

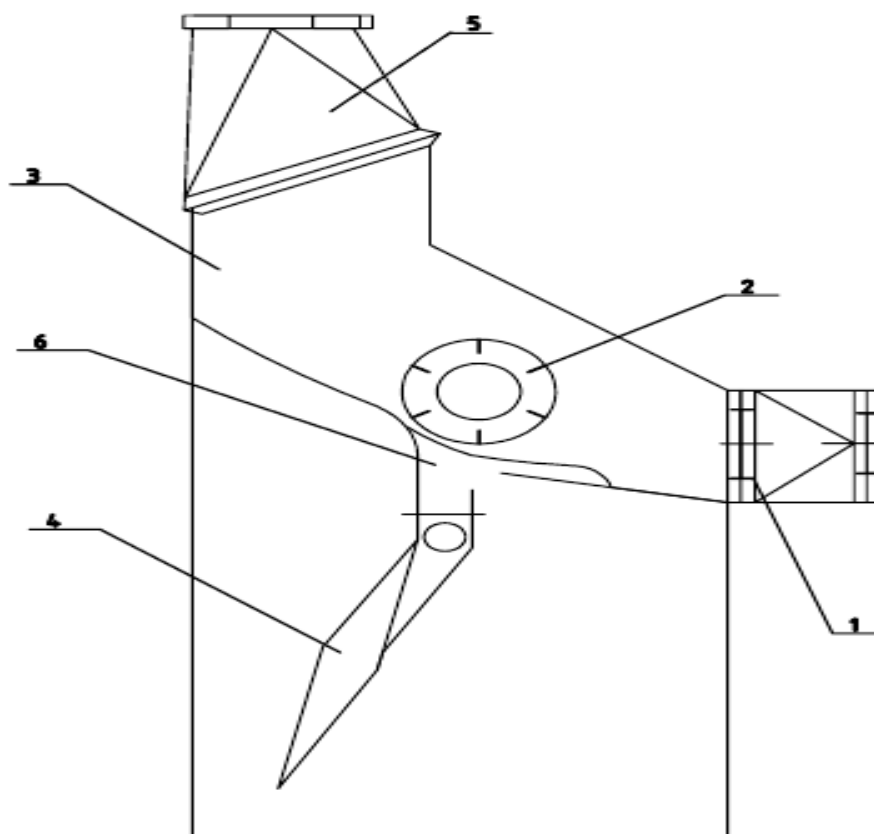
The advantage of the suction air conveyor is that the working pipeline system can be easily and conveniently changed depending on the location of the cotton ginning plants, and the length of the pneumatic line can be extended by connecting additional pipes to the initial pipes. The production capacity of the air conveyor depends on the production capacity of the cotton ginning plant. For an advanced cotton ginning plant with one battery, it is 10 tons per hour.

With the growth of the cotton production rate, the cotton processing industry sets itself the task of increasing production capacity, increasing the productivity of equipment, and improving product quality. The implementation of these tasks is largely dependent on the operation of the air conveyor installed in the area. Because it is directly integrated into the continuous technological process of the cotton ginning plant and is an important part of its initial and working rate.

Stone holders are divided into two types depending on the installation location. The first is linear stone holders. They are located in the line of the air conveyor and are installed before the separator. The second is non-linear stone holders, which are installed after the separator.

In order to achieve the highest possible retention of heavy impurities and metal fragments in the cotton, it is necessary to study the movement of cotton in the separation chamber of the devices created. The intended purpose is to determine the trajectories of cotton and heavy impurities in the working chambers of newly created multi-pocket radial and cylindrical stone holders. Using this trajectory, it will be possible to determine the location of the pockets and elastic plates in the working

chamber. Currently, the following stone holders and their improved designs are in operation at cotton ginning enterprises.



2CHTL heavy duty mixing device.

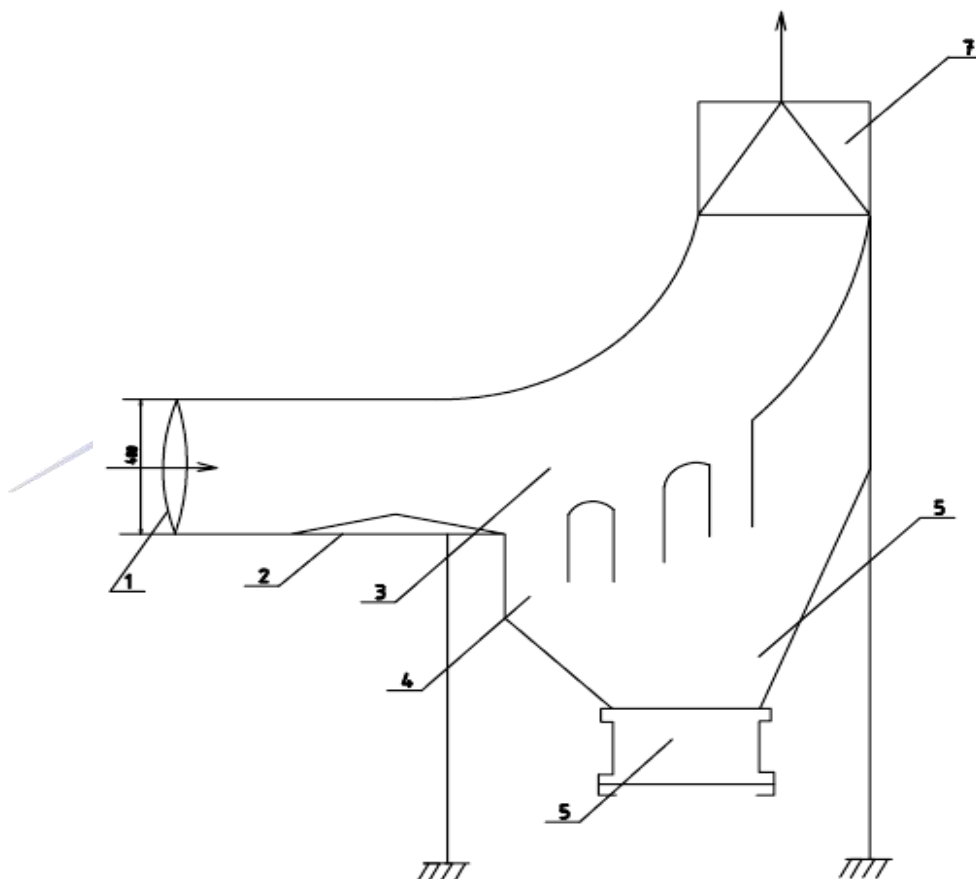
1-pipe for transferring cotton seeds into the device, 2- aspiration chamber, 3- return wall, 4- heavy impurities separator, 5- pipe for transferring cotton seeds from the device, 6- observation hatch.

In order to increase the efficiency of the stone catcher, that is, to capture and separate heavy impurities in the cotton seed coming from the pneumatic transport system, new designs of multi-pocket stone catcher have been proposed. When analyzing the designs of the proposed stone catcher, the following factors were identified and analyzed.

In this case, in order to achieve the highest level of capture of heavy impurities in the cotton by the multi-pocket stone catcher, it is necessary to determine the most convenient location of the pockets. That is, cotton and heavy objects, having different specific masses and speeds, move along different trajectories in the transition areas during air transportation. Since heavy objects have a larger mass



than cotton and move along different trajectories, it is necessary to know where to install the pocket stone catcher separation chamber to capture them.



Proposed heavy impurities capture device

**1- inlet pipe; 2 – diverter; 3 – separation chamber;
4 – pockets; 5 – receiving device; 6 – separator; 7 – outlet pipe.**

When determining the location of the pockets in the working chamber, possible situations of movement of cotton and heavy mixtures along the height of the pipe were taken. In this case, cotton and heavy mixtures were mainly studied in two cases in the pipes. In the first case, we consider that cotton and heavy mixtures move along the central axis of the pipe and in the middle of its lower plane. In the second case, we assume that cotton and heavy mixtures move in the area between the central axis of the pipe and its upper plane. Having studied the movements of cotton and heavy mixtures inside the pipe in these cases, we determined the coordinates of the intersection points of their movement trajectories with the pipe



walls. Based on the obtained points, the first pocket is installed in the lower part of the working chamber. Heavy mixtures with large sizes mainly fall into it.

The second pocket is installed in a stepped manner at a certain distance after the first pocket, and mainly medium-sized heavy impurities fall into it. The third pocket has the ability to retain small impurities from the cotton content. As a result of the theoretically based installation of these pockets, the loss of cotton with heavy impurities is also reduced. In addition, the stepped installation of the pockets causes the cotton moving in the form of pieces to vibrate as a result of impact. This vibration also makes it possible to separate heavy impurities that are well bonded to the cotton.

Conclusion. As a result of the analysis of the designs of stone traps, according to the operating processes of the currently operating stone traps, the use of multi-pocket designs compared to the 1st pocket leads to an improvement in the efficiency of the processes of retaining heavy impurities in the cotton content.

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ERGONOMIC AND AESTHETIC APPROACHES IN THE DEVELOPMENT OF CHILDREN'S CLOTHING MODELS

Yuldashaliyeva Zulayho Olimjon kizi
Assistant at Fergana State Technical University

Abstract. This article explores the fundamental principles of ergonomic and aesthetic design in the development of children's clothing. It discusses how garment models can be optimized for children's age-specific anatomy, mobility, and psychological needs. By analyzing ergonomic requirements and aesthetic preferences, the article provides insight into how comfortable, functional, and visually appealing clothing can enhance children's daily experience. The research highlights the importance of material selection, structural design, and visual harmony in the creation of children's apparel.

Keywords. children's clothing, ergonomics, aesthetics, design, comfort, textile, color harmony, child development

Children's clothing must satisfy a wide range of requirements—comfort, safety, durability, and attractiveness. Unlike adult clothing, garments for children must adapt to constant physical activity, rapid growth, and sensitive skin. Therefore, an ergonomic and aesthetic approach is vital in the design and development of children's apparel models.

1. Ergonomic Principles in Children's Clothing Design

Ergonomics in children's clothing focuses on the relationship between the garment and the physical characteristics of the child's body. Key considerations include:

- Body measurements and proportions
- Freedom of movement
- Safety and hygiene

Clothing that supports ergonomic needs promotes healthy posture, ease of wear, and physical confidence in children.

2. Aesthetic Aspects of Children's Clothing

In addition to functionality, children's clothing must appeal visually. Aesthetic design is not merely decorative but plays a role in:

- Emotional well-being

- Age appropriateness
- Gender sensitivity and inclusivity

Graphic prints, thematic elements, and stylish cuts are often used to create engaging designs that children enjoy wearing.

3. Integration of Ergonomic and Aesthetic Design

An optimal children's clothing model merges ergonomic and aesthetic criteria:

- Material Selection
- Pattern Construction
- Color Psychology

Combining these aspects ensures clothing is not only wearable but also enjoyable and developmentally supportive.

4. Technological Trends and Innovations

Recent advancements have introduced new possibilities in the production of ergonomic and aesthetic children's wear:

- 3D body scanning for accurate fit prediction
- Digital textile printing for personalized patterns
- Smart fabrics that react to temperature or moisture

In conclusion, the development of children's clothing models requires a delicate balance between ergonomic comfort and aesthetic appeal. Successful designs support children's growth, activity, and emotional needs. As textile technology evolves, opportunities for enhanced functionality and creative design will continue to expand, shaping the future of children's fashion.

Table 1.

Age-Based Ergonomic Design Guidelines for Children's Clothing (Ages 1–7)

Age Group (Years)	Average Height (cm)	Movement Needs	Design Considerations	Recommended Fabrics
1–2	80–90	Crawling, toddling	Snap buttons, wide openings, soft fabrics	Organic cotton, bamboo
3–5	95–110	Running, climbing	Elastic waist, reinforced	Cotton blends, jersey



			seams, flexible fit	
6–7	115–125	High activity, dressing independence	Functional pockets, self- fastening elements	Stretch cotton, modal



Figure 1. Ergonomic and Aesthetic Design Sketch for a 3–5 Year-Old Child’s Summer Outfit

The figure presents a unisex summer set consisting of a short-sleeved tunic and elastic-waist shorts made from lightweight, breathable cotton fabric. Key ergonomic features include:

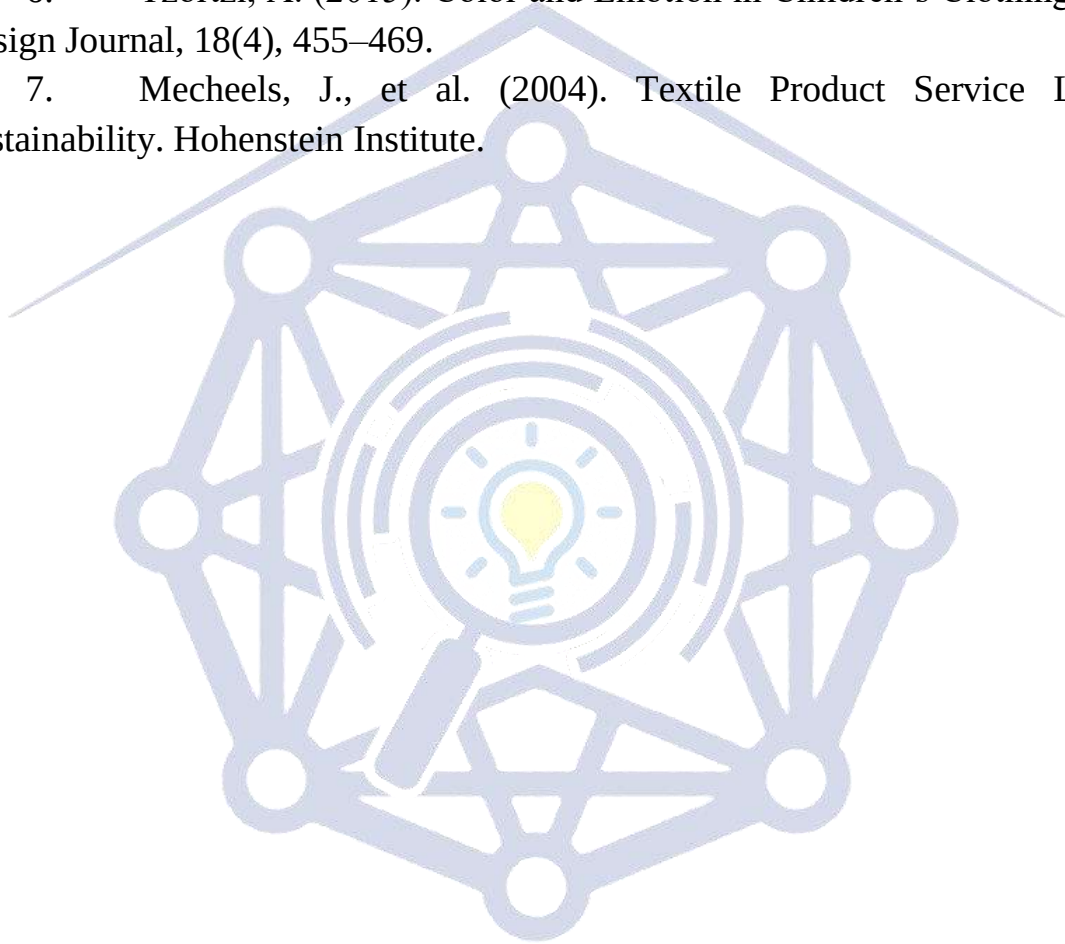
- Soft flat seams to avoid skin irritation
- Wide neck opening for easy dressing
- Loose-fitting silhouette for ventilation and movement
- Bright color scheme with playful patterns to support aesthetic appeal and emotional engagement

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RAQAMLI DIZAYN TEXNOLOGIYALARIDA KIYIM BALANSINING NAZORATI

R.A. Berdiyeva

Farg‘ona davlat texnika universiteti,
tel: 907801337 ranoberdiyevahon@gmail.com

Annotatsiya: Mazkur maqolada kiyim dizaynida ayniqsa yelkali kiyimlar konstruksiyasida muhim bo‘lgan “kiyim balansining” tushunchasi, uning amaliy ahamiyati va raqamli texnologiyalar yordamida balansni nazorat qilish imkoniyatlari yoritilgan. An‘anaviy va zamonaviy usullar solishtirilib, 3D skanerlash, virtual prototiplash, CAD tizimlari kabi texnologiyalar orqali kiyim balansining aniqligi va qulayligi qanday ta‘minlanishi tahlil qilinadi. Maqola dizaynerlar, konstruktorlar va tikuv sanoati mutaxassisleri uchun foydali ma‘lumotlar beradi.

Kalit so‘zlar : Kiyim balansi, raqamli dizayn, 3D skanerlash, CAD tizimi, yelkali kiyimlar, kiyim konstruksiyasi, virtual prototiplash, ergonomika, avtomatlashtirilgan dizayn.

Аннотация: В данной статье рассматривается понятие баланса одежды, которое играет важную роль в дизайне одежды, особенно в конструкции изделий с плечевыми элементами. Освещается практическое значение правильного баланса и возможности его контроля с помощью цифровых технологий. Сравниваются традиционные и современные методы, анализируются такие технологии, как 3D-сканирование, виртуальное прототипирование и системы САПР (CAD), в контексте повышения точности и комфорта балансировки одежды. Статья предоставляет полезную информацию для дизайнеров, конструкторов и специалистов швейной промышленности.

Ключевые слова: Баланс одежды, цифровой дизайн, 3D-сканирование, система CAD, плечевые изделия, конструкция одежды, виртуальное прототипирование, эргономика, автоматизированный дизайн.

Annotation: This article explores the concept of garment balance, which plays a critical role in clothing design, especially in the construction of garments with shoulders. It discusses the practical importance of achieving proper balance

and examines how digital technologies help control and ensure this balance. Traditional and modern methods are compared, and technologies such as 3D scanning, virtual prototyping, and CAD systems are analyzed in terms of their ability to enhance accuracy and comfort in garment balance. The article provides valuable insights for designers, pattern makers, and professionals in the sewing industry.

Keywords: Garment balance, digital design, 3D scanning, CAD system, shoulder garments, garment construction, virtual prototyping, ergonomics, automated design

Zamonaviy moda sanoatida texnologik yutuqlar kiyim dizaynining barcha bosqichlarini tubdan o'zgartirmoqda. Xususan, raqamli dizayn texnologiyalari yordamida kiyimlarning ergonomikasi, estetikasi va funksionalligini ta'minlashda yangi imkoniyatlar yuzaga kelmoqda. Shu jarayonda **kiyim balansini** nazorat qilish – ayniqsa yelkali kiyimlar dizaynida – markaziy masalaga aylanmoqda.

Kiyim balansi – bu old va orqa qismlar orasidagi muvozanat, tana tuzilmasiga moslashuv, harakatdagi qulaylik va siluetdagi estetik uyg'unlikni ta'minlovchi konstruktiv elementdir. An'anaviy konstruktorlikda balans noto'g'ri hisoblanganda kiyimning oldga tortilishi, orqaga sirpanishi, yoki elkada burmalar paydo bo'lishi kabi muammolar yuzaga keladi. Bugungi kunda esa bu muammolarni raqamli dizayn texnologiyalari orqali oldindan aniqlash va bartaraf etish mumkin.

Kiyim balansining asosiy tushunchasi. Kiyim balansiga odatda **old va orqa balans** o'lchamlari orqali baho beriladi. Bu o'lchamlar inson tanasining tik holatdagi egri chiziqlariga, ayniqsa orqa qiyaligi va ko'krak qismi to'liqligiga qarab belgilanadi. Har bir insonning antropometrik o'ziga xosligi sababli, balans ham individual tarzda aniqlanishi kerak. Balans noto'g'ri bo'lsa, kiyim nafaqat estetik jihatdan yomon ko'rinadi, balki noqulaylik tug'diradi. Kiyim balansining asosiy tushunchasi kiyimning inson tanasiga nisbatan qanday muvozanatda joylashishini anglatadi. Bu tushuncha, avvalo, kiyimning old va orqa qismlarining uzunliklari, ularning tana shakliga mosligi va umumiy holatda kiyimning to'g'ri o'tirishini belgilaydi. Balans, ya'ni muvozanat, kiyimning shakli, qulayligi va estetik ko'rinishida hal qiluvchi rol o'ynaydi. Kiyim tanaga mos tushganda, ya'ni balans to'g'ri bo'lsa, u insonning harakatlariga xalaqit bermaydi, bel chizig'i siljib ketmaydi, yelkada burmalar hosil bo'lmaydi va kiyim o'ziga xos holatda turadi.



Kiyim konstruksiyasida balans noto‘g‘ri belgilansa, bu kiyimning ko‘rinishiga ham, foydalanish qulayligiga ham salbiy ta‘sir qiladi. Masalan, agar orqa balans old balansga nisbatan uzun bo‘lsa, kiyim orqaga tortiladi; aksincha holatda esa old tomonga og‘ish paydo bo‘ladi. Bu holatlar kiyimning tanaga nomuvofiq tushishiga olib keladi, yelkada burmalar, ko‘krak qismida siqilish, bel chizig‘ida noto‘g‘ri joylashish kabi muammolar yuzaga keladi. Shu sababli kiyim balansini aniqlashda inson tana tuzilmasining individual xususiyatlari — yelka qiyaligi, orqa bukilishi, ko‘krak to‘liqligi, umumiy holatda gavda tuzilishi inobatga olinishi kerak.

An‘anaviy usullarda kiyim balansini konstruktor o‘z tajribasi asosida aniqlaydi. Bu yondashuvda inson tana tuzilmasi ko‘z bilan taxminan baholanadi va o‘lchovlar asosida balans belgilanadi. Lekin bu jarayonda inson xatolarga yo‘l qo‘yishi mumkin, chunki har bir insonning tana proporsiyalari har xil bo‘ladi. Aynan shuning uchun raqamli texnologiyalar, jumladan 3D skanerlash va CAD tizimlari bu sohada muhim yordamchi vosita sifatida kirib keldi. Ular yordamida inson tanasi uch o‘lchamli modelda olinadi va bu model asosida old va orqa qismlar o‘rtasidagi real proporsiyalar aniqlanadi. Bu esa balansni aniq va ishonchli tarzda belgilash imkonini beradi.

Kiyim balansni faqat estetik ko‘rinish uchun emas, balki ergonomik qulaylik uchun ham muhim hisoblanadi. Inson kiyimda erkin harakat qila olishi, egilayotganda yoki o‘tirayotganda kiyim cho‘zilmasligi, bukilmasligi, tirnash xususiyati keltirmasligi kerak. Bularning barchasi to‘g‘ri balans natijasidir. Shu bois kiyimni ishlab chiqarish jarayonida dizayner va konstruktorlar birinchi navbatda balansni to‘g‘ri aniqlashga e‘tibor qaratadilar. Ayniqsa yelkali kiyimlar — pidjak, ko‘ylak, palto kabi mahsulotlarda bu muvozanat alohida ahamiyatga ega, chunki bu kiyimlar murakkab konstruksiyaga ega bo‘lib, yelkadan to belgacha bo‘lgan chiziq juda muhim hisoblanadi.

Raqamli texnologiyalar aynan shu yerda – inson tanasining 3D modeli asosida har tomonlama o‘lcham olish, tahlil qilish va mukammal muvozanatni ta‘minlashda – o‘z afzalligini ko‘rsatadi.

Raqamli dizayn texnologiyalarining turlari. Raqamli dizayn texnologiyalari bugungi kunda kiyim-kechak, sanoat, arxitektura, grafik dizayn, animatsiya va boshqa ko‘plab sohalarda muhim ahamiyat kasb etmoqda. Ular mahsulotni loyihalash, modellashtirish, tahlil qilish va ishlab chiqarish jarayonlarini soddalashtiradi va avtomatlashtiradi. Kiyim dizayni sohasida bu texnologiyalar

dizaynerlar va konstruktorlarga yanada yuqori aniqlik, tezlik hamda kreativ yondashuvni taklif etmoqda. Quyida raqamli dizayn texnologiyalarining asosiy turlari haqida ma'lumot beriladi.

1. CAD (Computer-Aided Design) tizimlari. CAD — kompyuter yordamida loyihalash texnologiyasi bo'lib, u kiyim konstruksiyasi, chizmalar, detal joylashuvi va kesish andozalarini ishlab chiqishda keng qo'llaniladi. CAD dasturlari yordamida dizaynerlar kiyimni raqamli muhitda chizish, o'lchovlar kiritish, shaklni o'zgartirish va kesish sxemalarini tuzish imkoniyatiga ega bo'ladilar. CAD tizimlari orasida Lectra, Gerber, Optitex, Tukatech kabi mashhur platformalar mavjud.

2. 3D dizayn va virtual prototiplash. Bu texnologiyalar kiyim modellarini 3D formatda yaratish va ularni raqamli manekenlar ustiga “kiydirish” imkonini beradi. Virtual prototiplash yordamida mahsulotni real ishlab chiqarishdan avval uning silueti, harakatlanishdagi ko'rinishi, burmalar va tikish chiziqlari qanday bo'lishi aniqlanadi. Bu texnologiya vaqt va mato sarfini sezilarli darajada kamaytiradi. CLO 3D, Browzwear, Marvelous Designer kabi dasturlar aynan ushbu sohada yetakchi hisoblanadi.

3. 3D skanerlash texnologiyasi inson tanasining to'liq uch o'lchamli modelini yaratadi. Bu skanerlash orqali olingan ma'lumotlar asosida individual o'lchamlar aniqlanadi. Aynan shu texnologiya kiyim konstruksiyasini shaxsiylashtirish, ya'ni har bir insonning antropometrik tuzilishiga moslashtirish imkonini beradi. Bu, o'z navbatida, kiyim balansini to'g'ri belgilashda va ergonomik qulaylikka erishishda muhim rol o'ynaydi.

4. PLM (Product Lifecycle Management) tizimlari. PLM tizimlari mahsulotning to'liq hayotiy siklini boshqaradi – ya'ni dizayn bosqichidan to ishlab chiqarish, tarqatish va xizmat ko'rsatishgacha bo'lgan barcha jarayonlarni raqamli tarzda boshqaradi. Bu tizimlar dizaynerlar, ishlab chiqaruvchilar va marketing bo'limlari o'rtasida uzviy aloqa o'rnatadi va loyiha jarayonini aniq hamda izchil olib borishga yordam beradi.

5. AI va algoritmik dizayn. So'nggi yillarda sun'iy intellekt (AI) texnologiyalari raqamli dizaynda faol qo'llanila boshladi. AI yordamida avtomatik dizayn tavsiyalari, modaga mos naqshlar, personalizatsiyalangan kiyim g'oyalari va hattoki avtomatlashtirilgan o'lchovlar olish mumkin. Bu esa dizayn jarayonini yanada soddalashtiradi va moslashtiradi.



Kiyim dizaynida raqamli texnologiyalar quyidagi asosiy vositalarni o‘z ichiga oladi:

- **3D skanerlash:** Inson tanasining real vaqtda uch o‘lchamli modeli olinadi. Bu model asosida aniqlik darajasi yuqori bo‘lgan antropometrik o‘lchamlar olinadi.

- **CAD (Computer-Aided Design) tizimlari:** Kiyim konstruksiyasini raqamli muhitda chizish, tahrirlash va modellashtirish imkonini beradi.

- **Virtual prototiplash:** Kiyim modeli 3D maneken ustiga joylashtiriladi va uning real kiyinish holatidagi natijasi vizual ko‘rinishda baholanadi.

- **AI asosidagi modellashtirish:** Ba’zi zamonaviy tizimlar sun’iy intellekt yordamida foydalanuvchining harakatlariga mos ravishda kiyim balansi bo‘yicha tavsiyalar beradi.

Bu texnologiyalar yelkali kiyimlar, ya’ni ko‘ylaklar, pidjaklar, kurtkalar, pal’tolar kabi konstruksiyasi murakkab kiyimlar uchun ayniqsa dolzarbdir.

Kiyim balansini nazorat qilish bosqichlari

1. **Tana skaneri orqali 3D model olish.** Raqamli skaner yordamida foydalanuvchining tana tuzilmasi to‘liq raqamli modelga aylantiriladi. Bu model asosida elkalar qiyaligi, orqa qism bukilishi, ko‘krak to‘liqligi aniqlanadi.

2. **Old va orqa balanslarni avtomatik hisoblash.** CAD dasturlari orqali bu o‘lchamlar avtomatik tarzda aniqlanadi. Dasturning algoritmlari asosida individual muvozanat nuqtasi belgilab olinadi.

3. **Kiyim konstruksiyasini tuzish va sinash.** Konstruksiyalangan kiyim modeli 3D maneken ustiga “kiydiriladi”. Raqamli muhitda uning o‘rnatilishi, tortilishi, yelkadagi burmalar, bel chizig‘i siljishi kabi holatlar aniqlanadi.

4. **Balans muvozanatini tuzatish.** Agar old yoki orqa balansda nomuvofiqlik aniqlansa, dastur bu haqda ogohlantiradi va tuzatish bo‘yicha takliflar beradi. Masalan, orqa balansning uzunligi ortiqcha bo‘lsa, u qisqartiriladi.

5. **Final sinov va chiqish faylini olish.** Tayyor konstruktorlik fayli eksport qilinadi va lazer kesim moslamalariga uzatiladi. Bu jarayonda inson omili deyarli ishtirok etmaydi.

Raqamli balans nazoratining afzalliklari

- **Aniqlik:** Millimetrgacha aniqlikda o‘lcham olish imkoniyati mavjud.

- **Tezlik:** Konstruksiya yaratish va uni tahlil qilish jarayoni bir necha soat ichida yakunlanadi.



• **Moslashuvchanlik:** Har bir foydalanuvchiga mos individual konstruksiya yaratish mumkin.

• **Chiqindilarning kamayishi:** Oldindan virtual muhitda sinov bo‘lgani uchun noto‘g‘ri kesilgan matolar miqdori kamayadi.

• **Qulaylik va ergonomika:** Kiyim foydalanuvchining harakati, tana pozasiga mos holda moslashtiriladi.

Amaliy misollar va platformalar

Bugungi kunda turli zamonaviy dasturlar ushbu texnologiyalarni taklif qilmoqda. Jumladan:

• **CLO 3D** — kiyim prototiplash uchun qulay interfeysli tizim.

• **Optitex** — CAD asosida ishlovchi va avtomatik balans nazoratiga ega bo‘lgan platforma.

• **Lectra** — yirik tikuv sanoati korxonalari uchun mo‘ljallangan raqamli dizayn tizimi.

• **Browzwear** — virtual sinov, balans tahlili va interfeys integratsiyasi bo‘yicha yetakchi dasturlardan biri.

Xulosa qilsak, yelkali kiyimlar dizaynida balansni to‘g‘ri belgilash kiyimning umumiy ko‘rinishi, qulayligi va funksionalligini belgilaydi. An’anaviy usullarda bu jarayon tajribaga asoslangan bo‘lsa, zamonaviy raqamli dizayn texnologiyalari uni ilmiy va aniq yondashuvga aylantirdi. 3D skanerlash, CAD tizimlari va virtual prototiplash orqali kiyim balansini nafaqat nazorat qilish, balki uni mukammal qilish imkoni paydo bo‘ldi. Bu esa kelajakda moda sanoatini yanada samarali, ekologik toza va foydalanuvchi uchun qulay yo‘nalishga olib boradi

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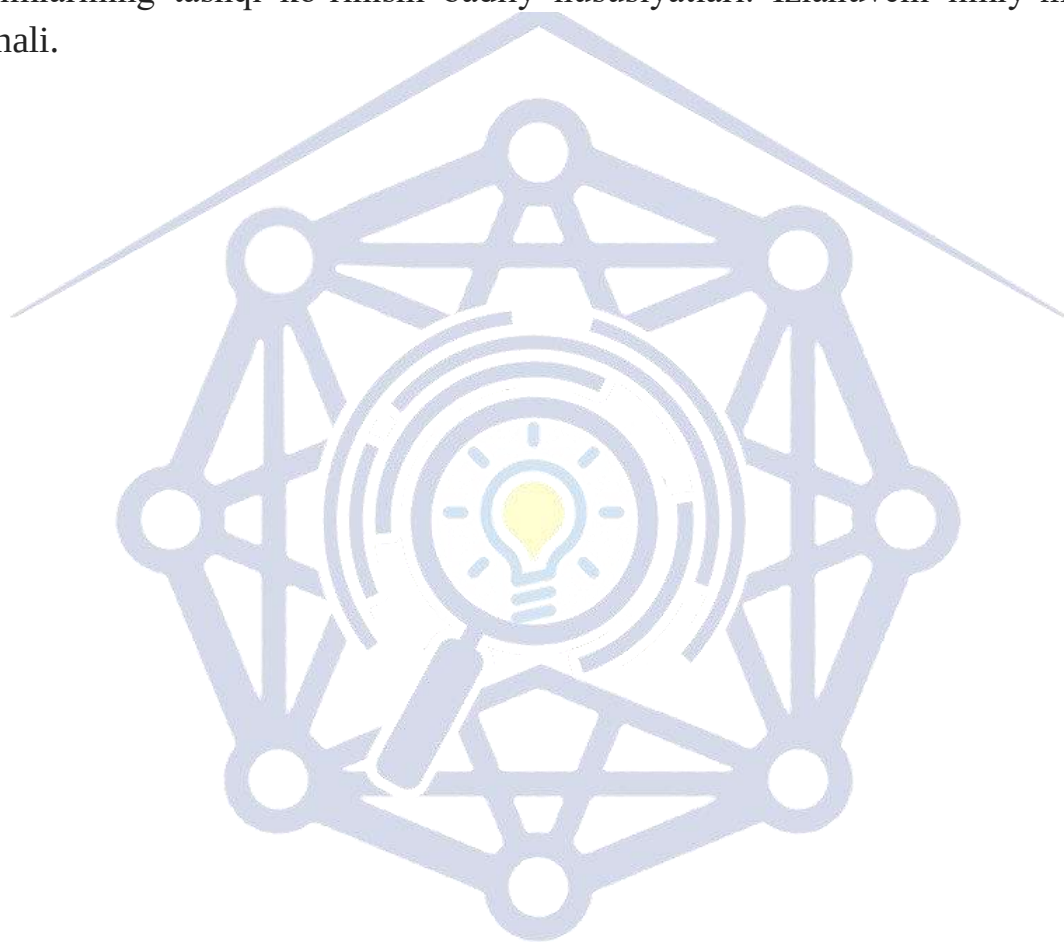
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THE IMPORTANCE OF THE IMPACT OF FIBER DEFECTS IN THE YARN PRODUCTION PROCESS

Mahmudova Gulshanoy Ozodjon kizi

Assistant, Fergana state technical university

Annotation: This article analyzes the effect of various defects on yarn. in yarn and man-made yarns, thicker threads are formed as a result of the strip being torn off. This defect is caused by the fact that the tape is not connected correctly. As a result of research, measures to prevent tape rupture were analyzed.

Keywords: defects, light, capacity, mass, unevenness, engine, air pressure, mechanism.

Currently, Saurer Czech and Saurer Group companies, in cooperation with other companies, produce many models of pneumatic spinning machines under the BD brand. A group of such machines is produced under the BD 300 model (models BD 310, BD 320, BD 321 and BD 330). These machines are designed for spinning cotton yarn.

The machines have the following mechanisms in order to improve thread quality, facilitate technical maintenance and increase the economic efficiency of production:

- "third hand" - a mechanism for removing the bobbins filled with thread, installing an empty spool and providing spare winding from the thread on its right side;

- a connecting lever or a semi-automatic connecting mechanism to facilitate its connection when the thread is broken;

- control device - serves to display the adjusted and actual parameters of the machine, adjust, perform technological calculations, control the process of starting spinning, and monitor the operation of the machine.

On the display of the control mechanism, all indicators are displayed in the specified order or they are reset. You can choose the necessary language for communication (English, German, French, Russian and others);

- device for starting the spinning process;

- lights indicating that the thread is disconnected;

- pulleys, belts for changing speeds in the transmission part;

- data gathering system (on some machines);
- lights warning of changes in air pressure (in some cars);
- an additional engine for adjusting the rotation speed of the camera (in some cars);
- automatic air pressure adjustment device (on some cars).

The technological structure of the machine does not differ much from the previously reviewed machines. In it, the essence of the processes of supplying, discretizing, transferring and threading, winding the thread is carried out in the order of the previous machines. However, due to the use of mechanisms and devices that implement these processes, their parts, transmission of motion to the machine and the use of new technical solutions in its management, the quality of yarn, the increase in productivity will lead to an increase in economic efficiency. This is a very important result.

Thickened strands appear as a result of a hair breaking off, its tip becoming entangled with another hair. The main defects found in raw silk are various and include: short thickened areas, longer dense sections, protruding and displaced ends of the silk, and splits in the middle of one or more strands when the cocoon threads are under different tension. spiral into threads to be wrapped in appearance.

In addition, defects affect weaving processes. That is, the thickening of yarns is the presence of yarns or warp yarns in the yarn whose linear density is higher than the linear density of the main fonn of the yarn. Local thickening - thickening of trunk or rope threads in short sections. Defects such as the difference in the tension, twist, color or shape of the cross-section of the threads of the warp or weft thread from the neighboring threads also affect the weaving process.

Artificial yarns have the following defects: uneven spinning of viscose yarns or insufficient spinning (occurs when the yarns are formed in excessive acid deposition baths), different colors of the yarns (occurs when the spinning solution is not homogeneous and dirty) , the hairiness of the threads - the ends of isolated threads that have broken off and protruded on the surface of the thread (when the spinning solution is not well cleaned of air bubbles and the solution is not appears when there is no viscosity), twisting - in the short part of the threads wavy tortuosity.

Appearance of cotton threads according to GOST 15818-80 standard is determined; short-section unevenness, knots (thinning, thickening); visible, seed parts, leaf, bark fiber, pod fragments, various external defects and hakoza. They are



divided into A, B, V classes. Unevenness is defined as the unevenness of the kalava yarns and yarns in terms of thickness, cooking, hardness and elongation. In order to determine the unevenness, the kalava yarn is compared with the standard (sample) kept in the laboratory, as well as by measuring the indicators several times with the appropriate tools and putting them into the appropriate formulas, the unevenness is calculated as a percentage. Yarns and staple fibers made of chemical fibers are more uniform in terms of yarn properties than complex yarns made of natural fibers and natural silk.

With at least 10 tubes to determine the class of spun yarns thread is selected.

Each product unit is wound on a screen winding machine with a pitch of 1.5 mm on a black board up to 100 m long, and the class of yarn for each side is determined by comparison with benchmarks. The work of wrapping the spun threads on the board is carried out evenly. In order to easily calculate the defects in the spun yarn, a template made of black cardboard is placed on the wound yarn. This pattern is divided into 10 rectangles. Each rectangle is 20mm high and 25mm wide to view 25 twisted yarns, 5m on 1 side and 5m on 2nd side, sum of yarn defects calculated and compared to the table, the class of the thread is determined.

A cardboard template is placed on a board wrapped in thread. It has about 10 rectangular holes. The length of the strings inside the rectangle is 5 m. Defects on the threads inside the rectangles on both sides of the board are considered. According to the obtained result, the number of defects corresponding to 1 g of thread is determined by the following formula.

$$n_1 = \frac{10^3 \cdot n}{T \cdot L}$$

where: linear density of T-thread, tyeks; n-10 m number of defects in the thread; L=10 m.

Subsequently, several methods and equipment projects have been developed in the spinning industry to control product defects. Currently, visual, gravimetric, mechanical, capacitive, photoelectric and other types of measuring methods are widely used for these purposes.

The method and tools of the company "Sylveger" (Switzerland) for determining the defects of spun yarns occupy one of the top places. One of the most common



equipment for detecting defects of spun yarns in the spinning process is "Uster-Tester". The following features are obtained in the equipment: common defects in 1 km of spun yarn - thinning (-20, -40, -50, -80%); thickened (+35, +50, +70, +100 %), knots (+140, +200, +280, +400 %). The equipment has high performance and diagnoses the condition of the equipment in the technological process.

Another device that determines the cleanliness of threads is the AOPN-5 photocell-based device. In the photocell method, defects are detected based on the passage between a different type of photocell (vacuum, phototriode, photoamplifier, etc.) and a light source. For example, device defects divided into: large thickening, threads with a diameter of 1.5, thickening, threads with a diameter greater than 1.5 and a length of more than 10 cm; super thickening, threads larger than 2 diameters: thinning threads less than 0.6 diameter and threads less than 0.6 diameter with a length of more than 10 cm. In addition, devices with capacitive sensors are used to determine and control the cleanliness of threads. The test leads are passed through the plate capacitor, resulting in a change in its resistance. The resistance of a capacitor is inversely proportional to its capacitance, and the larger the mass of the wire, the smaller it is.

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MOLIYA BOZORINI RIVOJLANTIRISHDA MOLIYAVIY TEXNOLOGIYALARNI JORIY ETISH YO'NALISHLARI

SHODIYEV ODILJON SALIM O'G'LI
QARSHI DAVLAT TEXNIKA UNVERSITETI
“MOLIYA VA BANK ISHI” KAFEDRASI O'QITUVCHISI

Annotatsiya. Mazkur ilmiy tezisda moliyaviy texnologiyalardan foydalanish orqali kapital bozorini rivojlantirishning ustuvor yo'nalishlari bayon etilgan. Respublikamizda kapital bozorini rivojlantirishga doir ilmiy takliflar ishlab chiqilgan. Xalqaro amaliyot tajribalariga doir ilmiy yondashuvlar yoritilgan.

Tayanch so'zlar: kapital bozori, moliyaviy texnologiyalar, qimmatli qog'ozlar, aksiya, obligatsiya, fyuchers, forvard, xedjirlash amaliyoti.

Bugungi kunda jahon va milliy amaliyotda amalga oshirilayotgan moliyaviy xizmatlar va pul mablag'larini raqamlashtirish moliyaviy xizmatlar doirasi va samaradorligini kengaytirish hamda iqtisodiy rivojlanishni rag'batlantirish uchun imkoniyatlar yaratmoqda. Mamlakatlar ushbu imkoniyatlardan foydalanishlari va xavfsiz moliyaviy innovatsiyalarni ishlab chiqish va qabul qilishni qo'llab-quvvatlovchi va rag'batlantiradigan iqtisodiy siyosatni amalga oshirishga alohida ahamiyat qaratmoqda. Jumladan O'zbekiston Respublikasida iqtisodiyot raqamli texnologiyalarni rivojlantirish borasida qator islohotlar amalga oshirib kelinmoqda. O'zbekiston Respublikasi Prezidentining 2020 yil 5 oktyabrdagi «Raqamli O'zbekiston - 2030» Strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risidagi PF-6079-sonli farmonini qabul qilinishi yuqoridagi so'zimizning tasdig'idir. Mazkur farmonda respublikada raqamli industriyani jadal rivojlantirish, milliy iqtisodiyot tarmoqlarining raqobatbardoshligini oshirish, shuningdek, 2017-2021-yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha Harakatlar strategiyasini «Ilm, ma'rifat va raqamli iqtisodiyotni rivojlantirish yili»da amalga oshirishga oid davlat dasturida belgilangan vazifalar ijrosini ta'minlash maqsadida qator ustuvor vazifalar belgilab berilgan.

Texnologik taraqqiyot moliyaviy kompaniyalar va moliya sektori imkoniyatlarini yanada oshirish bilan birga raqobat muhitini yanada jadallashishiga ta'sir ko'rsatmoqda. Infratuzilmaning yangi turlari, xizmat ko'rsatuvchi



provayderlar, mahsulotlar, biznes modellari va bozor tuzilmalari bozor konyunkturasini ko‘p jihatdan rivojlantirmoqda. Bunday sharoitda bozor konyunkturasining iqtisodiy siyosatning asosiy maqsadlariga mos kelishini ta’minlash zarur, chunki moliya sektori rivojlanishda davom etar ekan, qo‘shimcha xarajatlarni vujudga kelishi bilan birga iqtisodiy manfaatdorlikni oshishiga xizmat qiladi. Xalqaro amaliyot tajribalari ko‘rsatadiki, kapital bozorini rivojlantirishda moliyaviy texnologiyalarning ahamiyati yuqori bo‘lib, bu bir tomondan investorlar uchun moliyaviy imkoniyatlarni yanada oshirsa ikkinchi tomonidan kapital bozorida institutsional investorlar sonini oshishiga xizmat ko‘rsatadi. Amalga oshirilgan tadqiqot natijalaridan kelib chiqib aytish mumkinki, moliyaviy texnologiyalarni rivojlantirishning drayver yo‘nalishlari quyidagilardan iborat.

Birinchidan, moliyaviy xizmatlardagi texnologik innovatsiyalar (Fintech) moliyaviy mahsulotlarni, to‘lovlarni, biznes modellarini, bozor ishtirokchilari va tuzilmalarini va hatto pulning o‘zini o‘zgartiradi. COVID-19 pandemiyasi Fintechni amaliyotga tatbiq etishni tezlashtirdi. Fintechni joriy etish moliyaviy barqarorlik, moliyaviy jozibadorlik, moliyaviy inklyuzivlik, samaradorlik, innovatsiyalar va raqobat kabi asosiy iqtisodiy siyosat maqsadlariga erishishga ko‘maklashish orqali moliyaviy rivojlanishning yanada rivojlanishiga hissa qo‘shishi va raqamli iqtisodiyotning yanada rivojlanishi uchun mustahkam poydevor yaratishi mumkin.

Ikkinchidan, Fintech rivojlanishining joriy bosqichida ikkita asosiy drayverga ega: birinchisi mobil telefonlar, veb-qurilmalar va telekommunikatsiya tarmoqlari orqali aloqa xizmatlariga barcha joyda kira olish bo‘lsa ikkinchisi ma’lumotlarni hisoblash va saqlashning arzon usullarini mavjudligi. Birgalikda ular bulutli hisoblash kabi texnologiyalardan foydalanish imkonini beruvchi yangi biznes modellarining paydo bo‘lishi uchun sharoit yaratadi. Ushbu yutuqlarga asoslangan ilovalar, masalan, elektron tijorat va mobil ilovalar - foydalanuvchilar va tranzaksiyalar haqida katta hajmdagi ko‘plab ma’lumotlarni yaratadi. Ma’lumotlarni hisoblash va saqlashning arzon usullari qimmatli ma’lumotlarni olish uchun ushbu ma’lumotlarni oqilona tahlil qilish imkonini beradi.

Uchinchidan, ushbu drayverlar moliyaviy xizmatlarning qiymat zanjirlarini qayta konfiguratsiya qilish uchun sharoit yaratmoqda. Ko‘p yillar mobaynida kompaniya tomonidan ishlab chiqarilgan mahsulotlar yangi bozorlarga kirib borishi, reklamalarni amalga oshirish, bozorda o‘z o‘rnini topishi uchun yirik miqdordagi xarajatlar va inson omillari bilan bog‘liq harakatlarni talab qilar edi. Moliyaviy



texnologiyalarni rivojlanib borishi kompaniyalar tomonidan ishlab chiqarilgan mahsulotlarni dunyoning istalgan manzilida ma'lum daqiqalar ichida hech qanday inson omilisiz to'liq tanishtirish va barcha xususiyatlari bo'yicha ma'lumotlarni taqdim etish imkonini bermoqda.

To'rtinchidan, raqamli transformatsiya turli bozor sharoitlarini qo'llab-quvvatlash uchun tezkor to'lov tizimlari, raqamli identifikatsiyalar va ma'lumotlar almashinuvi platformalari kabi yangi infratuzilmani yaratishni, shu bilan birga ushbu ehtiyojni qondirishning yangi usullarini ta'minlashni talab qiladi. Xalqaro amaliyot tajribalaridan ma'lumki, endilikda moliyaviy infratuzilmani yaratish markaziy bank, an'anaviy to'lov tizimi operatorlari va vakolatli kredit byurolari yoki mulk reyestrining mutlaq vakolati emas balki xususiy tarmoq kompaniyalari tomonidan amalga oshirilishi mumkin. Yuqorida keltirilgan tashkilotlar esa asosiy megaregulyator sifatida ishtirok etishlari mumkin bo'ladi.

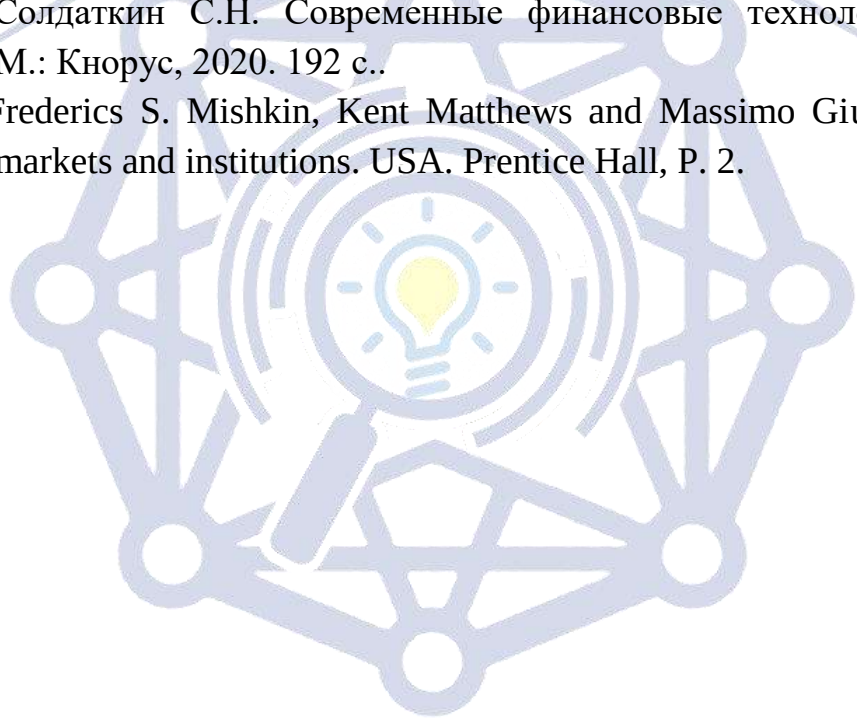
Fikrimizcha, milliy kapital bozorini takomillashtirishda moliyaviy texnologiyalardan samarali foydalanishga doir quyidagi chora-tadbirlarni amalga oshirish lozim.

- kapital bozorida risklarni boshqarishda raqamli texnologiyalar, innovatsiyalar va raqobatni rag'batlantirish;
- sohani yanada rivojlantirish maqsadida monitoring ko'lamini kengaytirish va tartibga solish indikatorlarini baholash, chunki moliyaviy xizmatlarning "yaratilishi" moliya sektorida raqobatni rivojlantirishda muhim ahamiyatga ega;
- moliyaviy texnologiyalarni amaliyotga tatbiq etish va rivojlantirish bo'yicha amalga oshirilgan loyihalar bo'yicha qo'shimcha imtiyozlarni yaratish;
- qimmatli qog'ozlar bilan bog'liq operatsiyalarni amalga oshirishda onlayn platformalarni rivojlantirish va hududlarda axborot-kommunikatsion infratuzilmani takomillashtirish;
- aksiyadorlik jamiyatlari tomonidan investitsion jozibadorlikni ta'minlash maqsadida dividend siyosatini optimallashtirish xususan IPO operatsiyalari orqali joylashtirilgan aksiyalar bo'yicha bozor stavkalariga teng miqdorda dividend kafolatini belgilash.



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Opportunities and importance of growing linseed fiber in the Fergana Valley

Farg‘ona davlat Texnika universiteti
Yengil sanoat va to‘qimachilik fakulteti
“Yengil sanoat texnologiya va jihozlari” kafedrası
t.f.f.d (PhD) A.O.Ibragimov

Annotatsiya: Ushbu maqolada Farg‘ona vodiysida zig‘ir tolasini yetishtirish imkoniyatlari ilmiy asosda yoritilgan. Zig‘ir ekinining agroiklim sharoitiga moslashuvi, tola hosildorligi va sifati bo‘yicha dala tajribalari o‘tkazildi. Natijalarga ko‘ra, zig‘ir ekologik toza, kam resurs talab qiluvchi va iqtisodiy jihatdan foydali ekin sifatida baholandi. Zig‘ir yetishtirish Farg‘ona vodiysida to‘qimachilik xomashyo bazasini diversifikatsiya qilishda muhim omil bo‘lishi mumkinligi isbotlandi.

Kalit so‘zlar: Zig‘ir tolası, Farg‘ona vodiysi, agroiklim, hosildorlik, ekologik tozalik, to‘qimachilik.

Аннотация: В данной статье научно обоснована возможность выращивания льна в Ферганской долине. Проведены полевые испытания по адаптации льна к агроклиматическим условиям региона, а также по урожайности и качеству волокна. Результаты показали, что лен является экологически чистой, мало ресурсоёмкой и экономически выгодной культурой. Выращивание льна может сыграть важную роль в диверсификации сырьевой базы текстильной промышленности Ферганской долины.

Ключевые слова: Льняное волокно, Ферганская долина, агроклимат, урожайность, экологическая чистота, текстиль.

Abstract: This article scientifically substantiates the feasibility of cultivating flax fiber in the Fergana Valley. Field experiments were conducted to assess the adaptation of flax to agro-climatic conditions, as well as fiber yield and quality. The results demonstrated that flax is an environmentally friendly, low-resource, and economically viable crop. Flax cultivation could play a key role in diversifying the raw material base of the textile industry in the Fergana Valley.

Keywords: Flax fiber, Fergana Valley, agro-climate, yield, ecological sustainability, textile industry.

ENTER

Linen (*Linum Usitatissimum* L.) - One of the ancient and universal technical crops, its fiber and fat valuable industrial raw materials. From linse fiber materials used in quality fabrics, technical tissue and medical industries are made. The oil obtained from the seeds is widely used in the food, pharmaceuticals and chemical industries. In the context of Uzbekistan, there are prospects for leakage in areas where there is a high agro-assegating agricultural capabilities such as the Fergana Valley.

Intensive culture of the main fiber source in Uzbekistan is high pressure on water resources, as well as the degradation and monocrotic problems are intensifying. In this regard, resource savers and planting stable crops remain one of the most important issues. The linen deserves noteworthy as an alternative to these complicates in these requirements. However, the agro-technical foundations, profantability and practical results of linse growing in the Fergana Valley have been poorly studied. This article is aimed at filling this scientific gap.

During the study, two types of linen - "Pskovsky" and the vegetation period in various agro-countriesis of the Fergana Valley (Fergana, Andijan and Namangan) were analyzed, productivity, fiber quality parameters. The effects of soil moisture, temperature, agrofone and agro-technical measures was observed. Based on the results obtained, the regional adaptation level and economic efficiency were evaluated.

Foreign research on linen (A.N. Beketov, 2015; V. Romanov, 2020; FAO, 2022) provides its rich information on factors and technology that affect fiber quality. In Russia, Belarus and Canada, the lineage is being successfully grown on the industrial scale of flax. Full systematic research on this topic in science in Uzbekistan is not enough, mainly limited to historical agronomical observations. Therefore, modern methodic, based on local conditions, play an important role in innovative research ..

METODOLOGY

- An experimental approach based on practical field tests and laboratory analysis was used in this study. Two varieties of linen - "Pskovsky" and "Vnilie"



were planted on the basis of three repeated experience in different regions of the Fergana Valley (Fergana, Andijan). The study covers the Vegetation period in 2023-2024.

- Data collection methods
- To collect data, the following parameters were measured regularly:

Duration of vegetation period (days);

- **fiber yield (s / ha);**
- **Seed yields (S / ha);**
- **Fiber quality indicators: length, elasticity, hygroscopic;**
- **Soil temperature and humidity;**
- **Climate factors (air temperature, precipitation, sunlight), citing official**

data of the Hydromet service.

Methods of analysis

The result was a desertical statistical analysis. Average values, dispersions and reliability intervals on each variety ($\pm$)count. ANOVA (dispersion The impact of linen, sowing points and agro-technical measures was also statistically assessed by the analysis) ($P < 0.05$). Fiber quality indicators have been analyzed on the basis of the agreement of industry standards (GOST 10332-76).

Experimental places

- **Fergana district - Smoothal soil, moderary moisture;**
- **Andijan district - irrigated ground soil;**
- **Namangan district - Average climate, weakly saline lands.**
- **Equipment and machinery**
- **Microscope and the length of the fiberalysis;**
- **Drying a hygrometer and scale to detect moisture;**
- **PH-mrs for soil analysis was used, EC regional and moisture sensor.**

Result of research

The vegetation period of linen and adaptation to the agro-lif

Pskovsky and Vniil varieties, which took part in the study, were planted in three districts of the Fergana Valley (Fergana, Andijan, Namangan). The growing season occurred between 85-100 days, which shows that it is fully consistent with the agro-assembly conditions of the region. The linen was highlighted in early spring (early



March), which is explained by the optimal temperature during the growing season (18-25 ° C) and moisture content.

Productivity results

The following table shows the fertility performance of linen in each region (s / ha):

1-table

Region	type	Fiber yield (s /	Seed yields (S / ha)
Fergana	Pskovskiy	13.5	7.2
Fergana	VNIIL	14.1	6.8
Andijan	Pskovskiy	12.8	7.5
Andijan	VNIIL	13.0	7.1
Namangan	Pskovskiy	11.2	6.4
Namangan	VNIIL	11.7	6.2

These results show that the highest productivity was observed in Fergana district, where agro-class conditions were optimal.

•• Fiber Quality Indicators: According to laboratory tests, the high number of Navi Fiber Case (28-32 mm), the length of the Navi Fiber (28-32 mm), was also evaluated. In Pskovsky, the fibers are relatively denser, and technical textiles (IP production) can be effective. • Fiber Quality Indicators: According to laboratory tests, the high number of Navi Fiber Case (28-32 mm), the length of the Navi Fiber (28-32 mm), was also evaluated. In Pskovsky, the fibers are relatively denser, and technical textiles (IP production) can be effective.

Economic analysis: With the average of 1 hectare of land, with seeds and 7 s / to 7 s / to 7 s / to 24-26 million per hectare. Due to the fact that the linen requires a small resource, its production cost is lower than cotton.

Foreign activities carried out in three different soils and climatic conditions of the Fergana Valley have shown that the average quality fiber can be obtained from 1 hectare when selected in accordance with the remote variety and agro-technical measures. These results are competitive in the compared with research in Russia and Belarus (Bekthetov, 2015; Khisamutdinov, 2019).

The flax is distinguished by the fact that it takes less water than cotton, fertilizer and processing. At the same time, the quality of fiber meets international



requirements as environmentally friendly biological raw materials. It describes GOST 10332-76 on fiber hygroscopic, elasticity and length as a prospective raw material for the textile industry

Conclusion

Research on linseing in the Fergana Valley has shown that agroisimatic factors in the region are convenient for linseed for the cultivation of the region. Pskovsky and Vnilie varieties, who participated in the study, were characterized by high yield and quality fibers.

Fiber and seeds of linen are both economic and environmentally useful, applied in textiles, food and pharmaceutical industries. Especially based on low resource and the short growing season is cultivating it as an alternative technical crop.

As a solution for the problem, landscaping should be introduced in the Fergana Valley, improving the system of agro-technical services and further expansion of selection-experience. In addition, it will increase the creation of new job profit in the region by creating a chain of product processing.

USE OF LITERATURE

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PAREMIOLOGIK MATNLARNING KOMMUNIKATIV- PRAGMATIK XUSUSIYATLARI

Egamberdiyeva Yulduz Bahodir qizi

ShDPI assistent – o`qituvchi

yulduzegamberdiyeva008@gmail.com

Annotatsiya

Mazkur maqolada paremiologik birliklarning (maqol, matal, aforizm) kommunikativ va pragmatik xususiyatlari har ikki til materiali — o‘zbek va ingliz tillari — asosida tahlil qilinadi. Ushbu birliklarning muloqotda qanday maqsadlarda qo‘llanishi, ularning ijtimoiy, madaniy va psixologik ta’siri, kontekstga ko‘ra ma’no yuki o‘zgaruvchanligi keng yoritiladi.

Kalit so‘zlar: paremiologiya, pragmatika, maqol, matal, kommunikatsiya, kontekst, lingvopragmatika.

Abstract

This article analyzes the communicative and pragmatic features of paremiological units (proverbs, sayings, aphorisms) based on material from both Uzbek and English languages. It explores how these expressions function in communication, their social, cultural, and psychological impact, and how their meanings shift depending on the context.

Keywords: paremiology, pragmatics, proverb, saying, communication, context, linguistic pragmatics.

Kirish

Tillar rivojida og‘zaki xalq ijodi — xususan, paremiologik birliklar — o‘ziga xos tarixiy va madaniy qatlamni ifodalaydi. Bu birliklar asrlar davomida insoniyatning jamiyat, axloq, mehnat va boshqa sohalarga oid tajribasini jamlab, qisqa va obrazli shaklda yetkazadi. Paremiologik matnlar bugungi kommunikatsiya tizimida ham o‘z dolzarbligini yo‘qotmagan, balki yangi kommunikativ vazifalarni bajara boshlagan.

Lingvopragmatika nuqtai nazaridan qaralganda, maqol va matallar nafaqat informatsion ma’lumot tashuvchi birliklar, balki muloqot jarayonida o‘zaro ta’sir, ta’sirchanlik, emotsional baholash vositasi sifatida xizmat qiladi. Har bir xalq o‘ziga xos dunyoqarashi va milliy tafakkurini ifodalovchi maqollar xazinasini bilan ajralib turadi. Shu nuqtai nazardan, biz ushbu kichik izlanishimizda o‘zbek va ingliz

tillaridagi maqollarni **tuzilishi** hamda **semantik xususiyatlari** nuqtai nazaridan qiyosiy tahlil qilishga harakat qilamiz.

Har bir til millatning tarixi, madaniyati, urf-odatlar, dunyoqarashi va ijtimoiy tafakkuri aks etgan ulkan boylik hisoblanadi. Shu ma'noda xalq og'zaki ijodi, xususan, **paremiologik matnlar** – maqol va maqolsifat birliklar xalq tafakkuri, hayotiy tajribasi va ijtimoiy munosabatlarining yorqin ifodasi sifatida tilshunoslikda katta ahamiyat kasb etadi. Ular nafaqat ma'naviy qadriyat, balki tilning funksional-stilistik, kognitiv va pragmatik imkoniyatlarini o'rganishda muhim manba hisoblanadi.

Paremiologik birliklarning pragmatik tabiati

Pragmatika — bu til birliklarining matnda qanday qo'llanilishini, qanday niyat va maqsad bilan aytilishini o'rganuvchi fan sohasidir. Paremiologik birliklar esa aynan matnda turlicha ma'no anglatishga qodir. Ular foydalanuvchining:

Paremiologik birliklar — bu xalq tomonidan asrlar davomida yaratilgan, mustahkamlangan va avloddan avlodga o'tib kelayotgan **maqol, matal, naql, hakamona so'zlar, aforizmlar** kabi janrlar yig'indisidir. Ular qisqa, mushohadaga boy, umumlashtiruvchi ma'noga ega va hayotiy tajribadan kelib chiqqan bo'ladi.

- intensiyasini (niyatini),
- kommunikativ strategiyasini,
- axborot va bahoni bir vaqtning o'zida ifodalashini bildiradi.

Masalan:

◇ “*Tovuqni kuzda sanashar*” — bu maqol vaziyatdan kelib chiqib, sabr qilishga undovchi yoki tez xulosa chiqarmaslik kerakligini bildiruvchi pragmatik niyatni ifodalaydi.

Komponentlar va kommunikativ vazifalar

Paremiologik birliklar muloqotda bir nechta kommunikativ vazifani bajaradi:

Kommunikativ nuqtai nazardan paremiologik matnlar tinglovchi yoki o'quvchi bilan muomalada muhim vazifani bajaradi. Ular axborot yetkazish, ta'sir qilish, baholash, ko'ndirish, tanbeh berish, ta'riflash, ta'lim berish, xulosa chiqarish kabi funksiyalarni bajaradi.

Vazifa turi

Tavsif

Ta'sirchanlik

Nutq ishtirokchisiga ta'sir qilish, fikrni
mustahkamlash



Vazifa turi	Tavsif	
Emotsional baho	Yaxshi yoki yomon munosabatni ifodalash	
Didaktik yoʻnaltirish	Axloqiy-meʼyoriy yoʻl-yoʻriq koʻrsatish	
Madaniy identifikator	Jamiyatga xos qadriyat va dunyoqarashni ifodalash	
Misollar:		
• “Elga bir kun podsho boʻlguncha, elingda ming kun xoʻja boʻl” (nasihat, ijtimoiy maqomga ishora)		
• “A rolling stone gathers no moss” (beqaror odam muvaffaqiyat toʻplay olmaydi – hayotiy tajriba asosida ogohlantirish)		
Ingliz va oʻzbek tillaridagi qiyosiy tahlil		
Strukturaviy oʻxshashlik va farqlar		
Har ikki tilda maqol va matallar odatda qisqa, ritmik va metaforik tuzilmaga ega. Lekin oʻzbek maqollarida koʻpincha raddiya shakli (qarama-qarshilik) koʻproq uchraydi:		
• “Yomon yoʻldoshdan yomon yoʻl afzal”		
• “Hard work never killed a man” (Inglizcha maqolda esa kinoya va irodiyning koʻrinishi ustun)		
Semantik pragmatika		
Tillar orasida semantik jihatdan oʻxshash boʻlgan maqollar koʻp:		
Oʻzbek maqoli	Inglizcha ekvivalenti	Pragmatik ifodasi
“Qancha odam, shuncha fikr.”	“Different strokes for different folks.”	Tolerantlik, xilma-xillikni tan olish
“Mehnat qilgan och qolmas.”	“No pain, no gain.”	Harakat va mukofot oʻrtasidagi bogʻliqlik
Paremiologik birliklarning nutqiy strategiyadagi roli		
Muloqot davomida maqollar quyidagicha qoʻllaniladi: Paremiologik birliklarning pragmatik vazifasi – gapiruvchining niyatini amalga oshirish, yaʼni tinglovchida muayyan taʼsir qoldirish, uning fikrini, xatti-harakatini yoʻnaltirish yoki oʻzgartirishga qaratilgan.		

- **Nutqni qisqartirish:** Uzoq fikrni ixchamlashtiradi.
- **Fikrni mustahkamlash:** Muallif fikriga xalq donishmandligini qo‘shadi.
- **Ishontirish:** Axloqiy yoki madaniy asosda ta’sir o‘tkazadi.
- **Zamonaviy nutq bilan integratsiya:** Ko‘plab maqollar reklama, siyosiy nutq, blog va mediamatnlarda ishlatilmoqda.

XULOSA

Paremiologik birliklar — bu tilning nafaqat tarixiy, balki kommunikativ zamonaviy qatlamidir. Ular qisqalik, emotsionallik, ifoda yuksakligi bilan zamonaviy kommunikatsiyada dolzarb vositadir. Ushbu birliklarning pragmatik xususiyatlarini o‘rganish tilshunoslik, psixolingvistika va madaniyatshunoslik uchun muhim ilmiy asos yaratadi. O‘zbek va ingliz tillarining paremiologik xazinasini qiyosiy o‘rganish esa madaniyatlararo muloqotni chuqurroq tushunishga xizmat qiladi. Paremiologik matnlar xalqning ijtimoiy tafakkurini, axloqiy mezonlarini, hayotga munosabatini aks ettiruvchi lo‘nda, ta’sirchan va majoziy ifodalar hisoblanadi. Ularning **kommunikativ vazifasi** axborot yetkazish va muloqotni yo‘naltirish bo‘lsa, **pragmatik vazifasi** tinglovchiga ta’sir o‘tkazish, ma’naviy va ijtimoiy qadriyatlarni singdirishdan iboratdir.

Zamonaviy tilshunoslikda paremiologik birliklarni lingvopragmatik, kognitiv, diskursiv va funksional nuqtai nazardan tahlil etish, til va jamiyat o‘rtasidagi munosabatlarni yanada chuqurroq tushunishga xizmat qiladi. Ushbu sohada olib borilayotgan tadqiqotlar nafaqat tilni, balki xalq mentaliteti va fe‘l-atvorini o‘rganishga ham katta hissa qo‘shadi.

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SENSORLI IPLAR YORDAMIDA SMART TRIKOTAJ MATOLARNING HARAKATGA SEZGIRLIGI: REABILITATSIYA VA SPORT UCHUN QO‘LLANILISHI

Tojaliyev Davronbek O‘rinboy o‘g‘li
Farg‘ona politexnika instituti magistranti
Xomidov Voxidjon Obidovich
Farg‘ona politexnika instituti v.b dots.

Annotatsiya: Zamonaviy to‘qimachilik sanoatida inson harakatini aniqlashga qodir aqlli materiallar muhim innovatsion yo‘nalishlardan biri hisoblanadi. Ushbu maqolada sensorli iplar yordamida ishlab chiqarilgan trikotaj matolarning harakatga sezgirlik xususiyatlari, ular asosida tayyorlangan smart kiyimlarning sport va rehabilitatsiya sohalaridagi amaliy ahamiyati, texnologik imkoniyatlari va ilmiy asoslari yoritiladi. Tadqiqot davomida turli sensorli tolalar, elektron o‘lchov tizimlari, hamda sinov natijalari asosida materiallarning funksional samaradorligi baholangan.

Kalit so‘zlar: trikotaj, sensor, harakat, rehabilitatsiya, sport, piezorezistiv, kapasitif, karbon, texnologiya, kiyim, elektronika, aqlli, monitoring, sanoat, dizayn

1. Kirish

To‘qimachilik sanoatida so‘nggi yillarda yuqori texnologiyali materiallar — xususan, sensorli iplar yordamida ishlab chiqarilgan smart trikotaj matolar katta qiziqish uyg‘otmoqda. Bunday matolar inson tanasining harakatiga javob qaytarib, uni aniqlash va raqamli signalga aylantirish xususiyatiga ega. Bu texnologiya zamonaviy to‘qimachilikning faqat modaga emas, balki sog‘liqni saqlash, sport, va inson salomatligini nazorat qilish sohalariga ham kirib borayotganining yaqqol dalilidir. Bunday yondashuv sportchilarning harakatlarini tahlil qilishda, hamda rehabilitatsiyada bemorlarning tiklanish jarayonini monitoring qilishda qo‘llanilmoqda.

Smart matolar inson tanasining egilishi, bosimi yoki harorat o‘zgarishlariga sezgir bo‘lgan iplar orqali signallar uzatadi va bu signalni mikroprotsessorlar yordamida raqamli ma‘lumotga aylantiradi. Mazkur texnologiya asosida ishlab chiqilgan kiyimlar nafaqat foydalanuvchi holatini doimiy monitoring qiladi, balki



ularning mashqlarni to‘g‘ri bajarishiga, reabilitatsiya natijadorligini oshirishga xizmat qiladi.

2. Sensorli iplarning turlari

Sensorli iplar — bu elektr yurituvchi, bosimga sezgir yoki deformatsiyaga reaksiya beruvchi iplar bo‘lib, ular odatiy trikotaj iplar bilan uyg‘unlashtiriladi. Quyidagi turdagi sensor iplar keng qo‘llaniladi:

Sensor turi	Material bazasi	Reaksiya turi	Qo‘llanilish sohasi
Piezorezistiv iplar	Karbonli, kumushli iplar	Deformatsiya, bosim	Reabilitatsiya, sport
Kapasitif iplar	Dielektrik tolali kompozit	Yaqinlik, teginish	Smart qo‘lqop, monitoring
Optik tolali iplar	Yorug‘likni o‘tkazuvchi iplar	Egilish, burilish	Ovoz va harakat deteksiyasi

Sensorli iplarning har biri muayyan afzallik va cheklovlarga ega. Masalan, piezorezistiv iplar yuqori sezgirlikka ega, ammo tezda eskirishi mumkin. Kapasitif iplar murakkab elektron integratsiyani talab qiladi, optik tolalar esa egilish burchagini aniq aniqlash imkonini beradi, lekin ulardan foydalanishda yorug‘lik manbalari bilan moslikni hisobga olish lozim.

3. Trikotaj matoga integratsiya qilish

Sensorli iplar to‘qimachilik texnologiyasiga mos ravishda trikotaj tuzilmalarga birlashtiriladi. Bu jarayon maxsus kompyuterlashtirilgan to‘quv mashinalarida amalga oshiriladi. Ular trikotaj matoning elastiklik, nafas oluvchanlik kabi fizik xususiyatlarini saqlab qolgan holda, signal uzatuvchi qatlamni hosil qiladi. Sensorli iplar odatda matoning belgilangan qismlariga — tizza, orqa, elka, tirsak yoki bel qismiga joylashtiriladi.

Bunday integratsiya qilishda quyidagi to‘qilish strukturalari ishlatiladi:

- Interlok trikotaj: ikki tomonlama to‘qilish, barqarorlik va mustahkamlik beradi.
- Ribb (ribana): elastiklik yuqori, ayniqsa bo‘yin va yeng sohalari uchun mos.
- Jacquard trikotaj: naqshli va murakkab dizaynlar uchun mos, sensorli iplarni yashirish mumkin.

4. Amaliy qo'llanilishi

4.1 Sport sohasida

Sensorli trikotaj kiyimlar sportchilar harakatlarini real vaqtda qayd qilib, ularning mashq samaradorligini oshirishga xizmat qiladi. Masalan, yugurish paytida tizzaning egilish burchagini o'lchash, to'g'ri qadam tashlash monitoringi. Ba'zi tizimlarda mobil ilovalar orqali real vaqt rejimida feedback (qayta aloqa) taqdim etiladi, bu esa foydalanuvchi uchun trening jarayonini yaxshilaydi.

4.2 Reabilitatsiyada

Harakat cheklangan yoki insult, falaj holatlaridan keyingi reabilitatsiya jarayonlarida sensorli matolar yordamida bemorning harakatlari kuzatilib, tiklanish bosqichlari tahlil qilinadi. Bu shifokorga tayanib, individual reabilitatsiya rejasini tuzishga yordam beradi. Masalan, egilish, bukilish yoki qadam bosishdagi simmetrik harakatlar o'lchanadi, ularning o'zgarishi asosida qayta tiklash jarayoniga baho beriladi.

5. Sinov va natijalar

Tajriba sifatida uch xil sensorli ipdan iborat trikotaj matolar tayyorlandi va egilish burchagi bo'yicha deformatsiyaga sezgirlik o'lchandi. Sinovlar laboratoriya sharoitida ISO 13934-1 standarti asosida o'tkazildi. O'lchovlar mobillikni o'lchovchi qurilmalar bilan, shuningdek, kuchlanishni aniqlovchi voltmetr orqali amalga oshirildi.

Namuna	Sensor ip materiali	Egilish burchagi (°)	Qarshilik o'zgarishi (%)	Elektr signal aniqligi
A	Kumushli ip	0–60°	15%	O'rtacha
B	Karbonli ip	0–90°	27%	Yuqori
C	Optik tolali ip	0–45°	10%	Past

Natijalarga ko'ra, karbon asosli iplar yuqori sezgirlikka ega bo'lib, eng yaxshi deformatsiyaga nisbatan o'zgarish ko'rsatdi. Kumushli iplar esa uzoq muddatli barqarorlik bilan ajralib turdi, optik iplar esa kichik egilishlarda aniqlik ko'rsatgan bo'lsa-da, umumiy sezgirlik darajasi pastroq bo'ldi.

6. Ilmiy yangilik

Ushbu tadqiqotda trikotaj matoga integratsiyalangan karbonli sensor iplarning harakatni aniqlashdagi sezgirliги tahlil qilinib, ularning reabilitatsiya sohasidagi yuqori aniqlikdagi ishlatilish imkoniyatlari birinchi marta sinovdan o'tkazildi. Bu yondashuv O'zbekiston sharoitida mavjud ishlab chiqarish quvvatlari, ayniqsa kompyuterlashtirilgan yassi trikotaj to'quv mashinalari bilan uyg'unlashadi. Shuningdek, ushbu tadqiqot trikotaj mahsulotlarining faqat moda emas, balki tibbiy texnologiya bilan uyg'unlashgan multifunksional mahsulot sifatida rivojlanayotganini ko'rsatadi.

7. Xulosa

Sensorli iplar bilan yaratilgan smart trikotaj matolar kelajakda sport, tibbiyot va kundalik hayotda faol foydalaniladigan funksional kiyimlarning asosi bo'lib xizmat qilishi mumkin. Ular nafaqat komfort, balki salomatlik monitoringi va harakat tahliliga xizmat qiladi. Matoning egilish, bosim, harorat va boshqa tashqi ta'sirlarga sezgirliги uni ilg'or zamonaviy materialga aylantiradi. Mazkur maqola asosida, yengil sanoat muhandislari uchun yangi tadqiqot yo'nalishlari ochilishi mumkin: misol uchun, arzonroq sensorli iplarni lokal xom ashyolar asosida ishlab chiqish, yoki elektron komponentlarni to'g'ridan-to'g'ri trikotaj jarayoniga qo'shish.

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METHODS OF MOIST-HEAT TREATMENT OF CLOTHES AND ANALYSIS OF THE EQUIPMENT USED IN THEM

Tursunova Khilola Shukhratjon kizi

FERGANA STATE TECHNICAL UNIVERSITY

Senior teacher, Department of Light Industrial Engineering

Abstract. In this article It provides information about methods of heat-wetting and processing clothes, the equipment used for this, and the importance of heat treatment in clothing production.

Keywords: Iron, press, steamer, steam air mannequins

Ironing is the act of lightly pressing the heated surface of an iron over the surface of a damp cloth. It is done using an iron.

Pressing is the process of squeezing a fabric between two heated surfaces that do not slide. It is performed using presses.

Steaming is the process of treating a fabric not by the action of heated surfaces, but by the action of steam pressure. A steam-air dummy is used for this.

Wet-heating equipment: irons, presses, and steam-air mannequins.

Irons can be heated with steam or electric-steam. Electric irons can have spiral or tubular electric heaters. They come in different weights depending on what they are intended for. For example, for ironing light clothes, 4 kg for suits and garments made of yarn 6 kg li, mass for coats 8 kg An iron is used. The surface of the iron can heat up to 140-220°C. When ironing with a cloth on the iron, the surface of the iron can be heated up to 20°C higher than usual. If the fabric is heated without ironing and without wetting, the physical and mechanical properties of the upper layers of the fabric may be damaged, that is, it may burn. The woven flowers on the iron-on fabric should not be clearly visible, and the elasticity of its fibers should be less than that of the fibers of the fabric being used. This prevents the fabric structure from being damaged and reduces the risk of fading.

There are three different ways to cool the fabric in the final stage of wet-heating: a) cooling under natural conditions on a sub-pad;

b) cooling by means of moisture absorption;

c) cooling with wind on the lower pillow. The properties of the fabric change during the soaking and heating process. If this process is done correctly, the

properties of the fabric improve. If the soaking and heating process of fabrics mixed with lavsan is done correctly, the resulting corrugations or pleated pleats will not be damaged even when washed. On the contrary, if the soaking and heating process is done incorrectly, the garment may be damaged as a result of the heat causing the fabric to shrink or discolor.

Steaming removes the tension in the fabric fibers that has been created as a result of previous processing, restores their original state, and makes the fabric non-shiny. Before using the fabric in garment factories, it is steamed, that is, de-shined (decated). The fabric is steamed in a steamer with a special steamer brush or a wet iron cloth wrapped around an iron is placed on the shiny areas of the fabric. When working with steam irons or steam presses, shiny areas are not formed.

The finished garment can also be ironed and steamed in a steam-air dryer. In this process, the garment is placed on a mannequin and steam and hot air are alternately applied to it. As a result, the creases and uneven areas of the fabric are straightened, giving the garment an ironed appearance. The steam-air mannequin consists of a steel frame. The working element of the steam-air mannequin is a nylon shell that takes the shape of the body when blown. The steam passing through the shell is applied for 5-10 seconds, then the shell is filled with hot air at a temperature of 105°C and the clothes are dried.

When steam and hot air are applied to the item from the outside in a hard-shell mannequin, the shape created is stabilized by changing the deflection of the fabric's yarns.

The wet-heat processing operations in sewing include the following:

1. Ironing with a slanted side - the sleeve and shoulder seams of women's dresses made of thin fabrics are ironed with a slanted side on ironing tables.

2. Split ironing - using special iron presses, the shoulder, side, sleeve, and back center seams of outerwear are ironed.

3. Ironing to thin out - using presses to thin out clothing collars, sleeve ends, hems, and hems.

4. Folding and ironing — Folding presses are used to fold and iron the edges of lining pockets, flaps, and flaps.

5. Pressing with a presser — the upper garment is pressed with a presser to create a bulge in the chest area of the front of the garment and to eliminate wrinkles at the ends of the hems. The lower pad of these presses has a concave shape, and the

upper pad has a convex shape.

6. Stretch ironing - using ironing tables, stretch ironing is carried out along the raised and folded areas of the undercollar and along the front edge of the upper sleeve.

7. Overcasting - Shirts and blouses made from light fabrics are overcast with an iron-on overprint (to mark the location of pleats and pockets).

3. Steaming — Steaming is done using steam presses and steam-air dryers to remove shine and wrinkles from clothing.

Wet-heat processing plays a significant role in the technological process of sewing clothes. It has a great impact on the quality of sewing products. With the help of such processing, a certain shape is given to the garment.

Irons are used in sewing for wet and heated processing. Electric irons can have spiral or tubular electric heaters. At the same time, irons can be heated with steam or electric steam. They come in different weights depending on what they are intended for. For example, a 4 kg iron is used for ironing new clothes, a 6 kg iron for suits and items made from yarn, and an 8 kg iron for coats. The surface of the iron can heat up to 140-220 C.

In addition to irons, ironing boards are used, which have heated ironing surfaces and absorb steam. For example, SU-1, SU, SU-OK ironing boards are used. These tables will have UPM electric steam, UP-, UP-3 steam irons with a capacity of 2.5-5 kg. The S5-294 ironing board, developed by the Hungarian company "Panonia", has an S5-392 electric steam iron and an S5-395 steam iron, each weighing 3-5 kg.

In addition, many different types of ironing presses are used in wet-heating operations. Depending on the pressing force, ironing presses are divided into light (up to 10kN), medium (up to 15-20kN), and heavy (more than 30kN).

From a technological perspective, presses are divided into ironing, folding, and steaming types. Presses are pneumatically and electromechanically driven. The following presses are used, the upper pads of which are heated by electricity and the lower pads by steam: PLS, PSS, PTS, PPU-1 S5-311, S5-313, S5-317 km, S5-351 R2 from the Hungarian company "Panonia".

The finished garment can also be ironed and steamed in a steam air mannequin. In this, the garment is placed on a mannequin and exposed to steam and hot air alternately. As a result, bent and uneven areas of the fabric are straightened, giving the garment an ironed look. The steam air mannequin consists of a steel frame. The

working element of the steam-air mannequin is a nylon shell that takes the shape of the body when inflated. The steam passed through the shell is exposed for 5-10 seconds, then heated to 105° . The shell is filled with hot air at a temperature of C and the clothes are dried.

The worker only puts on and takes off the clothes on the mannequin. For steam ironing trousers, there is an XF-7 mannequin from the German company "Textima" and a mannequin from the Japanese company "Inoue". A Hogess mannequin from the company "Textima" is used to fit men's coats.

Clothing details and finished garments in general are treated with moisture and heat to give them a certain shape or improve their appearance. 20-25% of the time spent on garment sewing is spent on wet-heat processing. When weaving into a shape, it is important to consider whether the fibers in the yarn are artificial or synthetic, derived from plants or animals.

Wet heat treatment is performed in 3 different ways:

1. Ironing.
2. Pressing.
3. Steaming.

Ironing is the act of lightly pressing the heated surface of an iron over a damp cloth. It is done using an iron.

Pressing is the process of squeezing a fabric between two heated surfaces that do not move. It is performed using presses.

Steaming is the process of treating a fabric not by the action of heated surfaces, but by the action of steam pressure. A steam air dummy is used for this.

Temperature is of great importance when working with moist heat. Because the heat resistance of fabrics depends on the heat resistance of the fibers. If heated above normal temperatures, the fabric will change its durability, strength, and color.

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Figure 1. Iron samples

Water sprayed onto a gauze or ironed cloth turns into steam when it touches the heated top pad of the press or the heated surface of the iron. As a result, the fibers of the upper and lower layers of the fabric are heated and pass from a glassy state to a highly elastic state, and the details are given the necessary deformation.

To maintain the shape achieved during wet-heat processing, the fabric must be cooled to return the fibers to a glassy state. To do this, it is necessary to completely dry out the remaining moisture in the fabric.

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Tabiiy ipakdan yangi turdagi to‘qimalar va ularni ishlab chiqarish takomillashtirilgan resurstejamkor texnologiyasini yaratishning nazariy asoslari

Xomidov Voxidjon Obidovich t.f.f.d., (PhD),

Farg‘ona davlat texnika universiteti (O‘zbekiston, Farg‘ona)

E-mail: vohidhomidovfar@mail.ru

Annotatsiya; Ushbu maqolada tabiiy ipak asosida yangi turdagi to‘qimalarni ishlab chiqarish jarayonini takomillashtirish va resurs tejamkor, yuqori samarali texnologiyani yaratish masalalari yoritilgan. Xo‘jalik yurituvchi sub’ektlar tomonidan ishlab chiqarilayotgan mahsulotlarning tashqi bozorlarda raqobatbardoshligini oshirishga qaratilgan ilmiy va amaliy yondashuvlar tahlil qilingan.

Kalit so‘zlar; tut, ipak qurti, pilla, sifatli xom-ipak, eksportbop, modernizatsiyalash, diversifikatsiyalash, raqobatbardosh, sifatli mahsulot.

Kirish. Milliy iqtisodiyotning eksportga yo‘naltirilgan tarmoqlaridan biri hisoblangan ipakchilik sanoatida yuqori qo‘shilgan qiymatga ega mahsulotlar ishlab chiqarish muhim ahamiyatga ega. Tabiiy ipakning ekologik tozaligi, yengilligi va nafisligi uni xalqaro bozorda talabgir qiladi. Bu talabga javob berish uchun yangi texnologiyalar joriy etilishi, mahsulotlar assortimenti diversifikatsiya qilinishi lozim.

Ishning dolzarbligi. To‘quv dastgohida mato hosil bo‘lish o‘rilishlarini aniqlash, to‘quv jarayonini to‘g‘ri tashkil yetish uchun muhimdir. Ishqalanish kuchlarining o‘zaro ta’siri va ip tizimlarining o‘zaro deformatsiyasi hodisalarining murakkabligi tufayli bu muammo hali universal shaklda analitik tarzda hal qilinmagan. Bizning tahlilimiz shuni ko‘rsatadiki, bozor iqtisodiyotining zamonaviy davrida va shiddatli raqobat kuchayib borayotgan davrda, sodir bo‘layotgan jarayonlarni iloji boricha real tavsiflovchi va ular asosida maqbul parametrlarni ishlab chiqadigan mato shakllanishining yangi matematik modelini ishlab chiqmasdan, mahsulotlarning raqobatbardoshligini va ularning jahon bozoriga chiqishini ta’minlash mumkin emas.

Mamlakat mustaqilligiga erishilgandan keyin ipakchilik tarmog‘ida iqtisodiy islohotlarni yanada chuqurlashtirishga, xorijiy investitsiyalarni jalb etish uchun qulay shart-sharoitlarni shakllantirishga, yangi korxonalar qurish va mavjudlarini modernizatsiyalashga, jahon bozorida xaridorgir va raqobatdosh tayyor mahsulot ishlab chiqarish hajmlarini oshirish va ularning turlarini ko‘paytirishga qaratilgan keng ko‘lamli tarkibiy o‘zgartirishlar amalga oshirildi.

Shu bilan birga tut ipak qurti ozuqa bazasi va pilla xomashyosi yetishmasligi tarmoqni yanada rivojlantirishga to‘sqinlik qilmoqda, buning natijasida respublika pillakashlik va shoyi to‘qish korxonalarining ishlab chiqarish quvvatlarini xomashyo bilan ta‘minlash darajasi pastligicha qolmoqda.

Ipakchilik tarmog‘ini yanada isloh qilishni ta‘minlash, ipakchilik sanoatini modernizatsiyalash, diversifikatsiyalash va jadal rivojlantirish jarayonlarini faollashtirish uchun, pillani chuqur qayta ishlash negizida tashqi bozorda barqaror talab qilinayotgan, raqobatbardosh mahsulot ishlab chiqarish hajmlarini ko‘paytirish va tovarlar turini kengaytirish, shuningdek, tarmoqni rivojlantirishga xorijiy investitsiyalarni keng jalb etish lozimdir.

Zamonaviy to‘qimachilik korxonalarida dastgohlar mashinasozligi sohasida dunyoning yetakchi mamlakatlaridan ishlab chiqilgan turli xil dastgohlarni ishlatishda iplarning kuchlanishini o‘rganish, uning yakuniy natijalari ipning uzilishini kamaytirishga erishilsa, dastgohning ish unumdorligi ko‘tarilsa shu bilan mahsulot sifati yaxshilanadi.

Tadqiqot ishlari quyidagi bosqichlar bo‘yicha bajarilishi lozim:

- tabiiy ipakdan to‘qimalar ishlab chiqarish texnologiyasini takomillashtirish bo‘yicha yangi nazariy va eksperimental tadqiqotlar natijalari olinadi;
- xom ashyoni to‘qishga tayyorlashda ipak iplarini qayta ishlash texnologik jarayonlarini asosiy omillari aniqlanadi;
- iplarni pishitish jarayoni o‘ramasini optimal turi aniqlanadi;
- tabiiy ipakdan yangi turdagi ko‘ylakbop to‘qimalar strukturasi yaratiladi
- tabiiy ipakdan to‘qimalar ishlab chiqarish texnologiyasini takomillashtirish bo‘yicha eksperimental tadqiqotlar natijalari olinadi;
- xom ashyoni to‘qishga tayyorlashda ipak iplarini qayta ishlash texnologik jarayonlarini asosiy omillari aniqlanadi
- tabiiy ipakdan yangi turdagi to‘qimalar ishlab chiqarish takomillashtirilgan resurstejamkor texnologiyasi yaratiladi;



- takomillashtirilgan texnologiya bo'yicha yangi turdagi to'qimalar namunalari ishlab chiqariladi, ularning sifat ko'rsatkichlari va texnologiyaning ish samaradorligi baholanadi.

Yangi texnologiya bo'yicha tabiiy ipak to'qimalarini tayyorlash jarayonlarini o'ziga xos jixatlarini taxlili va tadqiqotida, yangi texnologiyani inobatga olgan xolda tabiiy ipak to'qimalarini tayyorlash texnologik jixozlarini ish rejimlarini va maqbul omillarini ishlab chiqish va tabiiy ipakdan yangi turdagi ko'ylakbop to'qimalar strukturasini va ishlab chiqarish texnologiyasini yaratish mumkin.

Xulosa qilib aytish mumkinki, tabiiy ipakdan yangi turdagi to'qimalar ishlab chiqarish, takomillashtirilgan resurstejamkor texnologiyasini yaratishda, takomillashtirilgan texnologiya bo'yicha yangi turdagi to'qimalar namunalari ishlab chiqarish, ularning sifat ko'rsatkichlari va texnologiyaning ish samaradorligini baholash mumkin.

Dunyoda mato ishlab chiqarish uchun mashina va texnologiyalarni yaratishga qaratilgan ilmiy tadqiqotlar olib borilmoqda. Shu munosabat bilan, xususan, dastgohda mato hosil qilishning yangi usulini ishlab chiqish; dastgohning asosiy va yordamchi mexanizmlarining yangi dizaynlarini, dastgohni to'ldirish uchun maqbul parametrlarni va xususiyatlarga ega matolarning yangi assortimentlarini ishlab chiqish muhim vazifalardir.

Xulosa. O'tkazilgan tadqiqot natijalari dastgohlarda yangi mato elementini shakllantirish jarayonining intensivligining matematik tavsifini beradi. Dastgohlarda yangi mato elementini shakllantirish jarayonining matematik tavsifi ham olinadi, bu esa texnologiyaning intensivligini baholashga imkon beradi, yangi turdagi to'qimalarning fizik mohiyatini ochib beradi va dastgohlardagi jarayonning meyoriy oqimini ta'minlash uchun dastgohning dizayni va texnologik parametrlarining muqobillashtirish ko'rsatkichlariga ta'sirini aniqlaydi.

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Alternative Ways of Starting Classes, Ending Classes, and Deciding on a Syllabus in Language Education

Nazokat Sayfullayeva Abdusalim qizi- Shakhrisabz State Pedagogical Institute "Teacher of the Department of Foreign Language Practice and Theory"
sayfullayevanazokat19@gmail.com

Abstract

Effective language teaching goes beyond the delivery of content—it includes how lessons begin, conclude, and are structured overall. This article explores alternative and student-centered approaches to starting and ending lessons, and innovative methods of designing syllabi that involve learners in meaningful ways. Drawing on practical classroom strategies, teacher reflections, and academic research, it presents flexible, engaging, and inclusive techniques that can be applied in various contexts. These approaches enhance student motivation, autonomy, and retention by focusing on the learning process, not just the outcomes.

Introduction

In language education, classroom routines play a powerful role in shaping the learning environment. The way a teacher opens and closes a lesson can influence how students perceive the class, how much they engage, and how much they retain. Likewise, a syllabus is not just a list of topics—it represents a roadmap of the learning journey. Traditionally, syllabi are top-down documents designed by institutions or teachers. However, involving students in these decisions fosters a sense of ownership and personalization. This article explores these three areas—starting lessons, ending lessons, and designing syllabi—through practical, research-informed methods that promote active learning and student participation.

1. Starting Classes Creatively and Purposefully

The opening moments of a lesson set expectations and mood. Moving beyond basic greetings or taking attendance, creative openings can stimulate curiosity, prepare the mind, and help learners transition into the English-speaking environment.

Innovative Strategies:

Scenario-based Warm-ups: Give students a “mini situation” like “You lost your passport at the airport” and ask them how they would react.

Quick Debates: Present a provocative statement like “Homework should be banned” and let students express quick opinions.

Picture Prediction: Show a strange or humorous picture and ask learners to guess what happened before or after it was taken.

Mystery Bags: Bring a small object hidden in a bag and give clues related to the lesson’s theme.

"Whisper Chain": Whisper a short sentence to a student and let it go around the room to see how it changes. Then connect it to the day’s language focus.

Real-life Application:

One teacher started each class with a “three-word challenge,” where students had to make a funny or logical sentence using three random words from the previous lesson. This built vocabulary recall and sparked creativity.

2. Ending Classes Meaningfully and Reflectively

Rather than simply stopping when time is up, teachers can use the end of class to consolidate learning, encourage reflection, and preview upcoming content. Memorable endings help learning “stick.”

Alternative Ending Techniques:

Prediction for Tomorrow: Ask students what they think the next lesson will be about based on a clue or teaser.

Peer Teaching: Let students explain a key idea from the lesson to a partner in their own words.

"One-Minute Paper": Learners write down the most important thing they learned and one thing they didn’t understand.

Emotional Check-ins: Ask how students felt about the lesson using emojis or a traffic light (red = confused, green = confident).

Silent Summary Wall: Students write a summary or word from the day and stick it on a poster at the back of the class.

Real-life Application: In a high-school class, the teacher asked students to choose a GIF or meme that described how they felt about the lesson. This humorous but honest method helped track student mood and engagement.

3. Collaborative and Flexible Syllabus Design



A syllabus should be a living document, not a static one. Involving learners in the planning and development of the syllabus increases motivation and relevance, especially in adult or project-based learning contexts.

Student-Centered Syllabus Planning Methods:

Needs Analysis Worksheets: At the beginning of the term, students complete surveys about what skills or topics they need for their personal or professional goals.

“Learning Menu” Format: Create a syllabus with core topics and optional “side dishes” learners can vote on weekly.

Quarterly Adjustments: Review syllabus coverage every 4–5 weeks and let students suggest additions or changes.

"Question Box" Syllabus: Place a box in class where students can anonymously suggest topics or real-world problems they want to explore.

Integration of L1/L2 Interests: Let students bring texts or video clips in their own language to be translated or discussed using English vocabulary and grammar.

Real-life Application:

In an adult ESP course, the teacher created a basic grammar roadmap but allowed students to insert workplace-based scenarios they encountered each week. The syllabus became dynamic and highly relevant to their daily tasks.

4. Challenges and Considerations

While these alternative methods are rewarding, they require planning, adaptability, and sometimes institutional support.

Time Constraints: Balancing flexibility with curriculum coverage can be difficult, especially in test-preparation contexts.

Student Readiness: Some learners may feel uncomfortable with too much autonomy; scaffolding is essential.

Assessment Alignment: Creative activities should still support the overall assessment goals and course outcomes.

Teacher Confidence: New teachers may need support or peer training to confidently implement non-traditional approaches.

Conclusion

Incorporating alternative ways of starting and ending classes and redesigning the syllabus with learners in mind results in more engaged, motivated, and responsible students. These methods shift the focus from teacher control to learner empowerment. Instead of following rigid formats, educators are encouraged to

experiment with flexible structures, foster student voice, and create a positive classroom culture. By applying small changes consistently, classrooms can become spaces of curiosity, connection, and meaningful progress in language learning.

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NOFILOLOGIK YO'NALISH TALABALARIGA INGLIZ TILINI RAQAMLI TEXNOLOGIYALAR ASOSIDA O'QITISH METODIKASINI TAKOMILLASHTIRISH TEXNOLOGIYASI

Xolbo'tayeva Moxinur Temurboy qizi

Nizomiy nomidagi Toshkent davlat pedagogika universiteti 1-kurs tayanch
doktoranti

Annotatsiya. Ushbu maqolada nofilologik yo'nalish talabalariga ingliz tilini raqamli texnologiyalar asosida o'qitish metodikasini takomillashtirish texnologiyasi deganda nimalar tushunilishi va ular qanday bo'lishi mumkinligi haqida bilib olishingiz mumkin.

Kalit so'zlar: nofilologik, talabalar, ingliz tili, metodika, texnologiya, metodlar.

Аннотация. В данной статье вы можете узнать о том, что подразумевается под технологией совершенствования методики преподавания английского языка студентам нефилологических направлений на основе цифровых технологий и какими они могут быть.

Ключевые слова: нефилологические, студенты, английский язык, методика, технология, методы

Annotation. In this article, you can learn about what is meant by the technology of improving the methodology of teaching English to students of non-philological directions based on digital technologies and what they can be.

Keywords: non-philological, students, English, methodology, technology, methods.

Filologiya yo'nalishi talabalariga ingliz tilini raqamli texnologiyalar asosida o'qitish metodikasini takomillashtirish texnologiyasi deganda asosiy maqsad filologiya talabalarining ingliz tilini o'rganish jarayonini yanada qiziqarli, samarali va zamonaviy talablarga mos qilish, bunda raqamli texnologiyalarning imkoniyatlaridan to'liq foydalanish nazarda tutiladi. Shuningdek, quyidagi sohalarni qamrab oladi:

- O'qitish metodikasini modernizatsiya qilish: An'anaviy metodlarni raqamli texnologiyalar bilan integratsiyalash, yangi interaktiv metodlarni (masalan, gamifikatsiya, loyiha asosida o'qitish) joriy etish.



- Raqamli resurslardan foydalanishni optimallashtirish: Elektron darsliklar, onlayn lug'atlar, interaktiv mashqlar, video-darslar, podkastlar, mobil ilovalar, virtual sinflar kabi raqamli resurslardan maksimal darajada foydalanish.[1]

- Talabalarning mustaqil o'rganishini rag'batlantirish: Raqamli texnologiyalar yordamida talabalarning mustaqil o'rganish qobiliyatlarini rivojlantirish, ularga kerakli resurslarga oson kirish imkoniyatini yaratish.

- O'qituvchilarning kasbiy kompetentligini oshirish: O'qituvchilarni raqamli texnologiyalardan samarali foydalanishga o'rgatish, ularning metodik mahoratini oshirish uchun treninglar tashkil etish.

- Baholash tizimini takomillashtirish: Raqamli texnologiyalar yordamida talabalarning bilimni baholashning yangi usullarini (onlayn testlar, interaktiv topshiriqlar) joriy etish.

- Individual yondashuvni ta'minlash: Raqamli texnologiyalar yordamida har bir talabaning individual ehtiyojlarini hisobga olgan holda o'qitishni tashkil etish.

- Filologik yo'nalishga moslashtirilgan kontent: Ingliz tilini o'rgatishda filologiya yo'nalishiga oid matnlar, adabiyotlar, filmlar va boshqa materiallardan foydalanish.

Yuqoridagilarni nazarda tutgan holatda quyidagi amaliy misollarni keltirishimiz mumkin:

- Interaktiv onlayn darslar: Zoom, Google Meet kabi platformalar orqali jonli darslar o'tish, interaktiv doskalardan foydalanish.

- Gamifikatsiya: Kahoot!, Quizizz kabi platformalar orqali o'yin elementlarini darsga kiritish.

- Virtual sayohatlar: Muzeylar, tarixiy joylarga virtual sayohatlar uyushtirish.[2]

- Onlayn hamkorlik: Google Docs, Padlet kabi platformalar orqali guruhli loyihalar ustida ishlash.

- Sun'iy intellektga asoslangan ilovalar: Til o'rganish uchun mo'ljallangan sun'iy intellektga asoslangan ilovalardan foydalanish (masalan, Duolingo, Babbel).

Natijada esa ushbu texnologiyani qo'llash orqali filologiya talabalari nafaqat ingliz tilini yaxshi o'rganishlari, balki raqamli texnologiyalardan samarali foydalanish ko'nikmalariga ham ega bo'ladilar. Bu ularning kelajakdagi kasbiy faoliyatlarida muhim rol o'ynaydi.



Nofilologik yo'nalish talabalariga ingliz tilini raqamli texnologiyalar asosida o'qitish metodikasini takomillashtirish uchun quyidagi texnologiyalardan foydalanish mumkin:

1. Moslashuvchan (Adaptive) O'qitish Platformalari:

- Mohiyati: Sun'iy intellekt (AI) va mashinalarni o'rganish (ML) algoritmlariga asoslangan holda, har bir talabaning bilim darajasi, o'rganish tezligi va uslubiga moslashadigan platformalar.[3]

- Afzalliklari: Talabaning zaif tomonlarini aniqlab, ularni mustahkamlashga yo'naltirilgan mashqlarni taklif etadi, shuningdek, kuchli tomonlarini rivojlantirishga yordam beradi.

- Misollar: Duolingo, Knewton, Kaplan Adaptive Test Prep.

2. Multimedia Resurslaridan Foydalanish:

- Mohiyati: Video darslar, animatsiyalar, interaktiv o'yinlar, podkastlar va virtual sayohatlar kabi multimedia resurslarini o'quv jarayoniga integratsiya qilish.

- Afzalliklari: Talabalarning qiziqishini oshiradi, mavzuni tushunishni osonlashtiradi va xotirada uzoqroq saqlanib qolishiga yordam beradi.

- Misollar: YouTube Education, TED Talks, Khan Academy.

3. Virtual va Kengaytirilgan Haqiqat (VR/AR) Texnologiyalari:

- Mohiyati: Virtual haqiqat orqali ingliz tilida so'zlashuvchi muhitni yaratish va talabalarga real hayotdagi vaziyatlarni simulyatsiya qilish imkoniyatini berish. Kengaytirilgan haqiqat esa mobil qurilmalar orqali o'quv materiallarini interaktiv tarzda vizuallashtirish imkonini beradi.

- Afzalliklari: Talabalarning til amaliyotini real sharoitlarda qo'llash imkoniyatini beradi, ularning ishonchini oshiradi va o'rganish jarayonini yanada qiziqarli qiladi.

- Misollar: Immerse, MondlyAR.

4. Mobil Ilovalar:

- Mohiyati: Ingliz tilini o'rganishga mo'ljallangan mobil ilovalardan foydalanish. Bu ilovalar lug'at boyligini oshirish, grammatikani o'rganish, talaffuzni yaxshilash va til ko'nikmalarini rivojlantirishga yordam beradi.

- Afzalliklari: Qulaylik, tezkorlik va istalgan vaqtda, istalgan joyda o'qish imkoniyatini yaratadi.

- Misollar: Duolingo, Babbel, Memrise, Elsa Speak.

5. Hamkorlikdagi Onlayn Platformalar:



- **Mohiyati:** Talabalarga boshqa o'quvchilar bilan hamkorlik qilish, loyihalar ustida ishlash va o'zaro fikr almashish imkoniyatini beruvchi onlayn platformalardan foydalanish.[4]

- **Afzalliklari:** Kommunikativ ko'nikmalarni rivojlantiradi, jamoada ishlashni o'rgatadi va o'zaro yordam berish orqali o'rganishni osonlashtiradi.

- **Misollar:** Google Workspace (Docs, Sheets, Slides), Microsoft Teams, Slack.

6. O'yinlashtirish (Gamification):

- **Mohiyati:** O'quv jarayoniga o'yin elementlarini (ball to'plash, reytinglar, mukofotlar) kiritish.

- **Afzalliklari:** Talabalarning motivatsiyasini oshiradi, raqobat muhitini yaratadi va o'rganishni yanada qiziqarli qiladi.

- **Misollar:** Quizizz, Kahoot!, Classcraft.

7. Sun'iy Intellektga Asoslangan Chatbotlar:

- **Mohiyati:** Ingliz tilida suhbatlashish, savollarga javob berish va talaffuzni tekshirish uchun AI chatbotlaridan foydalanish.

- **Afzalliklari:** 24/7 yordam berish, xatolarni tuzatish va real vaqt rejimida fikr bildirish imkoniyatini beradi.

- **Misollar:** Replika, Andy.

8. Raqamli Baholash Vositalari:

- **Mohiyati:** Onlayn testlar, avtomatik baholash tizimlari va topshiriqlarni topshirish platformalaridan foydalanish.

- **Afzalliklari:** Baholash jarayonini tezlashtiradi, xatolarni kamaytiradi va talabalarga o'z natijalari haqida tezkor fikr bildirish imkoniyatini beradi.

- **Misollar:** Google Forms, Moodle, Canvas.

Muhim jihatlar:

- **Yo'nalishga moslashuv:** Nofilologik yo'nalish talabalari uchun ingliz tilini o'qitishda ularning kasbiy ehtiyojlarini hisobga olish va o'quv materiallarini shu yo'nalishga moslashtirish kerak.

- **Pedagogik yondashuv:** Raqamli texnologiyalardan foydalanish faqatgina vosita bo'lib, o'qituvchining pedagogik mahorati va talabalar bilan muloqot qilish qobiliyati muhim ahamiyatga ega.

- **Texnik ta'minot:** Raqamli texnologiyalardan samarali foydalanish uchun talabalarning internetga ulanishi va zarur texnik vositalarga ega bo'lishi ta'minlanishi kerak.



Ushbu texnologiyalarni integratsiyalash orqali nofilologik yo'nalish talabalari uchun ingliz tilini o'qitish metodikasini yanada takomillashtirish va ularning til ko'nikmalarini rivojlantirish mumkin.

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YOSHI KATTA AYOLLAR UCHUN "GARDEROB" TO'PLAMINI ISHLAB CHIQISH

Yaxyojonova Mohidil Husan qizi

Farg'ona davlat texnika univristeti

Yengil sanoat muhandisligi kafedrası assistenti

yaxyojonovam@gmail.com

Anotatsiya: Mazkur maqolada 50 yoshdan oshgan ayollar uchun garderoab shakllantirish bo'yicha tavsiyalar berilgan. Unda yoshi katta ayollar kiyim tanlashda qulaylik, sifat va uslubiy uyg'unlikni birinchi o'ringa qo'yishlari lozimligi ta'kidlanadi. Uy sharoitida qulay kiyimlar, tashqi muhitda esa zamonaviy, klassik va harakatni cheklamaydigan liboslar tanlash tavsiya etiladi. Garderobni to'ldirishda sifatli matolar, klassik kesimdagi kiyimlar va minimal bezaklarga urg'u berish lozim. Yozuvda har bir yangi kiyim ilgari mavjud kiyimlar bilan uyg'un bo'lishi kerakligi, shuningdek, ayol qanchalik yosh bo'lmasin, o'ziga bo'lgan e'tibor va didli kiyinish zarurligi qayd etilgan.

Kalit so'zlar: Yoshi katta ayollar garderoabi, 50 yoshdan keyin kiyinish, kiyim tanlash tavsiyalari, klassik uslub, sifatli matolar, zamonaviy ayol uslubi, garderobni shakllantirish, nafaqadagi ayollar uchun moda, ayollar kiyim madaniyati, qulay kiyimlar

Yoshi katta ayollarning ko'pchiligi kiyim tanlashda yoshidan kelib chiqib to'q ranli kiyimlar olishga intiladilar. Yaxshi tikilgan va harakatni cheklamaydigan qulay kiyimlarni kiyishni afzal ko'radilar. Sport shimlari va keng futbol kalar uy uchun juda qulay. Albatta, siz ularda ko'chaga chiqolmaysiz, qo'shnining uyiga chiqolmaysiz lekin juda qulay, shuning uchun uy ichida kiyish tavsiya beriladi. Modellarda tugmachalar, fermuarlar va mahkamlagichlar qancha kam bo'lsa, uni qo'yish va tikish osonroq. O'ylaymanki, ko'pchilik nafaqaga chiqqanida yangi narsalarni sotib olishni to'xtatadi va u erda boradigan joy yo'q. Lekin har qanday yoshda o'ziga va kiyinish uslubiga e'tibor berishi kerak. 50 yoshdan keyin qanday qilib to'g'ri kiyinish kerak. Zamonaviy ayol go'zalligi g'ayrioddiy joziba kasb etadi: bu to'g'ridan-to'g'ri ayolning yoshiga va uning turmush tarziga bog'liq. Ushbu joziba sharobga o'xshaydi, bu yillar davomida ajoyib ta'm va ajoyib hidga ega



bo'ladi. Deyarli har bir ayol to'g'ri garderozni yaratishi va 50 yoshida zamonaviy ko'rinishi mumkin. Ushbu biznesda asosiy narsa istak, e'tibor va oqilona yondashuvdir. Jahon stilistlari klassik kiyimlarga va asosiy narsalarga e'tibor berishni maslahat berishadi. Chiroyli ko'rinish uchun arzon buyumlar va materiallardan emas balki yaxshi va sifatli matolardan tanlash kerak. Garderobnani to'ldirishda kiyimning miqdoriga emas, balki sifatiga e'tibor qiling. Biroq, har doyim shuni, esda tuting: sotib olingan har bir yangi kiyimingiz ilgari sizda mavjud bo'lganlari bilan uyg'un bo'lishi kerak. Turli xildagi bo'yinbog'lardan, qo'pol mini, tor va shaklsiz kiyimlardan saqlaning. Qomatingizda qo'shimcha yog'lanishlar, osilish va bukirliklar uchrasa zich matodan tikilgan uzun ko'ylak yoki shim kostyumining hajmini mukammal darajada yashiradi.. 50-60 yoshli ayolning "ishchi" asosiy garderobida quyidagilar bo'lishi kerak: oq rangdagi bir nechta bluzkalar, tercihen tabiiy ipakdan va paxtadan qor-oq ko'ylakdan. ("Ofis" Garderobi haqida ko'proq ma'lumot olish uchun - maqolada. Ishga tayyorgarlik ko'rish: har kuni uchun zamonaviy kamon.) Qanday qilib 50 yoshda kiyinish kerak - zamonaviy, dolzarb, ayni modaga mos. O'ziga g'amxo'rlik qiladigan ayolga qarash har doim yoqimlinecha yoshda bo'lishidan qat'iy nazar - 15 yoki 50 yoshda - ayol o'zining tashqi ko'rinishiga befarq bo'lmaguncha ayol bo'lib qoladi. Yaxshiyamki, bugungi kunda ko'plab adolatli jinsiy aloqa vakillari buni tushuna boshladilar. 50 yoshli zamonaviy ayollar moda tendentsiyalariga rioya qilishadi, go'zallik salonlari va fitness klublariga tashrif buyuradilar. Moda yoshlarning imtiyozi deb o'ylamang. Ha, 20 yoshga to'lganingizda, do'kon javonlarida kiyimlar tanlovi ancha boyroq. Ammo bu 50 yoshdan keyin ayol va did bilan kiyinish imkoniyati yo'q degani emas. 50 yoshli ayolning asosiy garderobi. Ayol kishi 50 yoshga yaqinlashganda, uning qomatiga mos keladigan narsani bilish va o'rganish, shuningdek, shaxsiy uslubini takomillashtirishni davom ettirish juda muhimdir. Sizning garderobingiz doimiy klassik (afzal yuqori sifatli va qimmat) narsalardan iborat bo'lishi kerak va faqat bir nechta juda zamonaviy narsalar! Doimiy, klassik garderobi sizning shaxsiyatingizga mos keladigan tarzda uyg'unlashishi va zeb-ziynati bilan ajralib turishi va eng zamonaviy trendlarni hanuzgacha chiroyli qo'rishingizga imkon beradi. Masalan, Joriy mavsumda nashr etilgan sharf, marjon, zamonaviy moda poyabzal yoki chiroyli har mavsumda sizning garderobingizning asosiy qismini yangilab turishi mumkin. 50 yoshli ayolning uslubi lakonik kesilgan va umumiy chiroyli taassurot bilan ajralib turadi. To'plam uchun buyumlar juda ko'p dekor va ijodiy dizayn



topilmalariga muhtoj emas va tasvirlar bir vaqtning o'zida sodda va oqlangan ko'rinadi.

Asosiy garderoabning asosiy elementlari kostyumlardir: iliq mavsum uchun 1-2, sovuq uchun ham. Bahor va yoz uchun variantlar yengil ranglarda tayyorlanishi mumkin; klassik o'rta kulrang, qumli, sutli yoki qaymoq rang ayniqsa yaxshi tanlovga aylanmoqda. Kuz-qish davri uchun kostyumlar qora, to'q ko'k, jigarrang bo'lishi mumkin. Muxtasar qilib aytganda, neytral palitrani tanlang, shunda sizning asosiy garderoabingiz qo'shimcha narsalaringizning yanada yorqin, murakkab ranglariga mos keladi. Bu nafaqat kostyumlarga, balki boshqa barcha asosiy qismlarga ham tegishli. Sut rangidagi klassik kostyum. To'g'ri kiyimni qanday tanlash kerak: Har qanday ayol to'g'ri kiyim va aksessuarlarni tanlashni bilsa, go'zallikka aylanadi. Yaxshi tanlangan uslub va rang, uslubi va kattaligi har bir xonimning ayol bo'lishiga yordam beradi va erkaklar sizni hayrat bilan qarashga majbur qiladi. Keyin sochlarning rangi, ko'zlari, lablari, oyoqlari va tananing boshqa qismlari shakli endi muhim emas. Sizning tashqi ko'rinishingiz mustahkam va chidamsiz bo'ladi. Asosiy maqsad belni yaratishdir. Qorinni belga aylantirish uchun sizning ko'kargan ko'krak va sonlaringizni ingl. Ularda joylashgan yamoq cho'ntaklar yoki ruffles (ko'krak va sonlarda) sizning afzalliklaringizga hajm qo'shishi mumkin. Boshqa tomondan, belda cho'ntaklar bo'lmasligi kerak, keng belbog'ni tanlaganingiz ma'qul, ammo u sizning qorningizni qisib ishonch hosil qiling. Bel qismida toraygan chuqur kesilgan bluzkalarga ustunlik bering. Beldan kestirib kengayadigan kiyimlar ham sizning raqamingizni sozlash uchun juda yaxshi. To'g'ri o'ralgan kiyimlarni tanlamaslik muhim, bu sizga faqat zarar etkazishi mumkin. Pastki qismiga kelsak, to'piqdagi bo'shashgan shim sizga juda mos keladi, eskirgan va yamoq cho'ntaklariga e'tibor bering, shuningdek, pastki qismga kengayadigan yubkalar siz uchun kengayadigan yubkalar siz uchun juda mos keladi. Ushbu turdagi raqamlar ayollik standarti sifatida tan olingan va ko'plab ayollar bu haqda juda orzu qiladilar. U haqli ravishda namuna sifatida tanlangan, shuning uchun agar sizning tanangiz "Soat soati" bo'lsa - tabriklayman, siz omadlisiz va sizda bitta vazifa bor, o'zingizni noto'g'ri tanlangan kiyim ostida buzmaslik. O'zingizning raqamingizga mos keladigan toplar, sviterlar, bluzkalar va ko'ylaklarni tanlang, lekin mahkamlangan yoki haddan tashqari tor kiyimlardan saqlaning. Kesilgan kiyimlarni kiying - chiroyli bo'yin va bo'yinbog'ingizni turtka va turtak ostiga yashirmang, chunki bu yuqoridan pastga tushadi va sizning

raqamingiz teskari uchburchakka o'xshaydi. Belga urg'u bermaydigan kiyim tavsiya etilmaydi (masalan, Empire uslubida, ko'krigidan erkin tushish). Ustini kiyimga bu sonlarning eng keng qismida tugaydi. Shishgan, og'ir yenglardan saqlaning yoki pastki puflamali bilan birlashtiring. Bir tomoni o'ralgan ustki kiyimlar va ko'ylaklar, bo'yniga bog'lab qo'yilgan ustki kiyimlar, ta'kidlangan bel va keng yubka bilan liboslar sizga mos keladi ... Kamarlarni unutmay, ular sizning belingizni ta'kidlashga yordam beradi. Asosiy maqsad zarar etkazmaslikdir.

Ushbu to'rt rang turlari issiq (bahor va kuz) va sovuq (qish va yoz) bo'linadi. Tashqi ko'rinishning iliq turida terining, sochlarning va ko'zlarning rangi iliq soyadir, sovuqda esa aksincha. Qaysi turda ekanligingizni aniqlashda sochlaringiz, teringiz va ko'zlaringizning tabiiy ranglarini hisobga oling. Keling, qish rang turidan boshlaymiz. Zamonaviy dizayndagi 50 yoshdan oshgan egri shaklga ega ayollar garderobida bo'lishi kerak bo'lgan asosiy narsalar: tug'ri bichimli yubka u yana modaga qaytdi va bu juda yaxshi yangilik. tug'ri bichimli yubka deyarli universal bo'lib, barchaga mos keladi.



2.9.Rasm. 2021 yildagi yorug'lik gamutlari.

Kuylaklar - Tizgacha bo'lgan model ikkala poshnali poyabzal va odatiy etiklar bilan juda yaxshi ko'rinadi, kardiganlar. Bir vaqtning o'zida yana bir amaliy va oqlangan uslub. Katta va shaklsiz kardiganlar eskirgan va tartibsiz ko'rinadi. Egri shaklga ega xonimlar aniq, ammo erkin chiziqlar uchun ko'proq mos keladi. Turtlaklar. Kunduzgi va kechki ko'rinishni shakllantirish uchun mos bo'lgan yana bir ko'p qirrali kiyim. 50+ vaznli ayollar uchun eng qulay uslub katta hajmli ko'ylak yoki yubka bo'lishi shart emas. Shimlar zamonaviy ayol uslubining bir qismiga aylandi va har qanday yoshdagi ayollar kiyishadi. Ular, ayniqsa, kundalik ko'rinishlarni yaratishda amaliydir. Barchaga mos keladigan eng so'nggi moda buyumlari:

- tug'ri bichimli yubka.
- G'ayrioddiy shaklga ega chiroyli uzun kardiganlar. Ular qat'iy funksional bo'lmasligi mumkin, ammo ular eng oddiy tasvirni mukammal ravishda to'ldiradi.
- qimmatbaho matolardan tikilgan tekis rangli kombinezonlar.
- Keng ko'ylak.
- O'qlari bo'lgan qora tekis shim.
- Kestirib yopadigan o'rnatilgan ko'ylagi.
- Katta zargarlik buyumlari ko'rinishidagi yorqin aksanlar bilan to'liq qora ko'rinish.

Xulosa qilinib 50 yoshdan oshgan ayollar uchun garderoab tanlashda eng muhim jihatlar — qulaylik, sifat, klassik uslub va did bilan uyg'unlikdir. Ular odatda sokin, to'q ranglarni afzal ko'rishsa-da, har qanday yoshda o'ziga e'tibor berish, zamonaviy va oqlangan ko'rinish muhim hisoblanadi. Uy ichida harakatni cheklamaydigan sportcha kiyimlar qulay bo'lsa, ko'chaga chiqishda esa sifatli matolardan tikilgan, jismoniy kamchiliklarni yashira oladigan klassik uslubdagi kiyimlar afzaldir. Garderobda tabiiy ipak yoki paxtadan tikilgan bluzkalar, oq ko'ylak, qulay shim kostyumlar va mos poyabzallar bo'lishi kerak. Kiyim tanlashda miqdordan ko'ra sifati muhim; har bir yangi kiyim avvalgi kiyimlar bilan uyg'un bo'lishi lozim. Noqulay mini yubkalar, shaklsiz, haddan ortiq tor kiyimlar yoki



haddan tashqari bezakli buyumlardan qochish kerak. Lakonik, klassik kesimdagi liboslar bilan zamonaviy aksessuarlarni uyg'unlashtirish — bu yoshda zamonaviylik va jozibadorlik kalitidir. Ayol o'ziga g'amxo'rlik qilsa, har qanday yoshda ham chiroyli va o'ziga ishongan bo'lib ko'rinadi. Garderob — bu nafaqat kiyimlar to'plami, balki ayolning hayotga munosabati va uslubining ifodasidir.

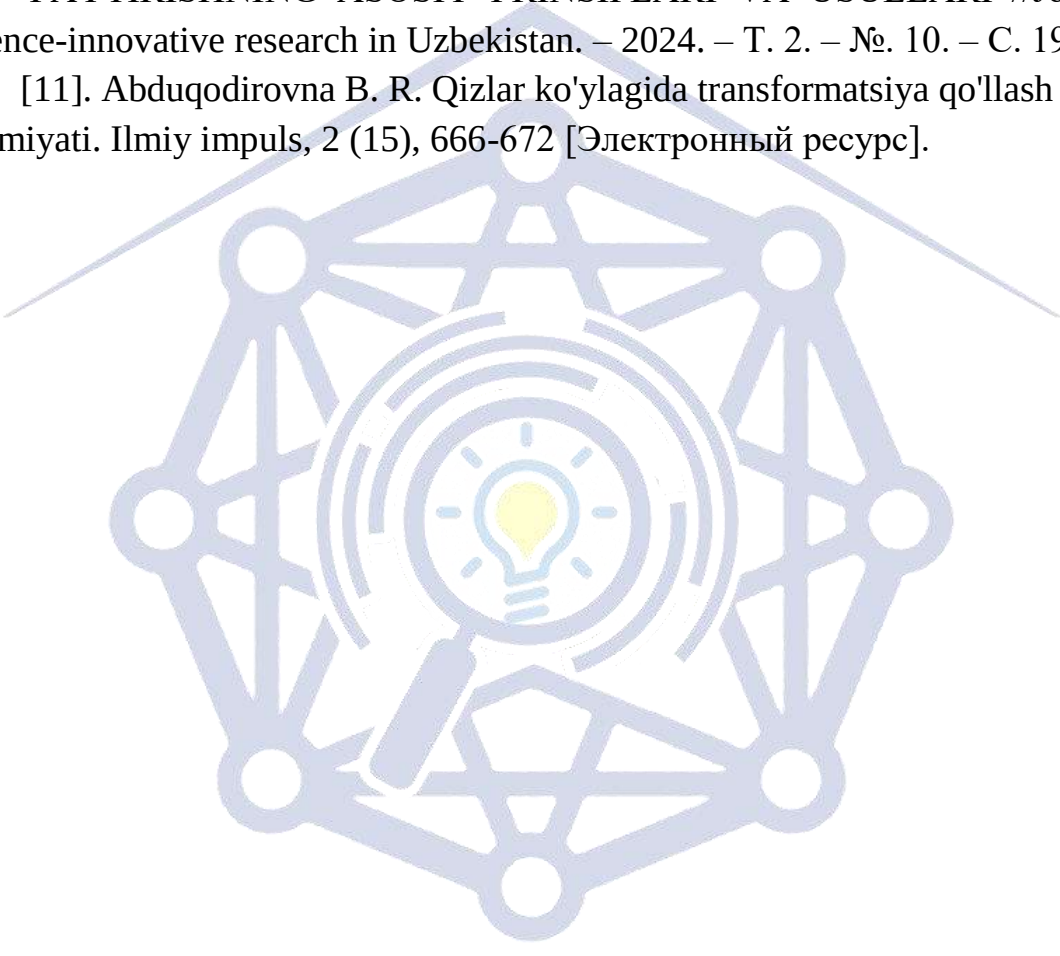
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ПАХТАНИ ПНЕВМОТРАНСПОРТГА ҒАРАМ БУЗГИЧ- ТАЪМИНЛАГИЧ ЁРДАМИДА УЗАТИШНИНГ НАЗАРИЙ ТАҲЛИЛИ

Саттаров Нурилло Музаффар ўғли

Фарғона давлат техника университети

e-mail: sattorovnurillo707@gmail.com, Тел: +99894-491-98-00

Аннотация: Ушбу мақолада пахта тозалаш корхоналари ғарам майдонларида сақланаётган пахта хомашёсини механик ғарам бузгич-таъминлагич ёрдамида ғарамдан бузиб ва ҳаво транспортига узатиш жараёнининг назарий таҳлили келтирилган.

Калит сўзлар: пахта, ҳаво транспорти, лентали таъминлагич, козикчалар, транспортёр лентаси,

Аннотация: В статье представлен теоретический анализ процесса драки хлопкового сырья, хранящегося на джин-полях хлопкоочистительных предприятий, из джина и передачи его на воздушный транспорт с помощью механического дражирователя-податчика.

Ключевые слова: хлопковая, воздушный транспорт, ленточный питатель, колышки, конвейерная лента

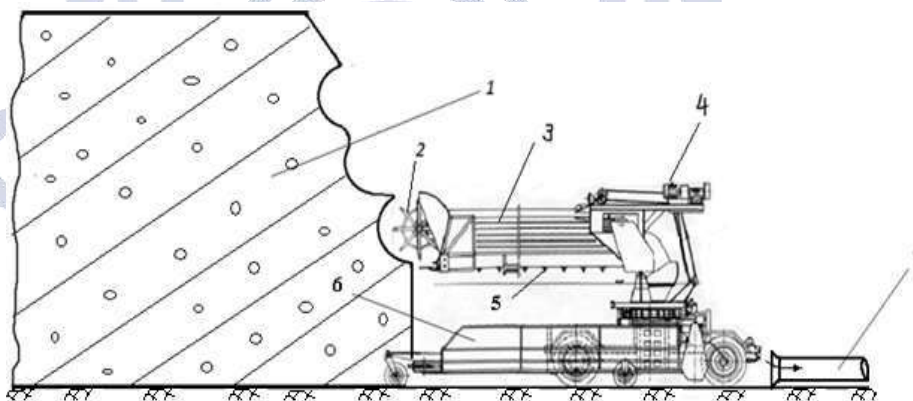
Abstract: This article presents a theoretical analysis of the process of breaking the cotton raw material stored in the gin fields of cotton ginning enterprises from the gin and transferring it to air transport using a mechanical gin breaker-supplier.

Keywords: cotton, air transport, belt feeder, piles, conveyor belt

Хозирги кунда пахта тозалаш корхоналари ғарам майдонларида сақланаётган пахта хомашёсини ғарамдан бузиб ва ҳаво транспортига узатишда тўхтовсиз ҳаво кувури узунлигини ошириб бориш ёки камайтириш, зарурат юзага келганда, жойлашган ўрнини ўзгартириш талаб этилади. Бу жараёни осонлаштириш учун ғарамбузгични ҳаракат йўналишига параллель қилиб ёрдамчи горизонтал лентали таъминлагич ўрнатилади. Пахта тозалаш корхоналарида горизонтал лентали таъминлагични ишлатиш ишлаб чиқариш заруратидан келиб чиққан. Пахта тозалаш корхоналарида чигитли пахта

ғарамини бузиб, ишлаб чиқаришга узатиш механик усулда РП, РБХ, РБА маркали ғарамбузгичлар ёрдамида амалга оширилади.

Пахта ғарамини бузиш ва ҳаво транспорти қувирига узатиш жараёнида ғарамбузгич олдинга ва орқага ҳаракатланиб туришига тўғри келади. Бунда ҳаво қувири узунлигини тўхтовсиз ошириш ёки камайтириш зарурати бўлиб, акс ҳолда ғарамбузгичдан чиққан пахта қувор оғзига тўғри келмай қолади. Шунинг учун, ғарам бузгич-таъминлагичнинг ҳаракат йўналишига параллел қилиб, узунлиги 4-7 м гача бўлган кўчма горизонтал лентали транспортёр ўрнатилади ва пахта шу транспортёр лентасига ташлаб берилади. Ҳаво қувири оғзи лентадан тушаётган пахтага мослаб жойлаштирилади. Натижада, ғарамбузгич шунча масофага силжигунча қувор узунлигини ўзгартиришга ҳожат қолмайди. 1- расмда ғарам бузгич-таъминлагичнинг иш жараёнидаги схемаси келтирилган.



1-расм. Механик ғарам бузгич-таъминлагичнинг умумий кўриниши.

1-ғарам, 2-чамбарак; 3-стрела; 4-стрелани кўтариш механизми; 5- пахтани олиб кетувчи транспортер; 6-ёрдамчи лентали транспортёр, 7-ҳаво қувири.

Ишлаш жараёнида ғарамбузгич пахта ғарамининг кичик ўлчамли томони ўртасидан келиб, юқори қисмидан бошлаб, пахта ғарамини бузишга киришади. Унинг ўқи учидан жойлашган чамбарак айланиб, ғарамдан бузиб олинган пахта қатламларини ташувчи лентига узатиб беради. Лента пахтани пахта тўплагичга келтириб ташлайди. Унинг остида жойлашган чиқарувчи лентали транспортёр пахтани ён томонга, ёрдамчи лентали транспортёрга ташлаб беради. Ёрдамчи лентали транспортёр ўз навбатида пахтани ҳаво

транспорти қувирига узатиб беради.

Пахта ғарамини бузиш вақтида унинг чамбараги, асосан горизонтал текислик бўйича ҳаракатланади ва пахта қатлами билан фақат айланиш траекторияси бўйича эмас, балки чамбаракнинг ён томони билан ҳам таъсирлашади. Шунинг учун, чамбарак ён томонга сурилиб, пахта қатлами билан таъсирлашганда пахтани титиб, чамбарак юришини оsonлаштириш мақсадида чамбарак ён текислигига тик қилиб, унинг периферияси бўйича ҳар икки томонга 4 тадан, жами 8 та қўшимча қозикча маҳкамланган.

Ғарамбузгич ўқи консоль таянчга ўрнатилган бўлиб, у марказ атрофида ҳам вертикал, ҳам горизонтал текислик бўйича айланиш имкониятига эга бўлади. Иш давомида у пахта ғарамини горизонтал текислик бўйича R радиус остида кесиб олади ва одатда ғарамнинг бутун кенглигини камраб олади. Сўнг навбатдаги қатламга тушиб, то майдон текислигигача худди шундай кесади ва олдинга сурилиб, юқоридаги жараёни қайтаради. Ёрдамчи лентали транспортёрнинг узунлиги 4 метр бўлиб, шунча масофада ғарамбузгич ҳаво транспорти қувурлари узунлигини ўзгартирмасдан узлуксиз ишлай олади. Ғарамбузгич ўқи ғарамга етмай қолганда пахта узатиш тўхтади ва у олдинга сурилади. Ёрдамчи лентали транспортёр ҳам тўғри чизик бўйлаб сурилиб, ғарамбузгич чиқарувчи транспортёри унинг бошланиш қисмига тўғри келадиган қилиб қўйилади. Шунга мос равишда ҳаво транспорти қувири ҳам узайтирилади (ёки қисқартирилади). Сўнг пахта узатиш давом эттирилади. Баъзан, ғарамбузгич ғарам майдонига чиқмай, унинг ён томонидаги йўлакка, ғарамнинг тенг ярмини камраб оладиган қилиб ўрнатилади. Бунда ғарамбузгич ғарамни икки юришда бузиб тугатади.

Бизга маълумки, ғарамбузгич чамбараги пўлат ҳаво қувурларидан кесиб тайёрланади ва унинг периферияси бўйича қозикчалар ўрнатилади. Қозикчалар одатда пахта ичига тушиб қолган металл ёки тош парчалари билан тўқнашганда чақин чиқариб, ёнғин хавфини келтириб чиқармаслиги учун рангли металлдан, кўпинча мис қотишмаларидан тайёрланади. Бу ҳолат зарба кучини ҳам маълум даражада камайтириш имконини беради ва чигит механик шикастланишини камайтиради.

Пахта билан таъсирлашадиган ишчи орган асли ана шу қозикчалар ҳисобланади. Иш жараёнида улар кучли емирилади ва тез муддатда калталашиб қолади. Шунинг учун қозикчалар алмаштириладиган қилиб



тайёрланади ва чамбарак учларига кертикли бирикма ёрдамида маҳкамланади.

Ғарам бузгич-таъминлагични бошқаришни икки киши: бошқарув оператори ва унинг ёрдамчиси томонидан масофадан туриб алоҳида бошқариш пулти орқали амалга оширилади. Ғарам бузгич-таъминлагични ишлатишга махсус ўқитилган, машинанинг тузилишини, уни ишлатиш қоидаларини, ғарамларни хавфсиз бузиш қоидаларини яхши биладиган ва корхона квалификация комиссиясининг махсус гувоҳномасини олган ишчилар (операторлар) қўйилади.

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ПЕРСПЕКТЫ СОЗДАНИЕ ТУТОВЫХ ПЛАНТАЦИИ В РЕГИОНАХ С НЕБЛАГОПРИЯТНЫМИ МЕЛИОРАТИВНЫМИ СОСТОЯНИЯМИ ПОЧВ, КАК КОРМОВОЙ БАЗЫ ШЕЛКОВОЙ ОТРАСЛИ

Мухамадрасулов Шамсиддин Хасанович, д.ф.т.н., доцент.

Ферганский государственный технический университет

Аннотация: В статье приведены результаты проведенных в УзНИИНВ научно-исследовательских работ по изучению питательных и качественных свойств тутовых листьев, выращенных в плантации, созданных в регионах с неблагоприятными мелиоративными состояниями.

Annotation. The article presents the results of research work carried out at UzNIINV to study the nutritional and quality properties of mulberry leaves grown in plantations created in regions with non-favorable reclamation conditions.

Аннотация: Мақолада мелиоратив шароити ноқулой тупроқли минтақаларда яратилган тутзорлардаги тут баргларининг тўйимлилиги ва сифат кўрсаткичларини аниқлаш учун ЎзТТИИда ўтказилган илмий татқиқотларнинг натижалари келтирилган

Не кому не секрет, что тутовые листья являются незаменимым кормом для черв тутовых шелкопрядов. По этому, все времена питательные качества, пути их улучшение является объектом исследований многих ученых мира. В этой направление учеными Узбекского научно-исследовательского института натуральных волокон были проведены ряд научно-исследовательские работы по изучению качественных и питательных свойств листьев тутовых саженцев, выращенных в регионах (Ташлакский и Язьяванский районы Ферганской области и Бозский район Андижанской области) с неблагоприятными мелиоративными состояниями почв. При проведении исследовательских работ изучались агрохимические показатели почв по генетико-географическим, профильно-геохимическим, стационарно-ключевым и химико-аналитическими методами исследования. Почвам Язьяванского района характерны свойства, присущие пустынным зонам – засоление, низкое содержание гумуса и питательных элементов, наличие шоховых и гипсово-

арзыковых горизонтов. В этом районе 29,26 % орошаемых земель по механическому составу супесчаные, 26,97 % - песчаные, 23,89 % - средне и 5,44 % - тяжело суглинистые, 14,26 %- легко суглинистые, а глинистые составляют всего 0,18 % [1]. В ходе исследований были изучены питательные свойства листьев, т.е. содержание в тутовых листьях белков, углеводов, клетчатки и содержание влаги. Результаты исследований приведены в табл. 1.

Таблица 1

Содержание в листьях тутовых саженцев питательных веществ

№ п/п	Наименование показателей	Контроль. вариант	Предлож · вариант	Контрол ь. вариант	Предло ж. вариант
1	Белковые вещества, %	9,8	14,3	13,0	16,2
2	Показатель выпитываем. белков	0,158	0,281	0,219	0,331
3	Аминокислоты, %	4,78	5,09	3,24	5,22
4	Высокомолекулярные полисахариды, г/%	0,38/3,8	0,64/6,4	0,32/3,2	0,70/7,0
5	Выход клетчатки, %	33,6	29,4	31,8	36,6

Анализ данных, приведенных в табл. 1 показывает, что качественные показатели листьев созданных плантации лучше, чем контрольный, т.е. листьев существующих плантации. Количество белкового вещества в предложенном варианте больше на 4,5 – 3,2 %, аминокислоты на 0,31- 1,98 %, полисахариды на 2,6 – 3,8 % по сравнению с контрольным . А это позволит экономит листьев, уменьшит отходов при выкормке. При изучение содержание в листьях влаги определялись динамика изменение влаги в листьях, подготовленных к выкормки червей в зависимости от времени хранения. В табл. 2 приведены данные о изменение влаги в тутовых листьях в зависимости от времени хранения.



Таблица 2

Изменения количества влаги в листьях в зависимости от времени хранения

Время хранения, час	Существующие плантации		Новые плантации	
	Коэффициент сохранение влаги, %	Общая влажность листьев, %	Коэффициент сохранение влаги, %	Общая влажность листьев, %
Одноголовые саженцы/двухголовые саженцы				
0	100,00/100,00	71,2/71,5	100,00/100,00	76,7/77,8
1	92,64/92,97	66,00/66,5	96,59/97,25	74,1/75,7
2	88,55/89,83	63,0/64,2	93,98/95,09	72,1/74,0
3	84,70/86,31	60,3/61,7	91,85/93,33	70,4/72,6
4	81,19/83,56	57,8/59,7	89,64/91,32	68,8/71,0
5	77,62/79,52	55,3/56,9	87,73/89,42	67,3/69,6
6	75,26/77,26	53,6/55,2	86,16/88,11	66,1/68,5
7	72,46/74,11	51,6/53,0	84,10/86,01	64,5/66,9
8	69,93/71,75	49,8/51,3	82,56/84,81	63,3/66,0

Анализ данных табл. 2 показывает, с прохождением времени тутовые листья теряет влажность. Если в начале хранения влажность листьев контрольного варианта составляла 71,2-71,5 % то через 8 часов хранения она составила 49,8-51,3 %. Это же показатели в предложенном варианте составляло 76,7-77,8 % и 63,3-66,0 % соответственно. Потеря листьями влаги за 8 часов составила по контрольному варианту 21,4-20,2 %, а по предлагаемому варианту составила 13,4-11,8 %. Как видно из выше изложенных потеря влаги листьями тутовых саженцев новых плантации значительно ниже, чем листьев контрольного варианта. Этот же



обстоятельства в конечном итоге и влияет на качественные показатели выращенных коконов.

Создаваемые тутовые плантации в регионах с неблагоприятными мелиоративными состояниями почв оказывают позитивное влияние на почву, т.е. улучшается плодородность почвы, уменьшается засоленность, увеличивается полезные минералы и гумус в почвах. Также значительно улучшается экология региона. В научных исследованиях, проведенных учеными Института почвоведения и агрохимии на эродированных почвах предгорных районов выявлено, что в зависимости от механического состава происходит увеличение или уменьшение количества гумусовых веществ в почвах. Например, на эродированных почвах региона в исследованных почвах количество гумуса составляет 1,62-1,92 %, а неэродированных почвах этот показатель составляет 3,00-3,38%. Также выявлена закономерность накопления гумусовых веществ в зависимости от механического состава почвы и влияние их на ее плодородие. Показано, что в исследованных почвах преимущество имеют фракции песка (0,1-0,05 мм) и крупной пыли (0,01-0,05 мм), количество которых колеблется в пределах 45-60 % [2, 3]. Проведенные исследования показывают, что тутовые плантации служат не только для расширения кормовой базы шелковой отрасли, но и успешно могут служить для улучшения экологии регионов и могут быть надежным заслоном в пути ветровой и водной эрозии почв, которые являются глобальной проблемой во всем мире.

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ТЕХНОЛОГИЯ ПРЯДЕНИЯ ИЗ ЧИСТОЙ ШЕРСТИ

Тоштемирова Косима Абдулхаевича, Ферганский государственный
технический университет
toshtemitov@gmail.com

Аннотация.

В производстве готовой продукции из шерстяных волокон в основном используется овечья шерсть. Изделия из шерстяного волокна отличаются естественностью, красотой, прочностью, мягкостью и хорошей теплоизоляцией.

В данной статье представлена информация о структуре шерстяного волокна и его свойствах, а также о технологии первичной обработки шерстяных волокон.

Abstract.

In the production of finished products from wool fibers, mainly sheep wool is used. Wool fiber products are distinguished by their naturalness, beauty, durability, softness, and good thermal insulation.

This article provides information on the structure of wool fiber and its properties, as well as the technology of primary processing of wool fibers.

ИНТЕЛЛЕКТУАЛЬНЫЕ СИСТЕМЫ УПРАВЛЕНИЯ ТЕХНОЛОГИЧЕСКИМИ ПРОЦЕССАМИ И МЕТРОЛОГИЧЕСКОЕ ОБЕСПЕЧЕНИЕ

Ключевые слова: шерсть, шерстяное волокно, кожа, отделение шерсти от кожи, показатель качества, обработка шерсти, руно. На мировом рынке шерстяное волокно, являющееся одним из натуральных волокон, является одним из основных видов сырья текстильной промышленности. В Узбекистане в больших количествах выращиваются хлопковое, шелковое, химическое и шерстяное волокна. Из них наиболее научно изучена обработка хлопковых, химических и шелковых волокон. Поэтому промышленность этого сырья широко развивается. В связи с этим шерстяные волокна немного изучены, некоторые их свойства и производство из них готовых изделий

широко не внедрены. В производстве готовой продукции из шерстяных волокон в основном используется овечья шерсть. Изделия из шерстяного волокна отличаются натуральностью, красотой, прочностью, мягкостью и хорошей теплозащитой. Волокнистый слой, расположенный на коже домашних и диких животных, представляет собой шерсть и обладает уникальными свойствами.

Под луковицей расположен сосочек, под которым находится слой клеток, формирующих шерсть. Шерсть растёт благодаря делению клеток на луковице. Стержень состоит из мёртвых ячеек. Перед корнем и луковицей находятся сальные железы, а ниже - потовые железы. Жир, выделяемый сальными железами, выходит через выводные протоки и окружает волокно. Он защищает шерсть от механических повреждений и атмосферных воздействий. Пот, выделяемый потовыми железами, соединяется с жиром, образуя сливочное масло. Их количество зависит от породы животных. Например, в то время как тонкая шерсть содержит 11% жира и 7% пота, грубая шерсть содержит 4% жира и 8% пота. Слой шерсти в поперечном сечении состоит из трех слоев: наружного, внутреннего и сердцевины. Для стирки шерсти используются вода, мыло, щелочные средства (кальцинированная сода, сульфанол и другие порошки). Необходимо обращать внимание на температуру моющей жидкости и степень загрязнения шерсти. Конструкция и работа моющих котлов

Жесткость воды также играет важную роль во время промывки. Основная цель стирки шерсти состоит в отделении масла и потовой массы от внешних прилипших отходов. Суть процесса стирки заключается в том, что эмульсия моющего средства проникает между волокном и загрязненным слоем, ослабляя связь между ними и тем самым ускоряя процесс размочки и отделения белья от шерстяного волокна. Жесткость воды измеряется в мг. экв/л. По показателю жесткости вода бывает очень мягкой - 1,5 мг. экв/л, мягкой - 1,5-3 мг. экв/л, умеренно мягкой - 3-6 мг. экв/л, жесткой - 6-10,0 мг. экв/л, очень жесткой - более 10,0.

ИНТЕЛЛЕКТУАЛЬНЫЕ СИСТЕМЫ УПРАВЛЕНИЯ
ТЕХНОЛОГИЧЕСКИМИ ПРОЦЕССАМИ И МЕТРОЛОГИЧЕСКОЕ
ОБЕСПЕЧЕНИЕ

Соль отделяется от воды, и для ее получения используется специальное устройство. Если устройства нет, воду отстаивают в течение 2-3 часов. Во время стирки шерсть сжимается под определенным давлением. В результате сжатия частицы соды и загрязнения в шерсти также отделяются. Порядок мойки шерсти в основном определяется количеством котлов в агрегате, количеством мыла, соды и других моющих средств в каждом котле, направлением жидкости, температурой жидкости, силой давления валиков и временем очистки котлов. Количество мыла и соды в жидкости в котле зависит от количества шерсти, жира и пота. Чем больше жира и пота содержится в шерсти, тем больше потребляется мыла и соды.

Количество химикатов в жидкости промывочного котла

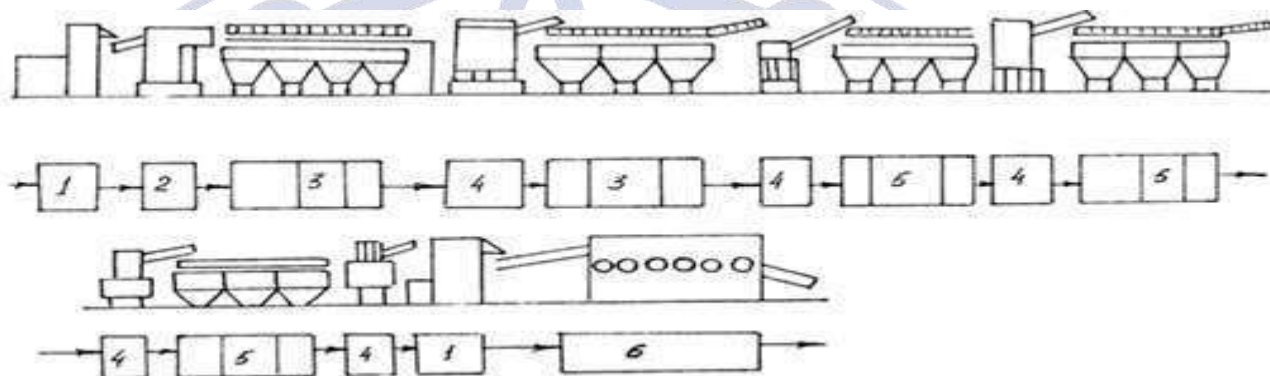
Котел	Мериносовидн для ый шерсти		Номерин для ос шерсть видов	
Первый	Сода	Мыл о	Сода	Мыл о
Второй	1,5-2	-	1,2-5	-
Третий	4,5-5	1	4	0,5
Четверт ый	4,0-4,5	1,2	3,5	0,8
Пятый	1	1-2-14	1	1,1
Котел				

В моечном агрегате жидкость направлена против направления движения шерсти. Шерсть одна за другой движется из первого котла в пятый, а жидкость против нее. Температура жидкости также должна быть как можно более равномерной в каждом котле. Ниже приведены значения температуры жидкости. Котел Температура, 0С Первый Второй Третий Четвертый Пятый
38 - 40 46 - 48 48 - 50 48 - 50 38 - 40 Величина силы давления между прижимными валиками от 7*104 до 15*104



Температура котла, 0С Температура котла, 0С	Температура котла, 0С Температура котла, 0С
Первый	38 - 40
Второй	46 - 48
Третий	48 - 50 4
Четвертый	8 - 50 3
Пятый	8 - 40

Величина силы давления между прижимными валиками должна быть от $7 \cdot 10^4$ до $15 \cdot 10^4$.



ИНТЕЛЛЕКТУАЛЬНЫЕ СИСТЕМЫ УПРАВЛЕНИЯ ТЕХНОЛОГИЧЕСКИМИ ПРОЦЕССАМИ И МЕТРОЛОГИЧЕСКОЕ ОБЕСПЕЧЕНИЕ

Общий вид моечного агрегата. 1. Автоматический питатель, 2. Чесальная машина, 3. Большой котел, 4. Зажимные валики, 5. Маленький котёл, 6. Барабан для сушки шерсти. Поскольку шерстяное волокно капиллярно-пористое, оно содержит адсорбционную и капиллярную влагу. В зависимости от состояния влажности в материале, свободная влага, гигроскопическая влага, избыточная влага и сбалансированная влага отделяются от состава материала. В нашей стране накоплен большой опыт первичной обработки натуральных волокон. В частности, в производстве натуральных волокон, а также в сферах заготовки, хранения и переработки применяются передовой зарубежный опыт и современная техника и технологии.



Закключение:

В производстве готовой продукции из шерстяных волокон в основном используется овечья шерсть. В целях сохранения натуральности изделий из шерстяного волокна предусматривается очистка их от различных примесей, жировых кормовых остатков и других примесей, подготовка чистого волокна к процессу промывки с сохранением красоты, прочности, мягкости и физико-механических свойств.

В данной статье представлена информация о структуре шерстяного волокна и его свойствах, а также о технологии мойки шерстяных волокон.

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MAQOL VA MATALARNING STRUKTURAVIY-SEMANTIK XUSUSIYATLARI

Maxsudova Fayzilat Shaxabovna

Mirzo Ulug‘bek nomidagi O‘zbekiston Milliy Universiteti

maqsudovafayzilat@gmail.com

Annotatsiya

Insonlar o‘rtasidagi hamkorlik va ijtimoiy faoliyatni ifodalovchi maqol va matallar o‘rganilayotgan ushbu maqola, asosan, odamlararo munosabatlarni aks ettiruvchi maqollar va matallarni tahlil qilishga bag‘ishlangan. So‘nggi yillarda frazeologiya sohasida olib borilayotgan tadqiqotlar alohida qiziqish uyg‘otmoqda. Ayniqsa, frazeologik birliklarda, xususan, maqollarda xalqning hayot tarzi, yashash sharoiti, tarixi va madaniyati o‘ziga xos tarzda namoyon bo‘ladi. Frazeologik boylikni bilish va faol ravishda qo‘llay olish nafaqat nutqni bezaydi, balki o‘rganilayotgan til xalqining mentalitetini yanada chuqurroq anglashga yordam beradi. Mazkur maqolaning dolzarbligi shundaki, hozirgi paytda xorijiy tillarni bilish zaruratining ortib borishi bilan turli xalqlarning madaniyati, ularning til birliklari, xususan, maqol va matallarining mazmuni va tuzilishini chuqur tadqiq etish dolzarb masalaga aylangan.

Kalit so‘zlar: maqollar, matallar, tadqiqotlar, frazeologiya, frazeologik birliklarning tuzilishi va ma’nosi, xalq tarixi va madaniyati.

Annotation

This article is devoted to the analysis of proverbs and sayings that reflect interpersonal relations, expressing cooperation and social activity among people. In recent years, research in the field of phraseology has attracted particular attention. Especially in phraseological units, and in proverbs in particular, the lifestyle, living conditions, history, and culture of a people are vividly manifested. Knowing and actively using phraseological richness not only beautifies speech but also helps to better understand the mentality of the people whose language is being studied. The relevance of this article lies in the fact that, in today's world, as the need for learning foreign languages increases, it becomes increasingly important to thoroughly study



the culture of different nations, including the meaning and structure of their proverbs and sayings.

Keywords: proverbs, sayings, research, phraseology, structure and meaning of phraseological units, national history and culture.

Аннотация

Данная статья посвящена анализу пословиц и поговорок, отражающих межличностные отношения, выражающих сотрудничество и социальную активность между людьми. В последние годы исследования в области фразеологии вызывают особый интерес. Особенно в фразеологических единицах, в частности в пословицах, ярко проявляются образ жизни, условия быта, история и культура народа. Знание и активное использование фразеологического богатства не только украшает речь, но и способствует более глубокому пониманию менталитета народа, язык которого изучается. Актуальность статьи заключается в том, что в современное время, на фоне возрастающей необходимости изучения иностранных языков, всё более важным становится глубокое изучение культур разных народов, в том числе значения и структуры их пословиц и поговорок.

Ключевые слова: пословицы, поговорки, исследования, фразеология, структура и значение фразеологических единиц, история и культура народа.

Kirish

Maqol va matallar tildagi xalq donishmandligi hamda madaniy merosni aks ettiruvchi muhim unsurlardan hisoblanadi. Ularning tuzilishi va ma'no jihatidan tashkil etilishi ularni ifodali va yodda saqlashga oson bo'lgan vositalarga aylantiradi. Ushbu maqolada ushbu til birliklarining asosiy strukturaviy va semantik xususiyatlari ko'rib chiqiladi.

Maqol va matallar xalq og'zaki ijodining muhim qismlaridan biri bo'lib, xalq donishmandligi, dunyoqarashi, qadriyatlari va an'alarini o'zida aks ettiradi. Ular o'ziga xos strukturaviy va semantik xususiyatlarga ega bo'lib, bu ularni yanada ifodali va esda qolarli qiladi.

O.G. Dubrovskaya fikriga ko'ra, rus tilida, odatda, bog'lovchisiz gap tuzilmasiga ega maqollar ustunlik qiladi. Agar bog'lovchisiz gaplar oddiy bir yoki

ikki bo‘lakli gaplar majmui sifatida qaralsa, bunday maqollarning soni yanada ortadi [1, 259].

Demak, “maqol” va “matal” tushunchalarini aniqlash borasida yagona yondashuv yo‘q. Har bir muallif ularni o‘z uslubida izohlaydi, biroq ko‘pchilik lingvistlar ularni ma‘naviy-tarbiyaviy xarakterga ega bo‘lgan, muayyan xalqning til manzarasini aks ettiruvchi barqaror iboralar sifatida talqin qiladi.

Maqolalarning mazmuni va tuzilishi

Tadqiqotchi N.F. Alefirenko ta‘kidlashicha, mazmuni va funksiyasi jihatidan maqollar lirik poeziyaga yaqin turadi. Ularning vazifasi — xalqning turli hayotiy hodisalarga bo‘lgan munosabatini qisqa, aforistik shaklda ifoda etishdir [2, 320].

O.V. Magirovskaya maqollar mazmuni o‘ziga xos ekanligini ta‘kidlaydi. Ular birgalikda boshqa xalq og‘zaki ijodi janrlariga qaraganda hayotni to‘liqroq aks ettiradi. Masalan, ertak, doston, tarixiy qo‘shiqlar kabi janrlar ma‘lum mavzular bilan chegaralangan bo‘lsa, maqollarning mavzu doirasi deyarli cheklanmagan. Ular voqelikning barcha jabhalariga munosabat bildiradi, xalq hayoti va dunyoqarashini har tomonlama aks ettiradi, turmush, ijtimoiy, falsafiy, diniy, axloqiy-estetik qarashlarni ifodalaydi [3, 148].

V.I. Dal’ esa maqollarning chuqur tuzilmalari, ularning avtosemantik va aniq ma‘noli bo‘lishini tahlil qilar ekan, ularning mazmunida madaniy konseptlar va qadriyat o‘lchovlari mujassam ekanini qayd etadi. Bu esa maqollarning qaysi vaziyatda qo‘llanishi mumkinligini belgilab beradi.

Maqollar turli ijtimoiy qatlamlar o‘rtasida keng tarqalganligi sababli, ularni sotsiolingvistik jihatdan ham ko‘rib chiqish, ya‘ni ijtimoiy va hatto shaxsiy belgilari asosida tahlil qilish mumkin. Muallifning fikricha, maqollar o‘z mohiyatida ko‘p jihatli bo‘lib, ular nutqdagi harakatchanligi, matnda semantik mazmunining yangilanishi, ularning shakliy jihatidan o‘zgarishi orqali to‘liq ochiladi.

1. Strukturaviy xususiyatlari

Maqollar va matallar barqaror shaklga ega bo‘lib, bu ularning asrlar davomida tilda saqlanib qolishiga imkon beradi. Ularning tuzilishi ixcham va barqarordir. Quyidagi strukturaviy unsurlar maqollar tarkibida ko‘p uchraydi:

a) Qofiya va ritm

Qofiyalangan iboralar ularni yanada ifodali va esda qolarli qiladi. Ko‘plab maqollar aniqlangan ritm va qofiyaga ega:

- “Nima eksang, shuni o‘rasan.”



- “Mehnat bo‘lmasa – rizq yo‘q.”
- “Mehnatsiz hovuzdan baliq tutib bo‘lmaydi.”
- “Yettita kishi – birini kutmaydi.”

b) Simmetrik va parallel tuzilma

Subyekt tomonidan bajarilayotgan harakat bir vaqtning o‘zida o‘tgan zamonga ham, hozirgi zamonga ham, kelajak zamonga ham tegishli bo‘lishi mumkin. Umumlashgan-shaxsli subyekt harakati kuzatilmaydi, u haqidagi xabar sezgi emas, balki insoniy tajriba va bilim doirasiga taalluqlidir [4, 259].

Ellipsis va ixchamlik

Maqol va matallar ko‘pincha ortiqcha so‘zlarni chiqarib tashlagan holda, ammo ma‘noni saqlab qolgan ixcham shaklda bo‘ladi. Ular ko‘pincha metaforalar va taqqoslashlarga asoslanadi:

- Hamisha mushukka Maslenitsa emas.
- O‘rmon kesilsa — shardalar uchadi.
- Qaeri yupqa bo‘lsa, o‘sha yerda yirtiladi.
- Ikki etik — bir juft.

Semantik xususiyatlar

Maqol va matallarning ma‘no jihati xalq qarashlari, umumlashtirilgan hayotiy tajriba va axloqiy mezonlarni aks ettiradi.

Murakkab bog‘lovli gaplar orasida “a” bog‘lovchisi yordamida ifodalangan qarama-qarshilik bildiruvchi gaplar ajralib turadi, bu esa gap bo‘laklari orasidagi qarama-qarshilikni kuchaytiradi. Sintaktik vosita sifatida ishlatilgan bu qarama-qarshilik leksik jihatdan ham mustahkamlanadi: qarama-qarshi mazmunli gaplar odatda antonimlarga asoslanadi [5, 285].

Xalq maqollari – hikmat manbai

V. Jukovning fikricha, ko‘plab masalnavis ifodalari xalq maqollariga aylangan. Ular ko‘pincha bahsni yakunlash, o‘z fikrini asoslash uchun nazariy dalillardan ko‘ra kuchliroq ta‘sir ko‘rsatadi [6, 160].

A.A. Sireyshchikova maqollarni o‘rganib, shunday xulosaga keladiki, ular osongina yodda qoladi. Bunda qofiya, ohang, ritm katta rol o‘ynaydi. Maqollarni yaratgan xalq savodsiz bo‘lgan, ammo o‘z hayotiy tajribasini saqlashning boshqa yo‘li bo‘lmagan. Ammo muallif ta‘kidlaydiki, maqolni uning nutqiy kontekstidan ajratgan holda tushunib bo‘lmaydi. Hech kim maqolni sababsiz eslamaydi. Ular har doim gap orasida, joyiga qarab esga tushadi.



Demak, maqollar va matallar kelib chiqishi juda qadimiydir. Ularning vujudga kelishi uchun til taraqqiyotining ma'lum bosqichi, ya'ni insonning til bilan erkin muomala qilish qobiliyati zarur edi. Aksariyat tilshunoslar fikricha, maqol va matallar og'zaki xalq ijodidan kelib chiqqan yoki adabiy manbalardan olingan, lekin keyinchalik u bilan bog'liqligini yo'qotgan holda xalq tajribasini umumlashtirgan.

“Maqol” va “matal” tushunchalarining ta'rifi

Maqol – bu qisqa masal, hukm, nasihat, xalq orasida tan olingan va muomalada ishlatiladigan hikmatli so'zdir [7, 130].

V.P. Jukovning “Rus maqol va matallar lug'ati”da “maqol” – bu grammatik jihatdan to'liq gap bo'lgan, ayni vaqtda bevosita va ko'chma ma'noni yoki faqat ko'chma ma'noni o'z ichiga oluvchi xalq iborasi deb izohlanadi. “Matal” esa – faqat bevosita ma'noga ega bo'lgan, grammatik jihatdan to'liq gap hisoblanadi [8, 160].

a) Didaktik xarakter

Ko'plab maqollar o'rgatadi, yo'l ko'rsatadi:

- Mehnatsiz ko'lga baliq ham tushmaydi. (mehnatning ahamiyati)
- Do'stlik o'z yo'lga, xizmat o'z yo'lga. (do'stlik va xizmat chegaralari)
- Til Kievgacha yetaklaydi. (bilim va so'zlashuv maqsadga yetkazadi)
- Hamisha mushukka Maslenitsa emas. (hayotda quvonch ham, qiyinchilik ham bor)

b) Xalq an'analari va turmush tarzining aks etishi

Qarama-qarshi tushunchalardan foydalanish ma'noni kuchaytiradi. Maqollar tarix, xo'jalik faoliyati va tabiat bilan bog'liq:

- Bahor-yoz — bir kunda sakkiz xil ob-havo.
- Yetti kishi birini kutmaydi.
- So'z – kumush, sukut – oltin.
- Arava yozda, chana esa qishda tayyorlanadi.

v) Baholovchanlik va axloq

Maqollar hayotda qo'llaniladigan umumiy haqiqatlarni ifodalaydi. Ular voqea-hodisalar va xatti-harakatlarga xalq bahosini bildiradi:

- Non – butun boshli hayotning asosi.
- Boshqaning noniga ko'z olaytirma. (hasad haqida)
- Mehnatsiz baliq ushlolmaysan. (muvaffaqiyat uchun mehnat zarur)
- Qimmatli kichik narsa ham foydali bo'ladi.

Xulosa

Maqollar va matallar – bu nafaqat tildagi yorqin ifodalar, balki avloddan-avlodga o‘tadigan xalq donishmandligining muhim manbaidir. Ularning tuzilma-semantik xususiyatlari ularni ifodali, esda qolarli va asrlar davomida dolzarb qiladi. Rus maqollari gaplarning sintaktik tuzilmasining butun xilma-xilligini – sodda ikki bo‘lakli gaplardan tortib murakkab tuzilmali gaplarga – namoyon qiladi.

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ILMIY PARADIGMADA “BAXT” KONSEPTI

Valieva Noiba Abbasxonovna

Toshkent davlat sharqshunoslik

universiteti o‘qituvchisi,

naying1564@mail.ru

<https://orcid.org/0009-0003-0666-5353>

Annotatsiya. Baxt bilan bog‘liq savollar insoniyatni azaldan qiziqtirib kelgan. Qadimgi yunon mutafakkirlari baxt nima ekanligini, uni qanday his qilish mumkin, qanday insonlar baxtli insonlar kabi savollarga javob izlashgan. “Baxt” konseptining semantik chegaralari juda keng bo‘lib, bir qator falsafiy, diniy, axloqiy, psixologik, ijtimoiy-iqtisodiy va boshqa jihatlarni tizimli ko‘rib chiqishni o‘z ichiga oladi. Shu sababli ham ushbu konseptni ko‘rib chiqish qaysi yo‘nalishda bo‘lishiga qarab, uning semantik tarkibi sezilarli darajada o‘zgarishi mumkin. Maqolada mazkur yo‘nalishlar tahlil qilingan.

Kalit so‘zlar. Baxt, felisitologiya, subyektiv va obyektiv baxt, evdemonizm, metafizik konsept, mikrokosmos va makrokosmos

Аннотация. Связанные с счастьем вопросы давно интересуют человечество. Древнегреческие философы искали ответы на вопросы, что такое счастье, как его можно почувствовать, какие люди считаются счастливыми и так далее. Концепция «счастья» имеет очень широкие семантические рамки и включает в себя системный анализ ряда философских, религиозных, моральных, психологических, социально-экономических и других аспектов. Поэтому, в зависимости от направления исследования, семантический состав этого концепта может значительно изменяться. В статье рассматриваются данные направления.

Ключевые слова. Счастье, фелицитология, субъективное и объективное счастье, эвдемонизм, метафизическая концепция, микрокосмос и макрокосмос.



Annotation. The questions related to happiness have long intrigued humanity. Ancient Greek philosophers sought answers to questions such as what happiness is, how it can be experienced, and what kind of people are considered happy, among others. The concept of "happiness" has very broad semantic boundaries and involves a systematic analysis of a number of philosophical, religious, moral, psychological, socio-economic, and other aspects. Therefore, depending on the direction of the study, the semantic composition of this concept can vary significantly. This article examines these directions.

Keywords. Happiness, felicitology, subjective and objective happiness, eudaimonism, metaphysical concept, microcosm and macrocosm.

KIRISH.

Aynan “baxt” qadim zamonlardan beri deyarli barcha faylasuf olimlarni qiziqitirib kelayotgan tushuncha, ruhiy holatdir. U haqida qadim zamonlardan beri Epikur, Aristotel, Seneka, Konfutsiy yozib o’tishgan bo’lsa, keyingi davrlarda Avgustin Blajenniy, Foma Akvinskiy, Gelvetsiy, I.Kant, L.Feyerbax, J.Bentam, J.S.Mill va b. qiziqqan. Biroq, uni chuqurroq va keng qamrovda o’rganish, felisitologiyani paydo bo’lishi o’tgan asrdan boshlangan.

Baxt metafizik tushuncha bo’lib, falsafa bilan bog’liq. Shu sabab “Etika lug’ati”da berilgan ta’rifga nazar solamiz: “Baxt axloqiy ong tushunchasi sifatida insonning shunday holatini anglatadiki, u o’z sharoitlaridan kelib chiqib insoniy maqsadlarni amalga oshirish, hayotning to’liqligi va mazmunlilikidan eng katta ichki qoniqishga ega bo’lish.¹”. Bugungi iqtisodiy globallashuvga madaniy globallashuv hamrohlik qilmoqda, bu esa turli mamlakatlar madaniyatining bir-biriga kirib kelishining muqarrar tendentsiyasini yaratadi. 1998 yilda YuNESKOning “Jahon madaniyati to’g’risida”gi 1998-yildagi hisoboti shuni ko’rsatdiki, iqtisodiy globallashuv madaniyat rivojiga ulkan va keng ko’lamli ta’sir ko’rsatdi, har xil millatlar madaniyatini o’rganish yetakchi sohaga aylanmoqda. Baxt haqidagi tadqiqotlar 60-yillardan boshlab AQShda keng tus oldi. Amerika va Yevropadagi jamoatchilik fikrini o’rganuvchi tashkilotlari odamlarning baxtiyorligi va qoniqishlari bo’yicha so’rovlar o’tkazdilar, ularning natijalari M.Argyle, X. Cantril, N. Bredbern, A. Kempbell, P. Convers, V. Rogers va boshqalarning “Social

¹ Словарь по этике./ Под ред. Гусейнова А.А. и Кона И.С. – М., Издательство политической литературы, 1989, 343с.



Indicators Research” (Ijtimoiy ko‘rsatkichlar tadqiqoti), “Personality and Individual Differences” (Shaxs va individual farqlar) va “The Journal of Personality and Social Psychology” (Baxtning psixologik va ijtimoiy psixologik) jurnallarida “baxt”ni o‘rganishga bag‘ishlangan maqolalar muntazam chop etiladi².

Hozirgi kunda hech kimga sir emaski, butun dunyo bo‘ylab Xitoy tili, madaniyati, urf-odati va xatto oshxonasini o‘rganish ham urfga kirgan. Turli madaniy elementlar ko‘p jihatdan Xitoy madaniyatining xilma-xilligini ko‘rsatadi. Qadimdan Xitoy o‘ziga ohangraboddek sayyohlarni jalb qilgan, tili, yozuvi, urf-odatlari va madaniyatini qiziqish uyg‘otgan. Aynan tili va iyerogliflari o‘zgacha bo‘lgani sabab, hozirgi davrda ham xitoyliklar, ham chet ellik tilshunoslar tomonida ilmiy izlanishlar olib borilmoqda. Xitoyda “baxt” (五福) tadqiqotining rivojlanishi 1980 -yillarda boshlangan bo‘lib, chet elda 20 yildan ko‘proq vaqtdan so‘ng tadqiq etilgan va tez rivojlanib, ko‘plab natijalarga erishilgan. Dastlabki, “baxt” so‘zi bilan statistikaga ko‘ra, shu paytgacha (幸福 haqida) 11900 ta ilmiy maqola borligi aniqlangan³.

ASOSIY QISM. Baxt hodisasini o‘rganishda katta hissa qo‘shgan va bir necha monografik tadqiqotlar muallifi V. V. Tatarkevich ta’kidlaganidek, “ikki ming yil ichida baxt haqida yaratilgan ishlar ko‘p, shunga qaramay, dunyoda baxtni o‘rganish muammosini to‘liq qamrab oladigan kitob hali yaratilmagan. Uning barcha tomonlarini jamlab, yechimi keltirilgan, keng qamrovli ishni uchratmadim. Odamlar uchun unchalik muhim bo‘lmagan masalalar bo‘yicha juda ko‘p kitoblar mavjudligini hisobga olsak, bu deyarli aql bovar qilmaydigan hodisa⁴”. Mazkur ta’rif baxt konsepti haqidagi izlanishlar hali ham davom etayotgani va yagona bir fikrga kelmaganini ko‘rsatadi. Baxtni tadqiq qilishning qiyinligi shundaki, mavzuning o‘ziga xosligini aniqlash juda qiyin, sababi “baxt” so‘zi turli ma’nolarda qo‘llaniladi. V.Tatarkevichning ta’kidlashicha, so‘zlashuv nutqida “baxt” so‘zining ikkita asosiy ma’nosini ajratib ko‘rsatish mumkin: 1) obyektiv, 2) subyektivdir. Birinchi ma’noda “baxt” ma’lum bir inson bilan sodir bo‘lgan quvonchli voqealarni ifodalasa, ikkinchi ma’noda sub’yektiv ya’ni har bir inson o‘zi his qilgan kuchli quvonch, baxt yoki zavqlanish holatini anglatadi. Birinchi holatdan to‘g‘ridan-to‘g‘ri inson atrofdagilarni his-tuyg‘usi haqida gapirsa, ikkinchi holatda inson

² <http://www.dslib.net/soc-filosofia/socialno-filosofskij-analiz-fenomena-schastja.html>

³ 近年来关于幸福研究的文献综述 李立 中南民族大学 民族学与社会学学院 武汉-2013.

⁴ Татаркевич В. О счастье и совершенстве человека. М., 1981, с-53.

shaxsan o‘zi nimani boshdan kechirganligi haqida gapiradi, ko‘pchilik subyektiv baxtni obyektiv bilan bog‘laydi. Natijada, barchada yadrosi bitta, biroq komponentlar turlicha baxt haqidagi tushuncha yuzaga keladi.

“Baxt” konseptini o‘rganish bugunga qadar ko‘plab olimlar tomonidan qiziqish uyg‘atgan bo‘lib, lingvokognitiv va lingvomadaniy yondashuvdagi ishlarni ko‘rib chiqsak, jumladan, S.G.Vorkachyov “Концепт счастья в русском языковом сознании: опыт лингвокультурологического анализа” nomli monografiyasida⁵ tadqiqotning o‘ziga xos vazifalari ya’ni rus ilmiy va lingvistik ongida inson o‘z hayotining muvaffaqiyati va mazmuniga munosabatini tartibga soluvchi ma’naviy mohiyat sifatida baxt tushunchasining lingvomadaniy xususiyatlari va semantik tuzilishini tahlil qilib o‘tgan. M.V.Klarin “На путях познания счастья” kabi maqola ishlarda⁶, Yu.S.Stepanov “Константы: Словарь русской культуры” nomli kitobda⁷ muallif asosan “quvonch” konseptiga to‘xtalib, uni etimologik tahlil qilgan.

Muvaffaqiyatli hayot yo‘li sifatida “baxt” konsepti qadim zamonlardan buyon jamoatchilik ongida mavjud bo‘lib, deyarli ko‘pgina konseptlarning ham tor ma’noda, ham keng ma’noda komponentlariga “mos”dir⁸ biroq, aynan “baxt” konsepti aniq ichki shaklga ega, baxt haqidagi qarashlar etnomadaniy tarzda belgilanadi va birinchi taxminda bir tsivilizatsiyadan boshqasiga farq qiladi⁹. Demak, “baxt” konsepti madaniyatning konstanti desak, mubolag’a bo‘lmaydi.

Insoniyat yaralibdiki, baxt nima va unga qanday erishish mumkinligi haqida aniq javob bermagan. Bu ko‘p jihatdan insoniyat ushbu murakkab va fanlararo savolga har tomonlama javob berish uchun yetarli ilmiy fundamental ma’lumotlarga ega emasligi bilan bog‘liq. XXI asrga kelib, insoniyat ilmiy bilimlarning ulkan to‘plami yig‘ildi, bu esa inqilobiy kashfiyotlarni amalga oshirishga imkon beradi va ilgari erishib bo‘lmaydigan bo‘lib tuyulgan narsalar endi haqiqatga aylandi. Shu tariqa, hozirda insoniyatga baxt nima va unga qanday erishish mumkinligi haqidagi savolini yechimiga har qachongidan ham yaqinlashishiga imkon beradi.

⁵ Воркачев С.Г. Концепт счастья в русском языковом сознании: опыт лингвокультурологического анализа - Краснодар КТУ, 2002.-142 с.

⁶ Кларин М.В. На путях познания счастья (вступительная статья) // Аргайл М. Психология счастья. М., 1990. С.5-26.

⁷ Степанов, Ю. С. Константы: Словарь русской культуры – М. : Академиче-ский проект, 2004. 992с

⁸ Воркачев С.Г. Концепт счастья в русском языковом сознании: опыт лингвокультурологического анализа - Краснодар КТУ, 2002.-142 с.

⁹ Кларин М.В. На путях познания счастья (вступительная статья) // Аргайл М. Психология счастья. М., 1990. С.5-26.

Insonning baxt haqidagi qarashlari orqali uning ruhiy holati haqida ham ma'lumot olish mumkin, “Sen baxt deganda nimani tushunishingni ayt, men senga kimligingni aytaman” (Yu.S.Stepanov) degan naql ham bekorga emas. “Baxt - bu biz qila oladigan eng yuqori zavq” deydi ingliz pedagogi va faylasufi Jon Lokk. Falsafa va psixologiya rivojlanish tarixida “baxt”ni tushunishga bo‘lgan harakatlar hozirgi kundagi felisitologiya yo‘nalishini (baxtning nazariy va amaliy muammolari o‘rganuvchi yo‘nalish) paydo bo‘lishiga olib keldi. Biroq, “madaniy va psixologik yo‘nalishlarda o‘z ahamiyatiga ega bo‘lishiga qaramay, “baxt” konsepti tilshunoslik sohasida to‘liq qamrovda o‘rganilmagan” deydi tilshunos S.G.Vorkachev.

Biroz yangi yo‘nalish bo‘lgan “felisitologiya”ga izoh berib o‘tsak, “felisitologiya” (lot. Felicitas - baxt) - baxtga erishish haqidagi ta’limot, XX asr o‘rtalarida neopozitivist O. Neyrat tomonidan ilgari surilgan. “Felisitologiya” baxt kategoriyasining axloqiy nazariyasi sifatida emas bal’ki, evdemonizm (*yunoncha eudamonia - baxt, ma’mnunlik*) an’anasini davom ettirgan holda psixologiyaning yangi yo‘nalishi sifatida vujudga kelgan. Insonning tabiiy ravishda intilayotgan psixologik holati sifatida ishlaydi (psixologik evdemonizm deb ataladi). Odamlarning baxtga intilishining ma’naviy ma’nosi, ya’ni “felisitologiya” inson intilishi kerak bo‘lgan maqsadlar to‘g‘risidagi ta’limot emas, balki faqat baxtga erishish yo‘llari, usullari to‘g‘risidagi savolga yechimdir. Otto Neyratning fikriga ko‘ra, “odamlar aniq nimaga intilishlari va qanday ijtimoiy natijalarga erishishlaridan qat’iy nazar, faqat baxt hissi muhimdir”¹⁰. Unda tashqari K. Neshev o‘zining “Этика счастья” nomli kitobida “felisitologiya bilan bog‘liq go‘yalar axloqiy nazariyaning asosidir, falsafiy jihatdan “baxt manifestlari” antik davrga borib taqaladi” kabi fikrni berib o‘tadi¹¹.

Yuqoridagi fikrlardan bilish mumkinki, ko‘pgina ilmiy tadqiqotlarda “baxt” konseptini tizimlashtirish, yaxlit bir ko‘rinishga yoki formulaga solish orqali ifodalash maqsad qilingan. “Baxt” bilan bog‘liq tadqiqotlarni ko‘pchilik tashkil etishidan ko‘rinib turibdi, “baxt”ni o‘rganish hozirgacha keng qamrovli bo‘lib, uning mazmuni subyektiv farovonlik, psixologik farovonlik, professional farovonlik, ijtimoiy farovonlik va shaxslararo farovonlikni o‘z ichiga oladi.

¹⁰ Словарь по этике: <http://moralphilosophy.ru/pg/feliciotologiya.htm>

¹¹ Нешев К. Этика счастья. М., 1982, с-43.

Jumladan Polsha faylasufi V. Tatarkevich o'zining “О счастье и совершенстве человека” nomli kitobida baxtga quyidagicha ta'rif bergan: “Shu bilan birga, “baxt” - bu juda gibril, “ximerik” tushunchadir, u “ichki” va “tashqi olamlarni” bog'laydigan, narsa-hodisalarga “tashqi holat” va “ruhiy holat” haqida signal yuboradi, mikrokosmos va makrokosmos, ruh va tanani birlashtiradigan, shu sabab u semantik noaniq, yaxlit kontseptual chegaralarga ega emas. “Baxt - bu qiyin tushuncha, ko'pchilik uchun bu noaniqlik va mavhumlikdir”¹².

“Baxt” konseptida etnosning ham dunyoviy va moddiy o'zaro uyg'unlikka erishish haqidagi, ham umuman inson hayotining mazmuni haqidagi mahalliy tasavvurlar aks ettiriladi” deya ta'riflaydi Li Sianxua¹³. Shu sabab ham metafizik konsept hisoblanib, uni tasavvur qilish, his qilish subyektivdir.

Yana bir tilshunos I.B. Rusokova o'zining Концепты «счастье» – «несчастье» в лингвокультурном содержании русских пословиц nomli ilmiy ishida “baxtga yaqin bo'lgan falsafiy tushunchalar “mehribon xudolar himoyasida bo'lgan inson taqdiri” ma'nosidagi evdomoniya hisoblanib, uning natijasida oliy ezgulikka erishishni bildirgan; lazzatlanish – ijobiy ichki kechinmalar; omad – ijobiy hayot sharoiti; huzur-halovat (baxt-saodat, rohat-farog'at)- oliy darajadagi lazzatlanish hisoblanadi. Baxt tavsifi uchun tabiiylik inson o'zi uchun muhim hisoblagan qadriyat ega bo'lish hisoblanadi. Baxtga intilish, ya'ni kerakli hatti-harakatni amalga oshirish, inson boshqaradigan axloqiy-etik mezonlar orqali belgilanadi” deydi. Demak, baxtning entimologik ichki shakli haqida yozib o'tadi, ya'ni qadimda insonlar “xudolar” yoki “osmon” homiyli va himoyasi ostida baxtga erishish mumkin kabi naqlga amal qilib, turli xil qurbonliklar keltirishgan. Albatta, baxt tasavvurlari inson dunyoqarashining o'ziga xos xususiyati ekan, unda uni tadqiq etishni antropotsentrik paradigmalar – falsafa, psixologiya, sotsiologiya doiralarida rivojlanayotgan ilmiy fanlar orqali amalga oshirish mumkin. Nafaqat baxt, balki boshqa metafizik konseptlar ham falsafiy yo'nalish bilan bog'liq va ularni tahlilida bevosita antroposentrik paradigmalariga murojaat qilinadi. Baxtga bo'lgan munosabat - bu insonning ma'naviy mohiyatini belgilovchi xususiyatlaridan biridir. U haqidagi g'oyalar, fikrlar dunyoqarashning eng qadimiy qatlamini tashkil

¹² Татаркевич В. О счастье и совершенстве человека. М., 1981, с-55.

¹³ Ли Цианьхуа. Концепт «счастье» в китайских пословицах и поговорках // Ли Цианьхуа, И. Б. Смирнов // Вестник Ленинградского государственного университета имени А.С. Пушкина. Серия Филология / гл. ред. В. Н. Скворцов. – СПб.: ЛГУ имени А.С. Пушкина, 2013. – № 3. – С. 175–185.

etadi. Baxt konsepti xuddi yaxshilik, qalb, o‘lim, ozodlik, muhabbat kabi tushunchalar bilan birga shaxsiy ongning aksiologik maydonining markaziy qismini qamrab oladi va aynan shu sababdan ham uni o‘rganish jarayonida ma’lum bir millatning mental xususiyatlari bilan tanishish mumkin. Demak, baxt konsepti bir millatning inikosi desak mubolag’a bo‘lmaydi.

Baxt konsepti paydo bo‘lishiga qarab ikki turga ichki va tashqiga bo‘linadi ya’ni inson ichki kechinmalarini ifodalovchi va tashqi ko‘rinishidan ko‘rsatuvchi. Falsafada esa baxt etikasi - eudemonizm va burch etikasi – deontologizmdir kabi turga bo‘linadi.

Falsafiy jihatdan qadimgi yunon faylasufi Aristotel baxtni ya’ni felisitar konseptni 3 guruhga bo‘lgan va quyidagicha ta’riflagan: “baxt-bu uchta manfaatning birgalikdagi hamjihatligi ya’ni 1) ma’naviy (ruhiy); 2) jismoniy, bunga sog‘lik, kuch, go‘zallik va shunga kabilar kiradi; 3) tashqi (dunyoviy), boylik, martaba, shon-shuhrat va boshqa shu kabilardir”. Mazkur fikrdan kelib chiqadiki, inson o‘zini baxtli his qilishi uchun nafaqat ruhiy yetuklikka erishishi kerak, bal’ki ham jismoniy, ham dunyoviy ehtiyojlarni qondirishi, ularni rivojlantirib borishini taqozo qiladi. Bu yerda ko‘proq V.Tartakevich tahlilidan kelib chiqsak obyektiv yondashuv birlamchi, biroq subyektiv jihatdan qaraganda “men”ga nisbatan baxtni his qilish uchun hayotdan mamnunlik, motiv, maqsadga, muvozanat, ichki hotirjamlik, mehr va boshqa kabi hissiy-emotsional to‘yingalik bo‘lishi kerak. Demak, asosan faylasuf olimlar yoki tilshunoslar tomonidan mazkur obyektiv va subyektiv baxtni bir tizimga solish uchun izlanishlar olib boriladi.

Ingliz faylasufi va pedagogi Jon Lokk baxtni ikki turga bo‘ladi, ya’ni ikki "bosqichi" mavjudligini ta’kidlaydi. Birinchi bosqich “yomonlikning yo‘qligi”ni va baxtsizlikka qarshi tura olishni o‘z ichiga oladi. “Baxt zavq borligida emas, balki azob-uqubatlarni yo‘qligidan iborat¹⁴” ya’ni passiv ko‘rinish desak ham bo‘ladi. Ikkinchi bosqich baxtsizlik va baxtga qarshi turish ya’ni insoniyatning qoniqish, quvonch va baxt hissini me’yordan oshib ketishi yoki kutilgan natijadan qoniqmaslik, baxtni tuymaslik.

Rus olimi L.N. Gumilyovni fikriga asosan birinchi bosqich subyektlari asosan ehtirosli, jasoratli insonlar kirs, ikkinchi bosqich esa “energiya tejovchi”, “sub-ehtirosli” insonlarni qamrab oladi. Mazkur yondashuvdan kelib chiqadiki, insonlar

¹⁴ Шопенгауэр А. Свобода воли и нравственность. М., 1992.

ikki xil ya'ni taqdirga tan berib, yo'lida davom etuvchi va “hammasi o'z qo'limda” shiori ostida harakat qiluvchilardir.

“Baxt” konseptini falsafiy tomondan farqli, lingvistikada tadqiqotni ma'lum bir usulga bog'lashdir¹⁵. Baxt haqidagi tasavvurlar madaniy o'ziga xosliklar bilan ranglanadi va kamida tsivilizatsiya turiga bog'liq¹⁶. Lingvistik nuqtai nazaridan S.G.Vorkochyovning fikricha baxt g'oyasi “semiotik to'yinganlik” ning yuqori darajasida bo'lib, u bir qator sinonimlar, paremiyalar, folklor va badiiy obrazlar orqali yetkazilgan. Demak, falsafiy jihatdan baxt insonning ruhiy olamini ifodalasa, lingvistik jihatidan ushbu holatni, his-tuyg'uni sub'yektiv lug'at boyligidan foydalanib ifodalashdir. “Odamlar qancha ko'p bo'lsa, baxt haqida shunchalik ko'p fikrlar bor degan umumiy fikr oxir-oqibat noto'g'ri” deydi. Individual g'oyalar tipologiyaga to'g'ri keladi, asosan, u haqidagi g'oyalar soni har bir inson tan oladigan baxt tushunchalari bilan belgilanadi. Shundan kelib chiqib, baxtning oddiy lingvistik kontseptlarini aniqlashga va ularning ma'lum bir til jamiyati dunyoqarashining ahamiyati ierarxiyasini o'rnatishga qaratilgan bo'lishi kerak. Undan tashqari U ““baxt” kontseptining nominativ maydoni ham statik, ham dinamik komponentlarga ega, ma'lum joy va vaqtda ularning nisbati bir xil nomdagi tushunchalarda farq qiladi: milliy, individual va badiiylilikda, sababi, “baxt” konsepti o'ta gibril, o'zgaruvchandir, u insonning “narsa-hodisa” va “ruhiy holati” haqida ma'lumot berib, “ichki” va “tashqi olamlarini”, mikrokosmos va makrokosmosni bog'laydigan” deya ta'kidlab o'tadi. Yana boshqa bir tilshunoslar George Lakoff, Mark Johnsonlar “bizning kundalik hayotimizdagi o'y-hayollarimiz, faoliyat va harakatlarimizda amal qiladigan konseptual sistema tabiatdan metaforik sanaladi. Bizning fikrimizni boshqaradigan konseptlar intellektimiz mahsuli bo'libgina qolmasdan, odatiy kundalik faoliyatimizni ham boshqaradi¹⁷” deya ta'riflashadi.

XULOSA. Konsept haqida turli fikrlar, tahlillar va qarashlar mavjud bo'lib, antroposentrik paradigmada mental ong bilan bog'liq, har bir xalqning ichki va tashqi hissiy-emotsional qarashlari orqali dunyoga bo'lgan munosabatini ifodalaydi. Tilshunoslar o'z ishlarida koseptni asosiy tushunchalardan biri sifatida kiritadilar, sababi u so'z, fikrlash, madaniyat kabi kategoriyalarni aniqlash va

¹⁵ Бабушкин А.П. Культура, когниция, перевод // Социокультурные проблемы перевода. Воронеж, 1998. С.10-16.

¹⁶ Карасик В.И., Шаховский В.И. Об оценочных пресуппозициях // Языковая личность: вербальное поведение. Волгоград, 1998. С.3-13.

¹⁷ George Lakoff, Mark Johnson. Metaphors We Live By. The University of Chicago Press. 2003. -193 p.



birlashtirish imkonini beradi. Demak, konsept periferiyalari ham vaqt va millat qarashlari bilan birga o'zgarib boradi, u doimiy rivojlanishda. Aslida “baxt” konseptini turlicha tushunish mumkin. Sababi unda turli olamlarga tegishli, ya’ni jismoniy va ruhiy; verbal, ilmiy va oddiy turmush-tarzini ifodalovchi tasvirlar mavjud bo‘lib, inson moddiy (tashqi) va ideal (ichki) tajribasini sintez qiluvchi birlikdir. O‘zbek tilshunosi T.K. Mardiyev aytganidek, baxt tushunchasi ijtimoiy hayotdagi barcha jabhalarda namoyon bo‘ladi va inson faoliyati uchun zaruriy tuyg‘u hisoblanadi. Yer yuzida baxt haqida o‘ylamagan va uni orzu qilmagan inson bo‘lmasa kerak. Demak, fan-texnika, ijtimoiy hayot, yashash tarsi o‘zgarib borar ekan, “baxt” konsepti ham tadrijiy rivojlanib boraveradi va yadro atrofidagi freymlar ham goho kengayib, goho torayib boradi.

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GIPS ASOSIDAGI QURUQ QURILISH QORISHMASI ISHLAB CHIQUARISH TEXNOLOGIYASINI TAKOMILLASHTIRISH

Quziboyev Shoirjon Shavkat o‘g‘li

PhD., katta o‘qituvchi, Farg‘ona davlat texnika universiteti, Farg‘ona,
O‘zbekiston

Sharipov Islomjon Qaxramonjon o‘g‘li

98-21 QMBKICH guruh talabasi, Farg‘ona davlat texnika universiteti,
Farg‘ona, O‘zbekiston

Annotatsiya

Ushbu maqolada gips asosidagi quruq qurilish qorishmalarini ishlab chiqarishda zamonaviy texnologiyalarni joriy etish, mahsulot sifatini oshirish va iqtisodiy samaradorlikni ta'minlash masalalari ko'rib chiqiladi. Mahalliy xomashyolar – xususan, tabiiy va chiqindi gips turlari (fosfogips, borogips), ohak, bo‘r, perlit va dolomit asosida optimal tarkib tanlash orqali mustahkamligi, yopishqoqligi, qurish vaqti kabi fizik-mexanik xossalari yaxshilangan qorishma kompozitsiyalari taklif etildi. Tadqiqotda eksperimental sinovlar, fazoviy modellashtirish va standartlarga muvofiqlik tahlili orqali yuqori texnik ko‘rsatkichlarga ega quruq aralashmalar ishlab chiqildi. Qorishma tarkibiga qo‘shimcha faol modda sifatida ultradispers silika va plastifikatorlar qo‘shilishi natijasida ishqoriy muhitdagi barqarorlik va ekologik xavfsizlik ham ta'minlandi. Olingan natijalar mahalliy sanoat korxonalarida arzon, ekologik toza va energiya samarador quruq qurilish materiallarini keng joriy etish imkonini beradi.

Kalit so‘zlar: gips, ohak, bo‘r, perlit, qo‘shimcha, fosfogips, borogips, dolomit.

Kirish

Yurtimizda xalq xo‘jaligining ustuvor tarmoqlaridan biri sifatida qurilish sanoati jadal rivojlanmoqda. Bu jarayonda zamonaviy qurilish materiallariga, xususan, quruq qorishma asosida ishlab chiqariladigan mahsulotlarga bo‘lgan talab yildan-yilga ortib bormoqda. Buning sababi, birinchidan, mamlakatimizda boy tabiiy xomashyo zaxiralari – gips, dolomit, ohaktosh, bor, perlit va boshqa



minerallarga ega konlarning mavjudligi bo'lsa [1], ikkinchidan esa, iqtisodiy jihatdan samarador, ekologik xavfsiz va energiyani tejovchi qurilish texnologiyalarini rivojlantirish zarurati bilan izohlanadi [2].

Bugungi kunda quruq qurilish qorishmalari qurilish sanoatining ajralmas tarkibiy qismiga aylangan. Ular zavod sharoitida maxsus texnologik uskunalarda, qat'iy texnologik tartib asosida ishlab chiqariladi. Qurilish maydoniga tayyor holatda yetkaziladigan bu qorishmalar yuqori darajada standartlashtirilgan bo'lib, ularning fizik-mexanik xossalari, ishlov berish qulayligi, tez qotishi va mustahkamligi bilan ajralib turadi [3]. Ayniqsa, gips asosidagi quruq qorishmalar pardevorlarni suvoq qilish, ichki pardoqlash, dekorativ ishlovlar uchun eng maqbul variantlardan biri hisoblanadi [4].

Jahon statistik ma'lumotlariga ko'ra, hozirgi vaqtda yiliga 35–40 million tonna atrofida gips asosidagi bog'lovchi materiallar ishlab chiqariladi va ularning 90 foizi bevosita qurilishda ishlatiladi [5]. Gips sanoatida yetakchi davlatlar qatoriga AQSh, Fransiya, Ispaniya, Buyuk Britaniya va Rossiya kiradi. O'zbekiston sharoitida esa ushbu yo'nalish asosan Buxoro va Farg'ona viloyatlarida faoliyat yurituvchi korxonalar tomonidan amalga oshirilmoqda [6].

Gips asosidagi quruq qurilish qorishmalari tarkibiga asosiy mineral bog'lovchi sifatida tabiiy yoki texnogen gips (masalan, fosfogips, borogips), shuningdek, plomba materiallari (kalsit, dolomit, perlit), va maxsus funktsional qo'shimchalar (plastifikator, retarder, stabilizator va boshqalar) kiritiladi. Ushbu komponentlarning optimal nisbatda tanlanishi va texnologik jihatdan to'g'ri aralashtirilishi qorishma sifatining asosiy kafolatidir [7]. Shuningdek, ularning qotish kinetikasi, gidratatsiya jarayoni, yopishqoqligi va mikrostrukturasi ilmiy asosda tadqiq etilmoqda [8].

Shu boisdan, ushbu maqolada gips asosidagi quruq qurilish qorishmalarini ishlab chiqarish texnologiyasini takomillashtirish, uning tarkibini modifikatsiya qilish, mahalliy xomashyolar asosida optimal retseptura ishlab chiqish va ilg'or texnologik usullarni joriy etish imkoniyatlari yoritiladi.

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1 - rasm. Quruq qurilish qorishmalari.

Gips asosidagi quruq qurilish qorishmasi ya'ni shtukaturka ishlab chiqarish uchun gips, ohak, bo'r, perlit, qo'shimcha kerak bo'ladi. Ularning tarkibi quyidagi jadvalda keltirilgan.

1 – jadval. Gips asosidagi quruq qurilish qorishmasi (shtukaturka) tarkibi

Shtukaturka tarkibi	Massa bo'yicha (%) da
Gips	40
Bo'r	57
Ohak	1,5
Perlit	1
Qo'shimcha	0,5

Gips asosidagi bog'lovchilar uchun xomashyo tahlili

Gipsli bog'lovchi materiallar ishlab chiqarishda asosiy xomashyo sifatida tabiiy kelib chiqishga ega gips toshi ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) va angidrit (CaSO_4) ishlatiladi. Ular O'zbekistonda ko'plab sanoat korxonalari tomonidan foydalanilmoqda, ayniqsa qurilishda ishlatiladigan yarimgidrat gips ishlab chiqarishda muhim o'rin tutadi [9]. Gipsli materiallar o'zining tez qotishi, hajm barqarorligi va ekologik xavfsizligi bilan ajralib turadi [10].

Bundan tashqari, sanoat chiqindilari — fosfogips, borogips, flüorgips kabi ikkilamchi mahsulotlar ham gips o'rnini bosuvchi samarali bog'lovchilar hisoblanadi. Ular tarkibida asosiy faol komponent — kaltsiy sulfat mavjud bo'lib, chiqindini qayta ishlash orqali arzon va ekologik toza bog'lovchi olish mumkin.



Ushbu yondashuv chiqindilarni qayta ishlash orqali qurilish sanoatining barqaror rivojlanishiga xizmat qiladi.

Qorishma tarkibida ishlatiladigan havoyi ohak — ya’ni CaO , tog‘ jinslarini (ohaktosh, bo‘r, dolomit) $1000\text{--}1200^{\circ}\text{C}$ da kuydirish orqali olinadi. Havoyi ohakning minerallashgan holatiga, gil aralashmalari va karbonatlarning tarkibiga qarab uning reaktivligi va ishlovchanlik darajasi aniqlanadi. Ayniqsa, dolomitli ohaktoshdan olinadigan ohak qotgandan keyingi mustahkamlikka ijobiy ta’sir ko‘rsatadi.

Quruq qurilish qorishmalarida ko‘pchitilgan perlit asosiy to‘ldiruvchi komponent sifatida qo‘llanadi. Bu material tabiiy perlitni $900\text{--}1200^{\circ}\text{C}$ da issiqlik bilan ishlov berish orqali olinadi. Jarayon davomida perlit strukturasidagi bog‘langan suv bug‘lanadi va hajmi 5–12 barobar ortadi, natijada yengil, g‘ovak va issiqlikni yaxshi ushlab turuvchi material hosil bo‘ladi. Ayniqsa, perlit qumi issiqlik izolyatsiyasi, suvoq aralashmalari va yengil beton ishlab chiqarishda yuqori samaradorlik ko‘rsatadi.



2 - rasm. Gips asosidagi quruq qurilish qorishmasi ya’ni shtukaturka ishlab chiqarish uchun uskuna.

Yuqori sifatli quruq qurilish qorishmasi ishlab chiqarishda turli kimyoviy qo‘shimchalar muhim ahamiyatga ega. Bular orasida plastifikatorlar (ishlov berish qulayligini oshiradi), retarderlar (qotish vaqtini boshqaradi), stabilizatorlar (struktura va ishlovchanlikni yaxshilaydi) mavjud. Qo‘shimchalar aralashmaning reologik xususiyatlari, suvda eruvchanligi, yopishqoqligi va mikrostrukturasini ijobiy tomonga o‘zgartiradi. Shu bilan birga, zamonaviy qorishmalarga ultradispers kremniy dioksidi (SiO_2), gidrofoblashtiruvchi vositalar va ekologik stabilizatorlar kabi komponentlar ham qo‘shilmoqda.

Bunday tarkibli va zamonaviy texnologiyali shtukaturka quyidagilarni imkonini beradi:

- ish unumdorligini oshiradi: ya’ni barcha materiallarni olib kelib aralashtirgandan ko‘ra tayyor mahsulotni suv bilan aralashtirib qorishma tayyorlagan oson bo‘ladi;
- mahsulotni isrof bo‘lishini oldini oladi: ya’ni kerakli miqdorda qorishma tayyorlab olinadi;
- aniq tarkib bilan tayyorlanadi: korxona sharoitida yuqori sifatli laboratoriyalar va zamonaviy texnologiyalar yordamida ishlab chiqariladi;
- transport xarajatlarini kamaytiradi: hamma materiallarni qurilish maydoniga olib kelgandan ko‘ra, tayyor mahsulotni olib kelgan maqsadga muvofiq bo‘ladi.

Xulosa qilib aytganda, gips asosidagi quruq qurilish qorishmalari ishlab chiqarish texnologiyasini rivojlantirish maqsadida yuqori sifatli va zamonaviy texnologiyalardan foydalanish kerak. Mamalakatimizda hozirgi kunda qurilish sohasi yuqori darajada o‘sib bormoqda. Shuning uchun yangi tarkibli va zamonaviy qurilish materiallarini ishlab chiqarish, va qurilish soxasini yanada takomillashtirish kerak.

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Такрорий ипак курти боқиш усулида пилла етиштириш ва уларни қайта ишлов бериш жараёнларига тайёрлаш

Ниязалиева Мухайё Махмудовна

Ферганский государственный технический университет, доцент
muxayyo_makhmudovna@mail.ru, тел .: +998 (90) 272 72 71

Аннотация: ушбу мақолада такрорий ипак курти боқиш усулида пилла етиштириш ва уларни қайта ишлов бериш жараёнларига тайёрлашга оид, олинган натижалар қайд этилганлиги ва уларнинг таҳлиллари келтирилган.

Калит сўзлар: хом ипак, маҳсулот, ишлаб чиқариш, хомашё, техника, технология

Аннотация: В данной статье приведены результаты полученных от испытаний и их анализ, связанные с выращиванием коконов методом повторного кормления шелкопряда и их подготовкой к переработке.

Ключевые слова: Шелк-сырец, продукция, производство, сырье, техника, технология

Annotation: This article presents the results of the tests and their analysis related to the cultivation of cocoons by the method of repeated feeding of silkworms and their preparation for processing.

Key words: Raw silk, products, production, raw materials, equipment, technology.

Жаҳон ипакчилик амалиётида тут ипак курти пилласини етиштиришнинг такрорий боқув усули кенг қўлланилмоқда. Бизнинг Республикамизда ҳам йилига тўрт марта такрорий боқув усулига ўтилган. Ўзбекистон табиий толалар илимий тадқиқот институтида йилига беш марта ипак курти боқилади. Бунда институт олимлари томонидан яратилган янги агротехнология ва кўп каватли курт парваришлаш инновацион сўкичакларидан фойдаланилади. Бир вақтнинг ўзида ипак куртининг янги нав ва дурагайлари боқиш орқали, улардан етиштирилган пиллаларнинг технологик ва сифат кўрсаткичлари ҳам синовдан ўтказилади. Энг мақбул

кўрсаткичли нав ва дурагайлар фермер хўжаликларида боқиш учун тавсия этилади, шунингдек, улардан етиштирилган пиллаларни чувиш параметрлари ҳам ишлаб чиқилади. Қуйида институтнинг тажриба қуртхонасида баҳор мавсумида боқилган “Ипакчи 2” дурагайининг тажриба намуналарини боқиш, уларни пилла чувиш автоматларида чувиш учун тайёрлаш, пилла чувиш тезликларини ва бошқа чувиш параметрларига аниқликлар киритиш бўйича ўтказилган тадқиқотлар натижалари келтирилган. Етиштирилган пиллаларнинг технологик кўрсаткичлари пиллаларни доналаб чувиш усулида УзНИИШП тизимидаги ЛК русумли лаборатория дастгоҳида аниқланди.

Ўзбекистон табиий толалар илмий тадқиқот институтининг тажриба қуртхонасида “Ипакчи 2” дурагайи ипак қурти уруғидан институтнинг янги агротехнологияси асосида 143,7 кг тирик пилла етиштирилди ва бу пиллалар институтнинг шаҳодатланган синов лабораториясида сараланди. Пиллаларни саралаш вақтида улардан 8,7 % (ёки 12,5 кг) ностандарт, чувиш учун яроқсиз пиллалар ажратиб олинди. Шунингдек, фермер хўжалигида анъанавий агротехнология бўйича “Ипакчи 2” дурагайи ипак қурти уруғидан етиштирилган 46,5 кг тирик пилла намуналари ҳам саралашдан ўтказилди ва улардан 16,3 % (ёки 7,57 кг) ностандарт пиллалар ажратиб олинди. Институтнинг синов лабораториясида тирик пиллалар ўлчамлари ва пилла қобиғининг қаттиқлиги бўйича калибрланди, ҳамда амалдаги стандартлар бўйича уларнинг технологик кўрсаткичлари ҳам аниқланди. Пиллаларни технологик кўрсаткичлари уларни УзНИИШП тизимидаги ЛК русумли пиллаларни доналаб чувиш лаборатория дастгоҳларида, доналаб чувиш усулида аниқланди. Тажриба ва назорат тирик пиллаларининг баъзи технологик кўрсаткичлари 1- жадвалда келтирилган.

1-жадвал

Тажриба ва назорат вариантлари, тирик пиллаларининг баъзи бир технологик кўрсаткичлари

т/р	Кўрсаткичларнинг номланиши	Тирик пиллалар вариантлари	
		Тажриба	Нazorat



1	Синовга олинган пиллаларнинг умумий вазни, <i>кг</i>	143,70	46,50
2	Навли пиллаларни чиқиши, %	91,30	83,70
3	Пилла чувиш автоматида чувиш учун тайёрланган навли пиллаларнинг умумий вазни, <i>кг</i>	131,20	38,93
4	Бир дона пилланинг ўртача вазни, <i>г</i>	1,375	1,363
5	Бир дона пилланинг қобиғини ўртача вазни, <i>г</i>	0,332	0,310
6	Бир дона пилланинг ғумбагини ўртача вазни, <i>г</i>	1,040	1,050
7	Пиллаларнинг калибри, %: майда (14-15 <i>мм</i>) ўртача (16-19 <i>мм</i>) йирик (20-22 <i>мм</i>)	8,93 87,52 3,55	9,89 77,75 12,36
8	Пиллаларнинг ўртача ипакчанлиги, %	23,90	22,05
9	Пилла ипининг ўртача чизиқли зичлиги, <i>текс</i>	0,270	0,275
10	Пилла ипининг узулуксиз чувилиш узунлиги, <i>м</i>	875,0	805,0
11	Пилла ипининг умумий узунлиги, <i>м</i>	965,0	950,0
12	Пилла қобиғининг чувилувчанлиги, %	88,96	86,12
13	Ипакнинг чиқиши, %	22,25	19,75
14	Пилланинг солиштира сарфи, <i>кг/кг</i>	4,49	5,06

1-жадвалда келтирилган тадқиқот натижаларини таҳлили шуни кўрсатадики, синовга олинган пилла тажриба варианты пиллалари назорат варианты пиллаларига қараганда анча яхши технологик кўрсаткичларга эга. Аммо, назорат варианты пиллалари ҳам жуда яхши технологик кўрсаткичларга эга, фақат ностандарт пиллаларни чиқиши стандарт талабларидан анча юқори бўлиб, бу қурт боқиш агротехникаси билан узвий боғлиқ. Пиллаларнинг калибрлари ичида иккала вариант бўйича ҳам асосий етакчи ўринни ўртача калибмли (87,52 ва 77,75 %) пиллалар эгаллаб турибди. Пилла ипининг узлуксиз чувилиш (875,0 ва 805,0 *м.*) ва умумий узунликлари (965,0 ва 950,0 *м.*), пилланинг солиштира сарфи (4,49 ва 5,06 *кг/кг*) ҳам хориж пиллаларидан қолишмайди. Бу кўрсаткичлар албатта лаборатория шароитида олинган, улар ишлаб чиқаришда олинадиган кўрсаткичлардан анча фарқ қилиши мумкин,



лекин бу кўрсаткичлар бизга ушбу пилла партияларидан олинадиган маҳсулотларнинг кўрсаткичларини оширишга эришиш имкониятини беради.

Пиллаларни саралаш ва калибрлаш жараёнларидан кейин, навли пиллалар аралашмаси сақлаш учун, махсус совиткичларга жойланади. Тирик пиллалар аралашмаси махсус совиткичларда тирик пилла сақлашнинг оптимал ҳарорати бўлган +4 °C ҳароратда сақланади.

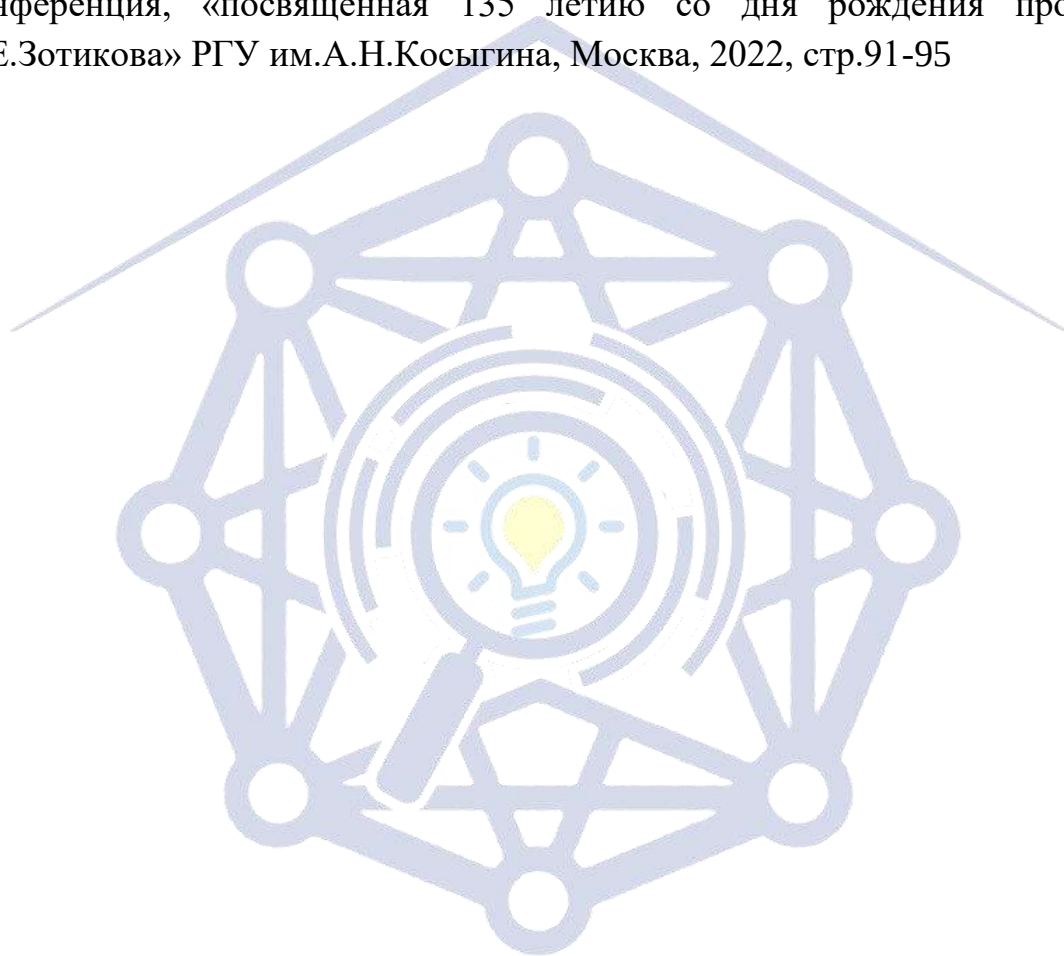
Сифатли маҳсулот олиш омилларига сифатли хомашё, самарали ишловчи техник воситалар ҳамда юқори кўникмага эга ишчилар киради. Юқоридаги масаланинг ечими сифатида ипакчилик соҳасида олиб борилаётган мазкур илмий тадқоқот ишларини оммалаштириш мумкин.

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Iplarning tukdorlik ko'rsatkichlarini yigirish tizimlari va usullariga bog'liqligi

Nishonov Islombek Abdumuxtor o'g'li

Farg'ona davlat texnika universiteti,

“Yengil sanoat texnologiya va jixozlari” kafedra asistenti

E-mail: islombeknishonov043@gmail.com,

nomer: +998 996060072

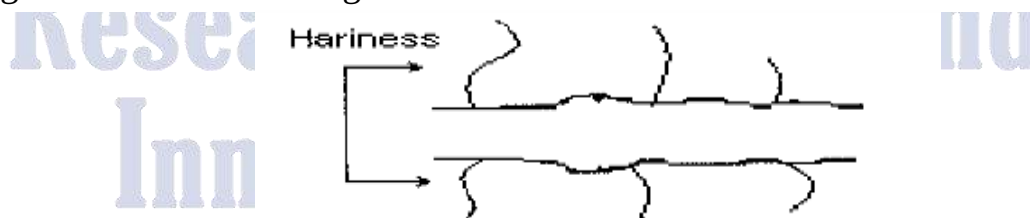
Annotatsiya: Ushbu maqolada Farg'ona viloyati Qo'qon shahridagi “Indorama Kokand Tekstil” qo'shma korxonasida halqali va pnevmomexanik usullarida, kompakt qayta tarash va oddiy karda kompakt tizimida yigirib olingan iplardan foydalanildi va ipning tukdorligini yigirish usullari va tizimlariga bog'liqligini o'rganildi. Chiziqli zichligi 19,6 ($N_e = 30$) kompakt halqali karda tizimida va qayta tarash tizimida hamda 19,6 teks ($N_e = 30$ OE) pnevmomexanik usulda yigirib olingan iplarni ishlab chiqarishda o'rta tolali paxtaning 4-tip I nav Qoraqalpoq va Xorazm seleksiya navining “oliy” sinfidan foydalanildi. Pilta, pilik va ipni notekisligini hamda ipning tukdorligini USTER TESTER 6-S800, ipni uzulish kuchi, uzulishdagi uzayishi va uzulish vaqti USTER TENSORAPID 4, ipdagi buramlar soni USTER ZWEIGLE TWIST TESTER 5 asboblari aniqlandi. Olingan natijalar Uster Statistik-2018 5% li me'yoriy ko'rsatkichlari bilan solishtirilib, ipning tukdorligi yigirish usullari va tizimlariga bog'liqligini tadqiq etildi. Unga ko'ra iplarning tukdorlik darajasini yigirish tizimi va yigirish usuliga bog'liqligini ko'rganimizda eng past ko'rsatkich pnevmomexanik ipida bo'lsada, Uster Statistik 2018 5 % li ko'rsatkichlariga karda kompakt ipi eng yaqin ya'ni 1,36 % ga farq qilishi aniqlandi. Demak, kompakt yigiruv mashinalarida faqat qayta tarash tizimida emas, balki oddiy karda usulida ham ip yigirilsa olinadigan daromad yuqoriroq bo'ladi.

Kalit so'zlar: karda, qayta tarash, kompakt ip, xalqali yigirish, pnevmomexanik yigirish, tukdorlik, sifat, nisbiy pishqlik, uster statistik 2018, notekislik, uzulish kuchi, cho'ziluvchanlik, ingichka joylar soni, qalin joylar soni, nuqsonlar.

I. Kirish

Bugungi kunda yurtimizda to'qimachilik sanoati ravnaqi uchun barcha sharoitlar – xom-ashyo zahiralari, mehnat resurslari mavjud bo'lib, eng ilg'or texnologiyalar bo'yicha ishlaydigan uskunalar bilan jihozlanmoqda. Respublikada yetishtiriladigan paxta tolasidan tayyor mahsulotlar ishlab chiqaruvchi qator qo'shma va xususiy korxonalarning faoliyati boshlanishi bilan eksportbop to'qimachilik mahsulotlari ishlab chiqarish hajmi ortdi. 2022-yilga qadar yurtimizda yetishtiriladigan paxta tolasining 100%ini (1 mln. tonna tola) O'zbekiston korxonalarida qayta ishlanishi bilan birgalikda qo'shimcha 300 ming tonna kimyoviy tola sotib olinishi ham rejalashtirilgan. Bozor iqtisodiyotiga o'tishda xom-ashyoga bo'lgan munosabat tubdan o'zgardi. Mahalliy xom-ashyolar paxta, ipak, kanop va boshqalarni qayta ishlab raqobatbardosh mahsulot ishlab chiqarish, mahsulotlarni import qilishni kamaytirib, eksport qilishni ko'paytirish, jahon bozoriga haridorgir mahsulotlarni taklif qilish kabi muhim vazifalar bajarilmoqda. Bozor munosabatlarida ishlab chiqarish omborlari asosan xom-ashyoni mumkin qadar ko'proq turlarini qamrab olib xaridorlar ehtiyojlarini ularning talablari asosida mahsulot ishlab chiqarishga xizmat qilishi lozim. Shunday qilib, bozor munosabatlari talablari raqobatbardosh mahsulotlar ishlab chiqarish uchun xom-ashyo zahiralarga ega bo'lishni taqazo etadi.

Bu borada O'zbekiston Respublikasi Prezidentining 2017-yil 28-noyabrdagi PQ-4408-sonli “Paxtachilik tarmog'ini boshqarish tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida”gi qarori muhim omil bo'lib xizmat qilmoqda [1]. Ushbu maqolada tadqiq qilinayotgan ishlar Prezidentimiz Sh. M. Mirziyoyevni to'qimachilik tarmog'iga oid qarorini ta'minlash maqsadida hamda sifatli ip ishlab chiqarishda ipning tukdorlik ko'rsatkichlarini ahamiyati ochib berish ko'zda tutilgan. Bizga ma'lumki, ipning muhim xususiyatlaridan biri tuklilikdir. Quyidagi 1-rasmda ipdagi tukdorlikni tasvirlangan.



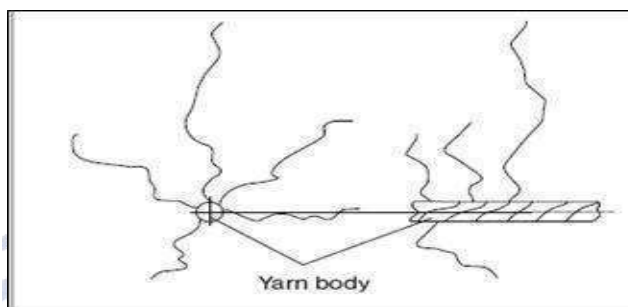
1-rasm. Ip tukdorligi

Tuklar odatda standart og'ish bilan aniqlanadi, CV (%) ga o'xshash



[2].

Umuman olganda, iplardagi uzun tuklar keyingi jarayonlarda sezilarli darajada halaqit qiladi, qo'shimcha xarajatlar kelib chiqadi va to'qimachilik mahsuloti ko'rinishini va amaliy xususiyatlarini pasaytiradi.



2-rasm. Ip o'zagi bo'ylab 2mm gacha yopishgan tola o'rtasidagi munosabat ($Ne=30$).

2 mm dan kattaroq tuklar keyingi jarayonlarda halaqit qilishi mumkin. Demak, kerakli va halaqit qiluvchi tukdorlik o'rtasida asosiy farqni talab qilsa, yetarli darajada o'lchash usuli bu farqni aniqlik va ishonchlilik bilan ifodalashi kerak [3].

II. Sinov o'tkazish usuli va vositasi

Hozirgi kunda tukdorlikni aniqlashda ishlatiladigan uch xil o'lchov asboblari mavjud:

1. Uster Tester 6 tukdorlik moduli.
2. G 566 m/s tukdorlikni tekshirgich.
3. Zweigle laserspot LST-III m/s. Keisokki [3].

Maqolaga tegishli bo'lgan tadqiqot ishini o'tkazishda “Indorama Kokand Tekstil” korxonasi laboratoriyasida mavjud bo'lgan Uster firmasi jihozlaridan foydalanib, tajriba uchun olingan iplarning nomeri, buramlar soni, notekisligi va tukdorligi kabi xossalarni o'rganildi. Ipni massa va nomerini o'zgarishi, ingichka va qalin joylar, nepslar anchagina ipni sifati va sotish narxiga ta'sir etadi. Shu sababli bu ko'rsatkichlarni o'rganish, tekshirish va oldini olish muhim hisoblanadi.

Quyida Uster firmasining ipning tukdorligini va nuqsonlarini aniqlash jihozi tuzilishi hamda ishlash prinsipi keltirildi.

USTER TESTER 6 – S 800 yakka ipni sifatini nazorat qiluvchi zaruriy asbob bo'lib, bugungi kunda eng aniq standartlarni ma'nodosh so'zi bo'lib qolgan.



Tekislik bo'yicha hatto kichkina og'ish ham yakka iplarda katta ahamiyatga egadir va bunda daromadli va daromadsiz ishlab chiqarishlardagi farq namoyon bo'ladi. Hajmli o'lchovlar spektogrammasi yigirish mashinasida va yigirish texnologik jarayondagi davriy nosozliklarni bir onda ko'rish imkonini beradi. Mexanik pishitish qurilmasi tufayli 800 m/min tezlikdagi tekshirishni takroriyligi ta'minlanadi [4].

USTER TESTER 6 – S 800 jihozi ipning va yarim mahsulotni quyidagi sifat ko'rsatkichlarini aniqlaydi:

1. Notekislik (USTER,%)
2. Notekislik bo'yicha o'zgarish koeffitsiyentini (CV, %)
3. Ingichka joylar soni (Thin/1000 m)
4. Qalin joylar soni (Thick/1000 m)
5. Tugunchaklar soni (Neps/1000 m)
6. Tukdorlik (H, Hairiness)



3-rasm. USTER TESTER 6-S800

Mashinaning ta'minlash qismiga o'rnatilgan bobina yoki naychadagi iplarni jihozning optik nazorat qismidan o'tkaziladi. Dastlab, HL (tuk uzunligi) nazorat datchigidan o'tadi va ipning tukdorlik miqdori aniqlanadi. Undan keyin qolgan 3 ta nazorat datchigidan (OH, OI, OM dan) o'tkazilib, ip, pilta va pilikning notekisliklari aniqlanadi. Bu jihoz sensorli tizimda ishlaydi va yuqori aniqlik darajasiga ega. Jihozda ip xossalarini aniqlash uchun 400 m namuna olinadi [5]. Natijalarni tahlil qilish uchun jihozning printeridan foydalanib, umumiy sinov natijalarini yoki yakka sinov natijalarini chiqarib olib tahlil qilish mumkin.



III. Natijalar

“Indorama Kokand Tekstil” korxonasidan tadqiqot uchun olingan iplarning ko’rsatkichlari tukdorlik darajasi bo’yicha Uster Statistik 2018 5% li ko’rsatkichlariga solishtirilganda ($N_e=30$) qayta tarash kompakt ipi 21,3 % ga, ($N_e=30$) oddiy karda kompakt ipida 1,36 % ga karda pnevmomexanik ipida esa 23,3 % ga yuqoriligini ko’riladi. Shu o’rinda natijalarni tahlil qiladigan bo’lsak, tadqiqot uchun olingan iplar orasida oddiy karda kompakt ipi tukdorlik ko’rsatkichi bo’yicha eng past ekanligi va deyarli karda kompakt ipi uchun Uster statistik 2018 5 % li ko’rsatkichlariga mos ekanligini ko’rishimiz mumkin bo’ladi.

Quyidagi jadvalda “Indorama Kokand Tekstil” korxonasidan olingan iplarning ko’rsatkichlarini Uster statistik 2018 5 % li ko’rsatkichlariga taqqoslanganini ko’rish mumkin.



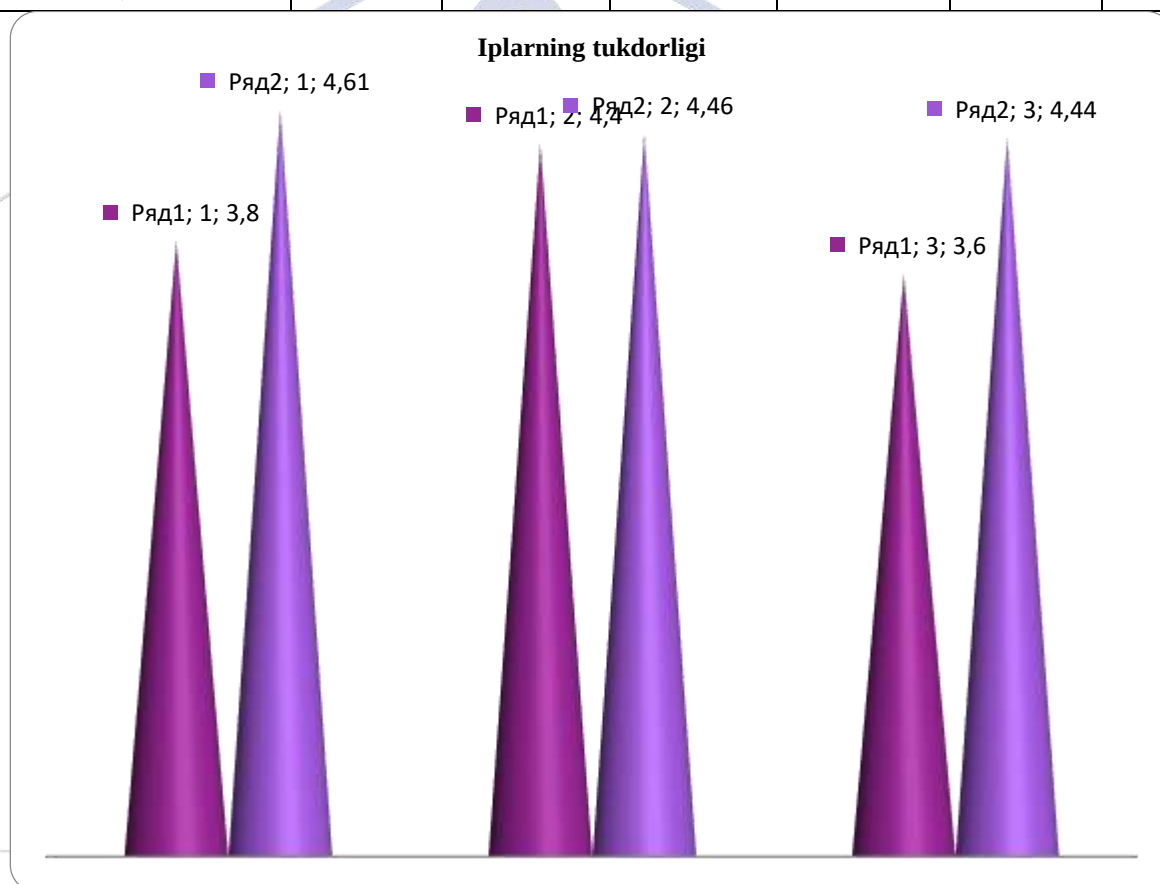
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**“Indorama Kokand Tekstil” korxonasidan olingan iplarning
ko’rsatkichlari**

Ko’rsatkichlar nomi	Uster statistik 2018 qayta tarash ipi uchun	Kompakt qayta tarash yigiruv korxona natijasi	Uster statistik 2018 oddiy karda ipi uchun	Oddiy karda kompakt yigiruv korxona natijasi	Uster statistik 2018 Pnevmo mexanik yigiruv	Karda pnevmo mexanik yigiruv korxona natijasi
	N _e =30	N _e =30	N _e =30	N _e =30	N _e =30 OE	N _e =300 E
Chiziqli zichligi, teks	19,6	19,6	19,6	19,6	19,6	19,6
Chiziqli zichligi bo’yicha notekisligi, U%	8,53	9,1	10,52	12,06	11,0	12,48
Chiziqli zichligi bo’yicha variatsiya koeffitsiyenti, CV%	11,01	11,45	13,12	15,45	13,77	15,71
Uzilish kuchi (Forse), sN	431	420,9	375	342,8	250	249,4
Uzulish kuchi bo’yicha variatsiya koeffitsiyenti, CV%	5,8	6,87	7,1	8,93	7,0	9,38
Nisbiy pishiqligi, (Rkm) sN/teks	21,8	21,38	18,9	17,49	12,8	12,67
Nisbiy pishiqligi bo’yicha variatsiya koeffitsiyenti, CV%	6,1	6,67	6,3	8,93	6,0	9,39
Uzulishdagi cho’zuluvchanlik (Elongation) %	6,4	5,02	6,5	3,52	7,4	3,63

	Ingichka joylar soni (Thin -50% /km)	0	9	3	238	9	80,3
0	Qalin joylar soni (Thick+50% /km)	6	16	50	161	43	106,5
1	Tugunchaklar soni (Neps200 /km)	17	24	115	163	9	402,8
2	Tukdorlik ko'rsatkichi, H	3,8	4,61	4,4	4,46	3,6	4,44



5% li Uster Statistik 2018 ko'rsatkichlari
“Indorama Kokand Tekstil”
ko'rsatkichlari

(N_e=30) qayta tarash kompakt ipi uchun Uster Statistik 2018
ko'rsatkichlari
(N_e=30) qayta tarash kompakt ipi “Indorama Kokand Tekstil” ko'rsatkichlari



($N_e=30$) karda kompakt ipi uchun 5 % li Uster Statistik 2018 ko'rsatkichlari

($N_e=30$) karda kompakt ipi “Indorama Kokand Tekstil” ko'rsatkichlari

($N_e=30$) karda pnevmomexanik ipi uchun 5 % li Uster Statistik 2018 ko'rsatkichlari

($N_e=30$) karda pnevmomexanik ipi “Indorama Kokand Tekstil” ko'rsatkichlari

IV. Xulosalar

1. Ushbu maqolada sinov uchun turli yigirish usullari va tizimlarida bir xil nomerdagi ($N_e=30$) iplar korxona sharoitida yigirib olindi.

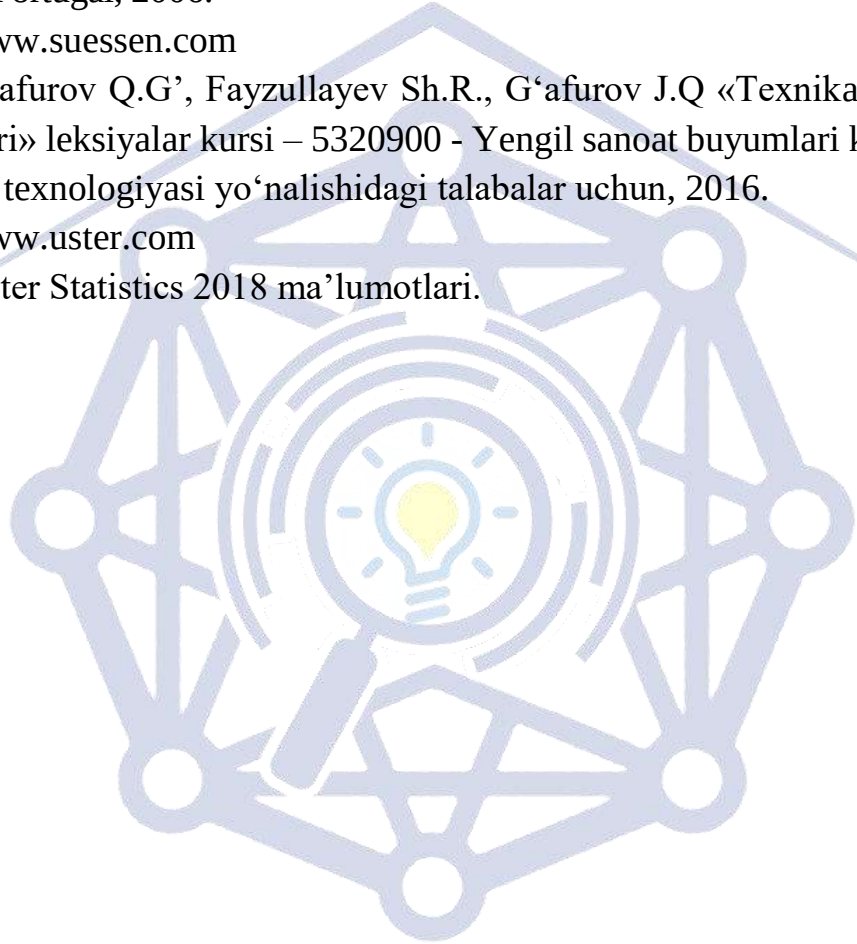
2. Yuqoridagi sinov ishlarida iplarning sifat ko'rsatkichlari tadqiq etilib, iplarning tukdorlik ko'rsatkichlarini aniqlashda “Indorama Kokand Tekstil” korxonasidagi Uster Tester 6 jihozidan foydalanildi. Natijalarni jadvallar va diagrammalar ko'rinishida taqdim etildi.

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Foydalanilgan adabiyotlar:

1. O'zbekiston Respublikasi Prezidentining PQ-4408-sonli “Paxtachilik tarmog'ini boshqarish tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida”gi qarori// 2017-yil 28-noyabr.
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New innovative technologies and solutions of cotton from small contaminants

Nishonov Islombek Abdumuxtor o'g'li

Farg'ona davlat texnika universiteti,

“Yengil sanoat texnologiya va jixozlari” kafedra asistenti

E-mail: islombeknishonov043@gmail.com,

nomer: +998 996060072

Abstract In this article, our national wealth is faced with various problems in the processing of seed cotton from large and small impurities. In order to find a solution to these problems, it was determined as a result of the analysis that the machine for cleaning seed cotton from small impurities is more efficient than other models.

Annotatsiya. Ushbu maqolada milliy boyligimiz chigitli paxtani qayta ishlash jarayonida yirik va mayda iflosliklardan tozalashda turli muammolarga duch kelmoqda. Ushbu muammolarni yechimini toppish maqsadida chigitli paxtani mayda iflosliklardan tozalash mashinasi boshqa modellarga nisbatan yetarli darajada samaradorliroq ekanligi tahlil qilish natijasida aniqlandi.

Аннотация. В данной статье наше национальное богатство сталкивается с различными проблемами переработки хлопка-сырца от крупных и мелких примесей. Чтобы найти решение этих проблем, в результате анализа было установлено, что машина для очистки семенного хлопка от мелких примесей более эффективна, чем другие модели.

Keywords. saw drum, colosnik grid, mesh surface, supply roller, brush drum, dirt hopper.

Kalit so'zlar. arrali baraban, kolosnikli panjara, to'rli yuza, ta'minlovchi valik, cho'tkali baraban, ifloslik bunker.

Ключевые слова. Пильный барабан, колосниковая решетка, сетчатая поверхность, подающий ролик, щеточный барабан, грязевой бункер.

Introduction

Taking into account that the main cotton raw materials grown in our republic correspond to high varieties, and they contain 8-9% moisture, they are dried using cold air or are not passed through drying drums at all. When moisture is 9-10%, raw cotton is processed in drying drums to remove 1-2% moisture. Cotton drying with

this method is very expensive. Currently, cotton drying in this way does not meet the requirements for production. Therefore, it is urgent to carry out the process of drying cotton raw materials with such humidity in other ways.

The increase and decrease of productivity and efficiency of the cotton ginning enterprise depends on the technological processes of drying and cleaning the seeded cotton. Today, due to the increase in the types of cotton varieties and the emergence of special varieties, which are called difficult to clean, it is necessary to improve the technology and technique of cleaning seed cotton from small impurities.

Today, cotton cleaning equipment of the 1XK and 6A-12M models are widely used in the cleaning departments of cotton gins. The advantage of 1XK equipment over other equipment is the high efficiency and cleaning efficiency. Also, the 1XK is relatively easy to service and repair.

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It was aimed to improve the 1XK cleaning equipment based on the drying process of seed cotton raw materials from small impurities in the equipment. The working process of the 1XK small dirt cleaning equipment is as follows: Seeded cotton is lowered into the mine installed on the supply rollers. Counter-rotating feed rollers feed the seeded cotton evenly to the pile drum. The drum with a pile rotates clockwise and in turn carries the seeded cotton over various surfaces and conveys it to the second drum. In this order, seeded cotton is cleaned and separated from small impurities in all drums. Separated impurities fall down the sloped walls of the impurity hoppers through various surface openings at the bottom of the drums and are sucked up by pneumatic transport. Cleaned seeded cotton is removed from the equipment and transferred to the next technological process.

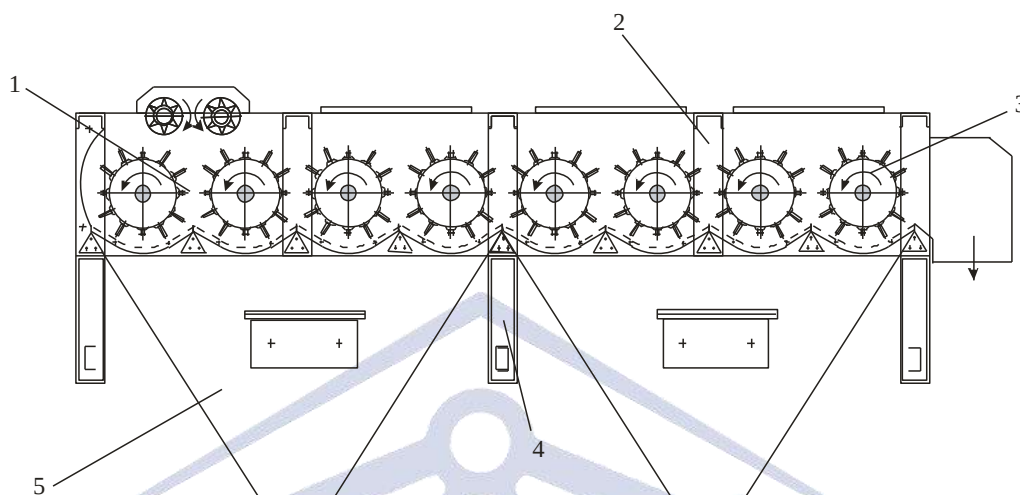


**Figure 1 1XK model cleaning from small impurities
scheme of the equipment**

1-providing rollers; 2-pile-blade drums; 3-mesh surface (surface); 4th dirt hopper;

Nov. 5.

Cotton falls on piled drums (2) and is pressed with piles and hit on mesh surface (3).

As a result, seeded cotton is shaken and cleaned of small impurities. The impurities released through the mesh surface fall into the hoppers (4) and are taken out with the help of a collecting auger.

In order to improve the technological processes of the 1-XK small dirt cleaning machine, scientific research work was conducted and analyzed. The results showed that small impurities (soil and cotton leaf particles) mixed with air in the air flow from the first pile drum were found to move to the next sections and fall back into the cotton. In order to study these problems, a device for absorbing the air formed during the rotation of the first drum with piles was prepared and experimental tests were conducted.

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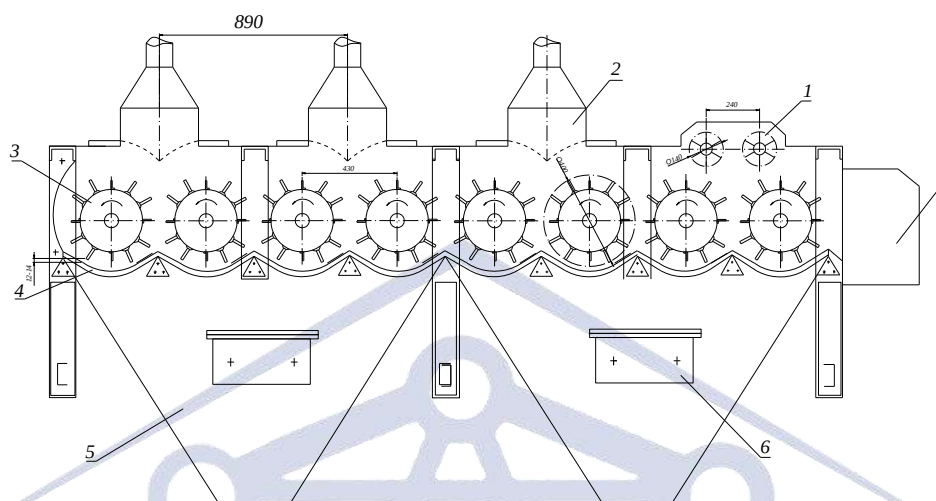


Figure 2 Cross-section diagram of 1XK equipment with proposed dry-cleaning processes

1. Supply rollers, 2. Hot air supply pipe, 3. Pile drum, 4. Mesh surface, 5. Impurity hopper, 6. Hole, 7. Outlet throat.

It was proposed to dry cotton with low moisture content (8-9%) by blowing hot air over the piled drums of the equipment for cleaning seed cotton from small impurities.

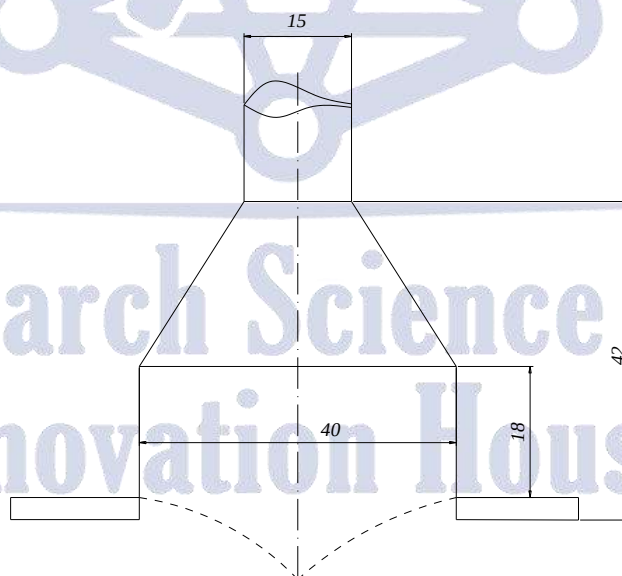


Figure 3 Scheme of the heat supply pipe to the 1XK cleaning equipment.

Conclusion

In order to improve the technological processes of the 1-XK small dirt cleaning machine, scientific research work was conducted and analyzed. The results showed that small impurities (soil and cotton leaf particles) mixed with air in the air flow from the first pile drum were found to move to the next sections and fall back into the cotton. In order to study these problems, a device for absorbing the air formed during the rotation of the first drum with piles was prepared and experimental tests were conducted.

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**Kurash bo'yicha murabbiylik faoliyatining zamonaviy yondashuvlari:
Ta'limda interfaol metodlar, murabbiy va sportchi o'rtasidagi
kommunikatsiya**

**Современные подходы к тренерской деятельности по борьбе:
интерактивные методы обучения и коммуникация между тренером и
спортсменом**

**Modern Approaches to Coaching in Wrestling: Interactive Teaching
Methods and Communication between Coach and Athlete**

Ochilova Sarvinoz Salim qizi - Navoiy davlat universiteti
Jismoniy madaniyat fakulteti Sport faoliyati (Kurash) ta'lim yo'nalishi 2-
bosqich talabasi

Очилова Сарвиноз Салим кызы - Навоийский государственный
Университет Факультет физической культуры, направление образования
«Спортивная деятельность (Кураш)», студентка 2-го курса

Sarvinoz Salim qizi Ochilov - Navoi State University
Faculty of Physical Education, 2nd-year student of the Educational Program
“Sports Activity (Kurash)”

Annotatsiya

Ushbu maqolada kurash bo'yicha murabbiylik faoliyatining zamonaviy yondashuvlari, interfaol ta'lim metodlarining ahamiyati va murabbiy-sportchi o'rtasidagi samarali kommunikatsiyaning sportchilarning rivojlanishiga ko'rsatadigan ta'siri tahlil qilingan. Tadqiqot Toshkent, Farg'ona va Buxoro viloyatlaridagi sport maktablari misolida olib borilib, interfaol yondashuvlarning mashg'ulot samaradorligi va sportchilarning motivatsiyasiga ta'siri o'rganilgan. Natijalar shuni ko'rsatdiki, murabbiy va sportchi o'rtasidagi ochiq muloqot, individual yondashuv va zamonaviy metodikalar sportchilarning ishonchi va natijalarini sezilarli darajada oshiradi.

Kalit so'zlar: kurash, murabbiylik, interfaol metodlar, kommunikatsiya, sport motivatsiyasi, sport ta'limi

Аннотация

В статье рассматриваются современные подходы к тренерской деятельности по борьбе, значение интерактивных методов обучения и влияние эффективной коммуникации между тренером и спортсменом на развитие последних. Исследование проводилось на примере спортивных школ Ташкента, Ферганы и Бухары с целью изучения влияния современных подходов на эффективность занятий и мотивацию спортсменов. Результаты показали, что открытое общение, индивидуальный подход и использование современных методик значительно повышают уверенность и результаты спортсменов.

Ключевые слова: борьба, тренерская деятельность, интерактивные методы, коммуникация, спортивная мотивация, спортивное образование

Abstract

This article examines modern approaches to coaching in wrestling, the importance of interactive teaching methods, and the impact of effective communication between coach and athlete on athlete development. The study was conducted in sports schools in Tashkent, Fergana, and Bukhara to assess the effect of modern methods on training effectiveness and athlete motivation. The findings indicate that open communication, an individual approach, and modern methodology significantly enhance athletes' confidence and performance.

Keywords: wrestling, coaching, interactive methods, communication, sports motivation, sports education

Kirish

Kurash O'zbekistonning qadimiy va milliy sport turlaridan biri sifatida xalqimizning ma'naviy merosi va jismoniy tarbiyasining ajralmas qismiga aylangan. Bugungi globallashuv va raqobatga asoslangan sport muhitida milliy sport turlarini yangi bosqichga olib chiqish, ularni xalqaro standartlarga mos ravishda takomillashtirish dolzarb masalaga aylangan. Ayniqsa, kurash sporti bo'yicha murabbiylik faoliyatini zamon talablariga mos tashkil qilish, ta'limda interfaol metodlardan foydalanish va murabbiy-sportchi o'rtasida samarali kommunikatsiya o'rnatish bugungi kunning asosiy vazifalaridandir. An'anaviy murabbiylik modelida ustozning bir tomonlama ko'rsatmalari, qat'iylik va buyruq asosidagi yondashuvlar

ustuvor bo‘lgan bo‘lsa, zamonaviy sport pedagogikasi bu modelni inkor etib, o‘quvchi shaxsini markazga qo‘yadi. Interfaol metodlar orqali sportchining fikrlashi, tahliliy salohiyati, motivatsiyasi, o‘ziga bo‘lgan ishonchi rivojlantiriladi. Sportda nafaqat jismoniy, balki psixologik, kommunikativ va axloqiy tayyorgarlik ham muhim ahamiyatga ega. Shuning uchun murabbiylik faoliyatida zamonaviy, sportchini rivojlantiruvchi, uning ehtiyojlariga mos metodikalar joriy etilishi lozim. Mazkur maqolada kurash sporti misolida murabbiylik faoliyatining zamonaviy uslublari, interfaol metodlarning ta‘lim jarayonidagi ahamiyati, shuningdek, murabbiy va sportchi o‘rtasidagi muloqot sifatining sport natijalariga ta‘siri ilmiy jihatdan tahlil qilinadi.

Metodlar

Tadqiqot Toshkent shahri, Farg‘ona va Buxoro viloyatlarida joylashgan sport maktablarida faoliyat yuritayotgan kurash murabbiylari va sportchilari ishtirokida olib borildi. Tadqiqotda 15 nafar malakali murabbiy bilan yarim strukturaviy intervyular tashkil etildi. Shuningdek, 60 nafar 14–18 yosh oralig‘idagi sportchilar orasida so‘rovnoma o‘tkazildi. So‘rovnoma savollari sportchilarni mashg‘ulotlardagi ishtirok darajasi, murabbiy bilan muloqot sifati, interfaol metodlar haqidagi tasavvuri, sportga bo‘lgan motivatsiyasi hamda o‘zini baholash ko‘nikmalarini aniqlashga qaratildi. Intervyu savollari esa murabbiylarning ta‘lim uslublari, individual yondashuvlari, mashg‘ulot jarayonida texnologiyalardan foydalanish va sportchilarning psixologik holatini inobatga olishga oid bo‘ldi. Kuzatuv metodidan foydalanib, o‘quv-mashg‘ulot darslarida murabbiylarning interfaol metodlardan qanday foydalanishi, sportchilar faoliyati, ularning qiziqishi va ishtiroki real sharoitda baholandi. Shuningdek, tajriba tariqasida 3 ta guruhda interfaol metodlar asosida darslar o‘tkazilib, ularning samaradorligi boshqa guruhlar bilan solishtirildi[2, 104].

Natijalar

Tadqiqot natijalari sportchilarning mashg‘ulotlarga bo‘lgan munosabati, ishtiroki va natijalari ko‘p jihatdan murabbiyning yondashuvi va metodikasiga bog‘liqligini ko‘rsatdi. So‘rovnomada qatnashgan sportchilarning 78 foizi murabbiy bilan ochiq, erkin muloqot imkoniyati mavjud bo‘lsa, o‘zlarini ko‘proq ishonchli va qulay his qilishlarini bildirishdi. 65 foiz sportchi esa interfaol metodlardan foydalanilgan mashg‘ulotlarda dars mazmunliroq va qiziqarli bo‘lganini,



o'zlashtirish darajasi yuqori bo'lganini ta'kidlashdi. Murabbiylar tomonidan esa individual yondashuv, sportchining psixotipi, ehtiyojlari va saviyasini inobatga olish orqali motivatsiyani oshirish, o'z-o'zini nazorat qilishga o'rgatish kabi natijalar kuzatilgan. Tajriba tariqasida interfaol metodlar asosida mashg'ulot o'tkazilgan guruhda sportchilarning texnik holatlar bo'yicha o'zini baholash ko'rsatkichlari 23% ga oshgan, qatnashuv faolligi esa 32% ko'paygan. Kuzatuvlar sportchilarning o'z murabbiylariga bo'lgan ishonchi ularning sportdagi barqarorligiga bevosita ta'sir qilishini ko'rsatdi. Sportchilar o'zlarining fikrlari inobatga olinadigan, xatolari tushuntirish asosida ko'rsatiladigan va xatolardan o'rganishga imkoniyat beradigan muhitda tezroq rivojlanishlarini aytganlar. Video tahlil, jamoaviy muhokama, rolli o'yin, o'zini namoyon qilish imkoniyati yaratilgan mashg'ulotlar ularda o'ziga bo'lgan ishonchni kuchaytirgan.

Muhokama

Zamonaviy murabbiylik faoliyatida faqat texnik-taktik bilimlarni berish emas, balki sportchini har tomonlama rivojlantirish – shaxs sifatida shakllantirish muhim ahamiyatga ega. Interfaol metodlar orqali sportchining darsdagi faol ishtiroki ta'minlanadi, uning fikrlash salohiyati oshadi, savol berishga va mustaqil qaror qabul qilishga o'rgatiladi. Bu esa sport musobaqalarida tezkor va to'g'ri harakat qilishga asos bo'ladi. Murabbiy va sportchi o'rtasidagi kommunikatsiya sifatining yuqoriligi esa ishonch, hurmat, mas'uliyat va o'zaro qo'llab-quvvatlash muhiti yaratadi. Bu muhitda sportchi xatolardan qo'rqmaydi, aksincha ularni o'rganish vositasi sifatida qabul qiladi. Sportchilar uchun murabbiy faqat topshiriq beruvchi emas, balki yetakchi, maslahat beruvchi va ishonchli shaxs bo'lishi lozim. Shuningdek, sportchining individual ehtiyojlariga qarab mashg'ulotni modifikatsiya qilish, zamonaviy texnologiyalar – videonaliz, statistik tahlil, virtual mashqlarni tatbiq etish, sportchilarning o'zini tahlil qilish ko'nikmasini shakllantiradi [4, 90]. Xalqaro tajriba ham shuni ko'rsatadiki, muvaffaqiyatli murabbiylar psixologik yondashuv, empatiya, kommunikatsion salohiyatga ega shaxslar bo'lib, ular sportchini motivatsion va intellektual jihatdan rivojlantirishga katta e'tibor qaratadilar. Shu bois kurash sportida murabbiylik faoliyatini zamonaviy asosda tashkil etish, interfaol ta'limni keng tatbiq etish, sportchi bilan ochiq muloqotni yo'lga qo'yish eng muhim strategik vazifalardan biri hisoblanadi.



Xulosa

Kurash sportida yuksak natijalarga erishish, sportchilarning jismoniy va ruhiy salohiyatini maksimal darajada rivojlantirish murabbiylik faoliyatining zamonaviy va ilmiy asoslangan yondashuvlariga bogʻliq. Interfaol metodlar, shaxsga yoʻnaltirilgan yondashuv, ochiq va ishonchli kommunikatsiya modeli kurash mashgʻulotlarining sifatini oshiribgina qolmay, sportchilarni mustaqil, fikrlovchi, motivatsiyalangan shaxs sifatida shakllantirishga xizmat qiladi. Shu sababli, har bir murabbiy oʻz faoliyatida interfaol uslublar, zamonaviy texnologiyalar va kommunikatsion malakalarni doimiy ravishda takomillashtirishi zarur. Bu nafaqat sport natijalariga, balki yosh avlodning barkamol yetishishiga ham katta taʼsir koʻrsatadi.

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Yashar Kamol asarlaridagi folklor unsurlari, ramzlar va ularning tarjimalarda berilishi

Shodmonova Dिल्фуза

TDSHU, 10.00.06 – Qiyosiy adabiyotshunoslik, chog‘ishtirma tilshunoslik
tarjimashunoslik ixtisosligi 2-kurs tayanch doktoranti, Toshkent. O‘zbekiston. Tel
+998998440094, E-mail: d.shodmonova@icould.com

Annotatsiya

Jahon adabiyotining tarkibiy qismi hisoblangan turk adabiyotida Yashar Kamol
ijodi alohida o‘rin tutadi. Uning roman va qissalari, hikoya va she‘rlarida milliy
turmush manzaralari, turk qishloqlaridagi kishilar qiyofasi realistik aks ettirilgan.
Adib asarlari dunyodagi juda ko‘p xalqlar tillariga tarjima qilingan va millionlab
kitobxonlarning ma‘naviy mulkiga aylangan.

Kalit so‘zlar: Yaşar Kemal, folklor unsurlari, ramzlar, simbolizm, adabiy
tarjima, madaniy kontekst, turk adabiyoti, o‘zbek tiliga tarjima, milliy identitet

Annotation

Yaşar Kemal's works hold a special place in Turkish literature, which is an
integral part of world literature. His novels, stories, and poems realistically depict
national lifestyle scenes and the characters of people in Turkish villages. The
author's works have been translated into many languages and have become the
spiritual heritage of millions of readers around the world.

Keywords: Yaşar Kemal, folklore elements, symbols, symbolism, literary
translation, cultural context, Turkish literature, translation into Uzbek, national
identity

Аннотация

Творчество Яшара Кемаля занимает особое место в турецкой литературе,
которая является составной частью мировой литературы. В его романах,
повестях, рассказах и стихах реалистично изображены сцены национального
быта и образы людей в турецких деревнях. Произведения писателя переведены
на множество языков и стали духовным достоянием миллионов читателей по
всему миру.

Ключевые слова: Яшар Кемаль, фольклорные элементы, символы, символизм, литературный перевод, культурный контекст, турецкая литература, перевод на узбекский язык, национальная идентичность

Adib xalq, og‘zaki ijodi namunalarini ixlos va e’tibor bilan to‘plagan, asarlarida folklor syujetidan samarali foydalangan. Uning ijodida qishloq hayotining betakror ko‘rinishlari, turk tilining rang-barangligi, boyligi, turklarning milliy xarakteri yorqin namoyon bo‘ladi. Yozuvchi gumanist ijodkor sifatida mavjud voqelikni butun murakkabliklari bilan ko‘rsatish orqali umumbashariy qadriyatlarni, ezgulik uchun kurash g‘oyalarini ulug‘laydi. Shu boisdan Yashar Kamol asarlari jahon badiiy tafakkurini boyituvchi adabiy-estetik hodisa sifatida turli millat ijodkorlari va kitobxonlari nazariga tushgan.

Folklor san’atining turk nasridagi ko‘rinishi Yashar Kamol ijodida barqaror uslubiy tamoyil sifatida namoyon bo‘lgan. Yashar Kamol turk xalq og‘zaki ijodini, xalqning milliy yashash tarzini mohir tasvirlab bergan ijodkordir. Xalq og‘zaki ijodiga xos elementlarning muayyan adib yaratgan badiiy asar matndan o‘rin olishi o‘sha asarning badiiy-estetik qiymatini oshiradi. Folklor unsurlarining Yashar Kamol ijodida keng o‘rin egallaganligi adib dunyoqarashi, bilim darajasi, tafakkur va tasavvur olamining kengligidan, ko‘lamdorligidan dalolat beradi.

“Sevgi afsonasi” romanida ko‘plab afsonalar bilan bog‘liq o‘rinlarga duch kelamiz. Yozma badiiy adabiyot har doim xalq og‘zaki ijodidan bahramand bo‘lgan, undan ta’sirlangan, o‘sha asos tufayli badiiy-estetik jihatdan boyigan. Dunyo adabiyoti durdonalari ichida bunda istagancha misol topiladi. Ma’lum bir yozuvchining alohida asarini shu ilmiy tamoyil negizida o‘rganish juda muhim ahamiyatga ega, albatta. Yashar Kamolning xalq og‘zaki ijodi sarchashmalari bilan sug‘orilgan “Sevgi afsonasi” romani ana shu jihatlari bilan e’tiborga loyiqdir. “Ot – murod”, – deydi dono xalqimiz. “Sevgi afsonasi” romanining muqaddimasida tog‘lik jasur yigit – Ahmadning eshigiga kelgan ot ham uning murodi, qismati ekanligi asar davomida anglashiladi.

Qahramonlik tipidagi xalq dostonlarida jangovar ot obrazi bosh qahramon darajasiga ko‘tarilgan asosiy obrazlardandir. Inchunun, Alpomish, Go‘ro‘g‘li, Manas kabi qahramonlarni ularning doimiy hamrohi – otsiz tasavvur etish qiyin. “Sevgi afsonasi” romanida ham voqealar rivoji bevosita ana shu obraz zamirida

yuzaga kelgan. Yashar Kamol bu obrazga xalq dostonlarida bo‘lganidek katta “yuk” yuklaydi.

Avvalo, ot tasviriga e’tibor beraylik: “Otning ustida kumush bezakli, naqshinkor, cherkes ustalar yasagan bir egari bo, uzangasi naqsh solingan kumushdan yasalgan. Otning oltin suvi yurgizilgan jilovi egarning oltin, sadaf qadalgan qoshiga ildirib qo‘yilgan” (SA.2021, 8). Ot anjomlarini tasvirlashda qo‘llanilgan bunday sifatlashlar dostonlarimizdagi ot anjomlari tasviriga har jihatdan yaqin. Bir misol:

Uzangisi o‘yma oltin,
Quyushqoni quyma oltin.
Egarining qoshi oltin,
Turmushining bari oltin¹.

Ot anjomlarining oltin, kumush, sadaf bilan bezatilgani, bir jihatdan bu otning oddiy emas balki og‘zaki ijodda bot-bot takrorlanuvchi “nazarkarda”, “yulduzni ko‘zlovchi” zotdor ot ekanligiga ishora qilsa, boshqa jihatdan turkiy xalqlarning otga bo‘lgan munosabati, hurmat – ehtiromi haqida ham tasavvur hosil qilishda yordamchi komponent vazifasini o‘taydi.

Tarihiy manbalarning guvohlik berishicha, turkiylar otni shu qadar e‘zozlashganki, unga oilaning bir a‘zosi sifatida munosabatda bo‘lishgan². Gerodot, Strabon kabi tarixchilarning asarlarida yuqoridagi fikrlarimizni tasdiqlovchi faktlar mavjud. Jumladan, O‘rta Osiyo yerlari qimmatbaho ma‘danlarga boy bo‘lgani va O‘rta Osiyoliklar ot anjomlariga ana shular bilan bezak berganliklari qayd etiladi³. Binobarin, “Sevgi afsonasi”dagi ot anjomlari tasviri bilan bog‘liq, yuqoridagi lavha yozuvchi tomonidan shunchaki o‘ylab topilgan epitet, sifatlash emas, balki tarixiy haqiqatning asardagi badiiy ifodasi, deyishga asos bor. Ot anjomlaridagi quyosh, hayot daraxti tasvirlari ham turkiy ajdodlarning dunyoqarashidan darak beradi.

Ma‘lumki, turkiylarda quyosh daraxti tiriklik, oydinlik ramzi tarzida talqin etilgan. Shuning uchun ular qoyatoshlarga, terilarga, buyumlarga qabilalar o‘z tug‘lariga bularning rasmini solishgan. “Kigiz yoping‘ich ustidagi olovrang quyosh rasmining yonida baland, yam-yashil hayot daraxtining rasmi ham ko‘zga

¹ Ravshan: xalq og‘zaki iodi. – Toshkent : YangiyurPoligraph Service, 2019, – B.28.

² Kafesoğlu İbrahim. Turk Milli Kültürü. – İstanbul: Boğaziçi Yayınları, 1988. – S.207.

³ Древние авторы о Средней Азии. – Ташкент: Гостехиздат, 1984. – С.110; Тилавов А. Ўзбек халқ дostonларидаги от образининг тарихий асослари ва бадний талқини. Филол. ф. номзод. дисс. ... автореф. – Тошкент: 2002. – Б. 10.

tashlanadi” (SA. 2021,9) deyiladi asarda. Asarda onomastika izlarini sezish qiyin emas. Ko‘pni ko‘rgan, tajribali So‘fiy otning bo‘yniga osilgan tamg‘adagi tasvirlarni ko‘rib qo‘rqadi. O‘tmishda ajdodlarimizda ba‘zi narsalarni xosiyatsizlik, baxtsizlik alomati tarzida irim qilish ishonchi bo‘lgan.

Ana shu jihatlari bilan Yashar Kamol talqinidagi ot obrazi turkiy xalqlar dostonlaridagi mifologik ot obraziga yaqin turadi.

Xalq orasida o‘ta ustamon, ishiga pishiq, insonlarga nisbatan “shayton”, “shaytonga dars beradi” kabi sifatlar ishlatiladi. “Yer yorilib kirib ketishgan bo‘lsa-da, topaman” deb oyoq, tirab turgan Poshshoga Kurt beklaridan biri Mulla Karim shunday deydi: “Poshshom, bu Girit tog‘ida biz bu odamlarni yana ming yil qidirsak-da, topolmaymiz. Bu tog‘liklar shunday yashirinadilarki, ularni shayton ham topolmaydi” (SA. 2021,58). Xalq, og‘zaki ijodi namunalarida ilm, hunar olishga targ‘ib qilinadi. Qahramonning komillik sifati tarzida uning ilmli, tajribali ekani alohida ta’kidlanadi.

Xalq, og‘zaki ijodidan yaxshi xabardor bo‘lgan Yashar Kamol “Ogiritog‘i nolasi”da ana shu an’anani davom ettirgan. Asarda zolim, qahri qattiq ota sifatida gavdalangan hukmdor – Mahmud poshshoning aslida ilmli kishi ekanligi, hatto otasining Arzurum madrasasida tahsil olgani ilm ahliga xayrihoh, bo‘lgani, saroyga tez-tez olimlar, baxshilarni to‘plagan eslatib o‘tiladi (SA. 2021,24).

Mahmud poshshoning qizlari ta’riflanayotganda: “Gulruh opalari orasida o‘qishga rosa qiziqar edi. Ahmadiy Xoniyning she’rlarini yoddan bilar, otasining devonida bolaligidanoq, she’r o‘qirdi. Otasi farzandlari ichida Gulruhni ko‘proq, yoqtirar edi” (SA. 2021,19), deyiladiki, bu ham poshshoning ilmga rag‘bati, munosabatini bildiruvchi lavhadir. Darvoqe, asar qahramonlari portreti tasvirida ham biz turk xalqining o‘sha davrlarga xos kiyinish madaniyati, milliy o‘ziga xosligi, axloq-odob mezonlari haqida qimmatli ma’lumotlar olamiz.

Yashar Kamol Gulbahorning portretini shunday chizadi: “Gardanligi oltindan edi. Oyoq, bilaklariga Ogiritog‘ilik ayollar kabi oltin marvarid, zumrad halqalar taqardi” (SA. 2021,14). Bu o‘rindagi tasvirlar ham shunchaki badiiy tasvir vositalari emas, mavjud tarixiy haqiqatning asardagi badiiy ifodasidir. Chunonchi, tarixiy manbalarning guvohlik berishicha, qadimda turkiy xalqlar yashagan hududlarda oltin, marvarid kabi qimmatbaho toshlar mo‘l bo‘lgan va bu ayollarning kiyinishida o‘z aksini topgan. O‘rta Osiyoda arxeologlar olib borgan qazilma ishlari natijasida topilgan ko‘plab qimmatbaho taqinchoqlar fikrimizning dalilidir.



Gulbahorning yana bir fazilati – uning usta chavandozligidir. Bizga ma'lumki, ajdodlarimizda nafaqat erkaklar, balki ayollar ham otga minish, uni tarbiyalash san'atini bilishgan. Gulbahorning otga mehri ham bo'lakcha edi. Binobarin, otasining oti haqidagi mojaro uni befarq qoldirmaydi. Bu voqeaning tafsilotlarini bilishga harakat qiladi, zindonga tushgan So'fiydan bu haqida tinmay savollar so'raydi. So'fiy: “Bu ot Ahmadga yodgordir. Haq uni Ahmadga yubordi. Ahmad otni hech kimga bermaydi. Bersa bo'lmaydi. Butun Og'ritog'i o'lsa o'ladiki, biroq ot berilmaydi” (SA. 2021,45) deydi.

Xalq ogzaki ijodi namunalarida, xususan, dostonlarda qahramonning o'z dardi, iztiroblari, niyatlarini soz chalib yoxud qiyofani o'zgartirib “aytish” detallari mavjud. “Sevgi afsonasi”da ham zindonband qilingan So'fiy Gulbahorga Og'ritog'i xalqining dardini sibizg'ada chalib aytadi

Turkiy xalqlar dostonlarida tez-tez uchrab turadigan mushtarak motivlardan biri – tutqunlik, zindon motividir. Zindonda qahramonning xarakteri, ruhiyati, fazilatlari yanada yaqqolroq namoyon bo'ladi. Zindonband So'fiyni huzuriga chaqirgan xon: “Ot kelmay, Ahmad kelmay, seni zindondan chiqarmayman”, – deydi. Shunda So'fiy: “Ot ham, Ahmad ham kelmaydi. Ot Ahmadga Haqdan yodgordir. Ahmad kelsa ham ot kelmaydi. Men ham Ahmadni senga keltirmayman” (SA. 2021,51), deya dadil so'zlaydi. Bu so'zlardan uning qat'iyatliliigi, irodasi mustahkamligi va do'stga sadoqati namoyon bo'ladi. Xalq, dostonlarida zindon motivi bilan bog'liq xarakterli bir jihat bor. Zindonga tashlangan mahbuslarga hukmdorning qizlari yordam berishadi. Masalan, “Alpomish”da Alpomishga Qalmoq shohning qizi Tovkasoy bevosita yordam bersa⁴, “Dada Qo'rquq”da Tamanin qal'asidagi bir quduqqa tashlangan Salor Qozonga hukmdor Takurning xotini yordam beradi⁵. Folklorshunos Jabbor Eshonqulov qahramonlarning tutqunlik holati tasodifiy bo'lmay, bu ularning tug'ilishidanoq taqdiriga bitilgan alplik maqomiga erishuvdagi navbatdagi sinov ekanini ta'kidlaydi⁶. Ushbu fikrni ma'lum ma'noda “Sevgi afsonasi”dagi tutqunlik epizodiga ham tadbiiq etish mumkin. Chunki So'fiy ham Ahmad ham zindonga tushib nochor qolishganda ham tushkunlikka tushmaydilar, qarorlarini o'zgartirmaydilar, o'zlarini haqiqiy alplardek tutadilar.

⁴ Алдомиш. Айтувчи Фозил Йўлдош ўғли. – Тошкент: Шарк, 1998. – Б. 274.

⁵ Metin Ergün. Dede Korkut Kitabı. – İstanbul: Ebru Yayınları, 1980. – S.214.

⁶ Эшонқулов Ж. Фольклор: Образ ва талқин. – Қарши: Насаф нашриёти, 1999. – Б. 123.



J.Eshonqulovning fikricha, qahramonning tutqunligi, uning narigi dunyoga safari bo‘lib, qayta tug‘ilishi, bir maqomdan ikkinchi maqomga ko‘tarilishi kabi bir necha ramziy, mifologik ma‘no ifodalaydi. Biroq, “Sevgi afsonasi”dagi tutqunlik bilan bog‘liq, lavha ramziylikdan, mifologik talqindan ko‘ra ko‘proq, hayotiylik kasb etadi.

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UDK: 916; 796.5

ORCID: 0009-0005-9461-8542

FARG‘ONA VODIYSIDA ZIYORAT TURIZIMIDAN FOYDALANISH MASALALARI

Abdimo‘minov Tog‘oy nazar Abdinaxat o‘g‘li

Termiz davlat pedagogika instituti

Texnologiya va geografiya kafedrası o‘qituvchisi

E-mail: togoy nazar abdimominov@gmail.com

Xoliqov Xasanjon Imomnazar o‘g‘li

Termiz davlat pedagogika instituti talabasi

Annotatsiya. Ushbu maqolada Farg‘ona viloyatida turizmni rivojlantirish imkoniyatlarini baholash bo‘yicha olib borilgan tadqiqot natijalari keltirilgan. Shuningdek, viloyatda turizmni rivojlantirish bo‘yicha taklif va tavsiyalar berilgan.

Kalit so‘zlar: ekoturizm, ziyorat turizm, agroturizm, tarixiy turizm, madaniy turizm, turistik obyektlar, milliy hunarmandchilik maskanlari, turistik guvohnoma.

Bugungi kunda turizm jahonda eng tez rivojlanayotgan soha hisoblanadi. O‘zbekistonda ham so‘ngi yillarda turizmni rivojlantirish uchun bir qancha amaliy ishlar amalga oshirilmoqda. Xususan, ziyorat turizmini rivojlantirish uchun mamlakatimizda yetarlicha qadimiy obidalar va ziyorat maskanlari mavjud. Ziyorat turizmi haqida o‘zbek islomshunos olimi B.M.Bobojonov, Markaziy Osiyoda ziyorat obyektlarining eng keng tarqalgan turi, bu – “Muqaddas qadamjolar” hisoblanishini aytib o‘tgan. Surxondaryo viloyatlari tarixiy obyektlarini me‘morchilik, arxitektura nuqtai nazaridan o‘rganish olim I.Azimovning tadqiqotida ko‘zga tashlanadi.

Jahon sayyohlik va turizm kengashi (WTTC) ning 2020 yil mart oyida e‘lon qilingan hisobotiga ko‘ra turizm va sayohat sektori 2019-yilda 3,5 foizga o‘sib, ketma-ket to‘qqizinchi yil davomida jahon iqtisodiyotidan (2,5 foiz) o‘zib ketdi. So‘nggi besh yil ichida mazkur soha har to‘rtinchi yangi ish o‘rnini yaratdi va bu sohani bandlik muammolarini hal qilishda eng yaxshi hamkorga aylantirdi. Shuningdek:



- jahon yalpi ichki mahsulotiga qo'shgan hissasi 8,9 trillion AQSH dollari;
- jahon yalpi ichki mahsulotidagi ulushi 10,3%;
- dunyo bo'yicha 330 million ish o'rni yoki dunyodagi har o'ninchi ish o'rni turizmga taalluqli;
- 948 mlrd dollar kapital qo'yilmalar (umumiy investitsiyalar hajmining 4,3%) aynan turizm va sayohatning ulushiga to'g'ri keladi.

O'zbekiston Respublikasi Markaziy Osiyo davlatlari ichida turistik salohiyati bo'yicha yetakchi mamlakatlar qatorida turadi. So'nggi yillarda Prezidentimiz Sh.M.Mirziyoyev tomonidan ushbu sohani rivojlantirishga qaratayotgan yuksak e'tibori tufayli O'zbekistonda turizm taraqqiyotining yangi davri boshlandi. Jumladan, prezidentimiz tomonidan turizmni rivojlantirishga qaratilgan bir qator qaror va farmonlari ushbu sohada to'planib qolgan muammo va kamchiliklarni, shuningdek turizm taraqqiyotiga to'sqinlik qilayotgan holatlarni bartaraf etilishiga chinakam yechim bo'lmoqda desak mubolag'a bo'lmaydi [2].

Ushbu sohani jadallik bilan rivojlantirish maqsadida mamlakatimizda 90 dan ortiq normativ huquqiy hujjatlar qabul qilindi. 2021 yilning 15 mart holatiga ko'ra mamlakatimizda 90 ta xorijiy mamlakat fuqarolari uchun vizasiz rejim tatbiq etildi. 2018 yil 15 iyuldan elektron kirish vizalarini berish tizimi yo'lga qo'yildi va bu tizimdan 57 ta davlat fuqarolari foydalanish imkoniyatiga ega bo'ldi. 2016 yilda 1,3 million nafar xorijiy davlat fuqarolari mamlakatimizga sayyoh sifatida tashrif buyurdi. Bu ko'rsatkich 2019 yilda 6,7 million nafarga yetdi [3].

Tasavvuf namoyandalarining qadamjolar va ziyoratgohlar, ularning tarixi, ziyorat turizmi to'g'risida A.Mamanazarov, B.Sattorov, O.Poslavskaya, S.Jo'rayeva tadqiqotlar olib borgan. O'zbekiston hududida ziyoratgohlar masalasini o'rganishda ziyoratgoh nomi bilan bog'liq shaxsni personifikatsiya (avliyo, pir, said, xo'ja) maqomi va darajasini tadqiq qilish ham muhim sanaladi. T.Dadabayev, E.Karimov tadqiqotlarida ham ziyorat masalasining turli jihatlarini yuzasidan fikr-mulohazalar keltirilgan. Jumladan, D.Abramson va E.Karimov hammuallifligida yozilgan maqolada, Markaziy Osiyo xalqlari hayotida ziyorat joylarning ahamiyati, turli davrlarda ularga bo'lgan munosabat tahlil qilinadi.

O'zbekistonning har bir hududi o'ziga xos turistik salohiyatga ega. Shu jumladan, Farg'ona viloyati ham turizmni rivojlantirish imkoniyati yuqori



bo'lgan mamlakatning eng so'lim go'shalaridan biri xisoblanadi. Farg'ona viloyatining xushmanzara tabiati, takrorlanmas iqlimi, o'ziga xos bo'lgan relyef shakllari, daryo va soylari turizmining barcha yo'nalishlarini rivojlantirish uchun keng imkoniyat yaratadi, shuningdek, turizmning barcha ko'rinishlarini bo'yicha sayyohlar uchun barcha xizmat turlarini taqdim etish imkoniyatiga ham ega hisoblanadi. Ammo, bu imkoniyatlardan foydalanish darajasi hamon pastligicha qolib kelmoqda.

Farg'ona vodiysi O'zbekistonning qadimiy, madaniy va diniy markazlaridan biri bo'lib, yuzlab muqaddas qadamjolarga ega. Bu joylar alohida ahamiyatga ega

nafaqat diniy e'tiqod nuqtai nazaridan, balki nuqtai nazardan ham muhim ahamiyatga ega turizm salohiyati. Farg'ona vodiysi ziyorat turizmi orqali tobora rivojlanib bormoqda nafaqat mahalliy sayyohlar, balki chet elliklar uchun ham qiziqarli va tarixiy manzil mehmonlar. Bugun O'zbekistonda turizmning barcha yo'nalishlari qatori ziyorat turizmi ham rivojlanib bormoqda. Ushbu turdagi turizm orqali fuqarolar sayohat qilish imkoniyatiga ega diniy va tarixiy maskanlarni o'rganish, ulardan ma'naviy saboq olish. Xuddi o'sha payt, ziyorat turizmi iqtisodiy, ijtimoiy va madaniy jihatdan muhim o'rin tutadi. Shu bilan birga, sohani rivojlantirishda ayrim muammolar mavjud. Shu bilan birga vaqt, bu sohada ham katta imkoniyatlar mavjud. Ziyorat turizmi O'zbekistonda turizmning ustuvor yo'nalishlaridan biri sifatida rivojlanayotgan tarmoq hisoblanadi. Ayniqsa, keyingi yillarda diniy qadriyatlar, tarixiy obidalar tiklandi hamda ziyorat turizmi ommalashdi. Bu sektor muhim o'rin tutmaydi faqat iqtisodiy, balki ijtimoiy va ma'naviy jihatdan ham.

Farg'ona vodiysida ziyorat turizmining tarixiy ildizlari, ularning diniy-madaniy hayotdagi o'рни va zamonaviy sharoitda ushbu sohani rivojlantirish sharoitlarini o'rganish bugungi kunda muhimdir. Ishda tarixiy asoslangan tahliliy yondashuv qo'llaniladi manbalar, me'yoriy-huquqiy hujjatlar, statistik ma'lumotlar va zamonaviy ilmiy tadqiqotlar olib borilgan.

Farg'ona vodiysi eng qadimiy sivilizatsiya markazlaridan biridir. Yuzlab muqaddas qadamjolar, tarixiy masjidlar, diniy maqbaralar Farg'ona vodiysida mavjud. Shahriston Xoja maqbarasi (Andijon), Xoja kabi ziyoratgohlar Amin maqbarasi (Namangan), Xonqa masjidi (Qo'qon), Pirsiddiq bobo Ziyoratgoh (Farg'ona), Norbo'tabiy (Qo'qon) masjidi katta ahamiyatga ega. diniy e'tiqod,



tarixiy xotira va turistik qiziqish atamalari va shular jumlasidandir mahalliy va xorijiy sayyohlar tashrif buyuradigan joylar.

Farg‘ona vodiysi ziyorat turizmi uchun ulkan tarixiy, madaniy va diniy salohiyatga ega. Qadimgi ziyoratgohlarni ilmiy tadqiq etish muhim vazifalardan biri bo‘lib, hududdagi ziyoratgohlarni zamonaviy jihozlash, zamonaviy turizm uyg‘unligini shakllantirish muhimdir.

Ushbu ish jarayonida aniqlanganidek, ziyorat turizmi mumkin nafaqat iqtisodiy, balki ma‘naviy-ma‘rifiy manfaatlar ham keltiradi. Bu jamiyatning ma‘naviy uyg‘onishiga hissa qo‘shadi. Ziyorat turizmi milliy qadriyatlarni targ‘ib qiluvchi, iqtisodiy va ma‘naviy manfaat keltiradigan turizm yo‘nalishidir. Uning rivojlanishi ishonchli huquqiy bilan bevosita bog‘liq asoslar. Shu asosida Farg‘ona vodiysini ilg‘or hudud sifatida shakllantirish mumkin. Farg‘ona vodiysi o‘zining muqaddas qadamjolari bilan nafaqat diniy qadriyatlar markazi, balki sayyohlik salohiyati yuqori hudud sifatida ham e‘tirof etilgan.

Turizm hozirgi vaqtda eng tez rivojlanayotgan dunyo iqtisodiyotining yetakchi tarmoqlaridan biri hisoblanadi. Jahon sayyohlik va turizm kengashi (WTTC) ning ma‘lumotiga ko‘ra turizm va sayohat sektori jahon yalpi ichki mahsulotining 10,3 foizini tashkil etadi, dunyodagi har to‘rtta yangi ish o‘rni turizm sektorlari tomonidan yaratiladi va to‘qqiz yil ketma-ket jahon iqtisodiyoti o‘sishidan o‘zib ketdi [4].

Shu bois ushbu sohani rivojlantirish uchun mukammal tadqiqotlar olib borish, sohani rivojlantirish uchun asoslangan taklif va tavsiyalar ishlab chiqish talab etiladi. Mazkur tadqiqot ishi ham shu maqsadda olib borildi. Farg‘ona deganda avvalambor O‘zbekistonimizning gavhari bo‘lgan go‘zal diyor ko‘z o‘ngimizda namoyon bo‘ladi.

Xo‘ja Ilg‘or Muhammad Al-Hanafiy va Mulla Ismatulloh ziyoratgohi XX asrga mansub. Ziyoratgohning maqbarasi XX asr arxitektura yodgorligi sifatida Farg‘ona vodiysidagi eng qadimgi va muqaddas qadamjoldan biri hisoblanadi. Muhammad Xanafiya Xo‘ja Ilg‘or va Mulla Ismatulloh ziyoratgohini o‘ziga xos me‘morchilik ansambli deyish mumkin. Xo‘ja Ilg‘or deb Muhammad ibn Al-Hanafiy Hazrat Alining avlodlari qadamjolari tushuniladi.

Xo‘ja Ahmad Valiy ziyoratgohi ziyoratgohning maqbarasi XX asr arxitektura yodgorligi sifatida Farg‘ona vodiysidagi eng qadimgi va muqaddas qadamjoldan biri hisoblanadi. Xo‘ja Ahmad-Valiy to‘g‘risida ma‘lumotlar deyarli uchramaydi.



Faqatgina ayrim rivoyatlar saqlanib qolgan. Rivoyatga ko‘ra u Hazrat Alining jilovdori bo‘lgan. Yana bir rivoyatga ko‘ra Xo‘ja Ahmad Valiy yetti aka-ukalardan biri bo‘lib, Xo‘ja Ahmad Yassaviyning avlodlaridan ekan.

Bobo Ahtam va Bobo Qambar ziyoratgohi XVIII asrga mansub. Ziyoratgohning maqbarasi XVIII asr arxitektura yodgorligi sifatida Farg‘ona vodiysidagi eng qadimgi va muqaddas qadamjolardan biri hisoblanadi. Oq ota mozoridagi ikkinchi ziyoratgoh Bobo Ahtam ziyoratgohidir. Ushbu ziyoratgohning ikkinchi nomi Oq ota ziyoratgohidir. Bu ziyoratgohni Sahoba Bobo Ahtamning qadajoyi degan taxminlar bor. Ahtam Hazrat Alinig amakisining o‘g‘li bo‘lganligi tilga olinadi. Mustaqillik yillarida bu maskan yanada chiroy ochdi. Ahmad Farg‘oniy, Burhoniddin Marg‘iloniy kabi allomalarimizning hamda Marg‘ilon shahrining yubileyleri jahon miqyosida nishonlanishi xorijliklarning bu zaminga bo‘lgan qiziqishlarini yanada orttirib, sayyohlik salohiyati yuksalishiga xizmat qilmoqda. Ayni paytda Farg‘onaga tashrif buyurayotgan mehmonlar uchun Marg‘ilon, Qo‘qon va Farg‘ona shaharlari hamda Quva tumani bo‘ylab sayyohlik yo‘nalishlari tashkil etilmoqda.

Yangi sayyohlik yo‘nalishlari Marg‘ilonda Burhoniddin Marg‘iloniy, Said Ahmad Eshon majmualari, Pirsiddiq Hazrat chillaxonasi va maqbarasi, Uvaysiy uy muzeyi, hunarmandlar ustaxonasi, Qo‘qon shahridagi O‘rda saroyi va unda joylashgan o‘lkani o‘rganish muzeyi, Jome va Komol qori masjidleri, Norbo‘tabiy majmuasi, Madalixon tarixiy obidalari, Farg‘ona shahri hamda Quvadagi Ahmad Farg‘oniy majmualari bo‘ylab uyishtirilayotgan ekskursiyalar sayyohlarda katta taassurot qoldirmoqda.

Milliy hunarmandchilik mahsulotlari ko‘rgazmasining tashkil etilishi ham yangi imkoniyatlarga yo‘l ochmoqda. Farg‘ona vodiysi o‘zining hunarmandchilik ustaxonalari bilan mashxur. Farg‘onadan olib kelinadigan eng ko‘p sovg‘alar – kulolchilik, yog‘och o‘ymakorligi mahsulotlari va albatta, xon atas, adras va ipak kabi to‘qimachilik buyumlari hisoblanadi. Agar siz ozgina qimmatbaho vaqtingizni sarflab Farg‘onadan 50 km uzoqlikda bo‘lgan Rishtonga borsangiz, unda siz kulolchilik makoniga tushasiz. Bu yerda kulolchilikning nodir namunalarini uchratasiz. Farg‘ona viloyati nafaqat madaniyati balki totli, sarxil mevalari, o‘ziga xos tabiat manzaralari bilan ham ko‘pchilikning e‘tiborini tortadi. Beshariq tumanidagi Shodoqoziq va Sarikalish fermer xo‘jaliklari ko‘llari



sayyohlarning baliq ovi orqali hordiq chiqarishlari uchun xizmat ko'rsatmoqda. Bu yerda sayyohlar uchun qulayliklar yaratilgan.

Farg'onada har yili noyob palov tayyorlash an'ana tusiga aylangan bo'lib, butun vodiya bo'lgani kabi, bu taomni tayyorlash uchun maxsus guruch navi – devzira ishlatiladi. Bu guruch noodatiy qizil jigarrangga ega bo'lib, ta'm jihatdan palov uchun juda mos keladi. Noyob lazzatni kasb etish uchun qoida tariqasida sarimsoq ishlatiladi. U guruch qo'shmasdan turib butunligicha solinadi. Bu lazzatli taomni tatib ko'rish uchun jaxonning ko'plab mamlakatlaridan sayyohlar tashrif buyuradi. Bu Farg'ona viloyatida turizmning gastronomik yo'nalishini rivojlantirishga katta imkoniyat yaratadi.

Farg'ona viloyatida so'nggi yillarda turizmning ekoturizm, agroturizm va hunarmandchilik turizmini xorijiy va mahalliy investitsiyalar yordamida yanada rivojlantirish bo'yicha yirik loyihalar amalga oshirilmoqda. Bundan tashqari, xorijiy turistik tashkilotlar va ommaviy axborot vositalari vakillari uchun „Mega-info-tur tanishtiruv tadbirlari tashkil etilmoqda.

Farg'onaning turistik resurslar bilan yuqori darajada taminlangan shaharlari Qo'qon, Farg'ona va Marg'ilon hisoblanadi. Ushbu shaharlar turistik resurslar bilan taminlanganligi, mavjud xizmat ko'rsatish tarmoqlarining rivojlanganligi, shunga monand turistlarning tashrif ko'rsatkichlari bo'yicha alohida ajralib turadi. Mazkur shaharlarda aholi soni ko'p bo'lib, xizmat ko'rsatish, transport va aloqa tizimi yaxshi rivojlangan. Farg'ona viloyatining Oltiariq, Farg'ona, Buvayda, Rishton, Toshloq tumanlari hamda Quvasoy shahrida turizm o'rtacha darajadagi rivojlangan hududlar hisoblanadi. Mazkur tumanlar ichida O'zbekiston, Oltiariq, Farg'ona tumanlari turistik resurslarga boy hisoblanadi. Shunga qaramay, ushbu imkoniyatlardan yetarli darajada foydalanilmayotganligini ko'rishimiz mumkin.

Ziyorat bu - yaratganga murojaat qilish, ko'ngil va qalb xotirjamligiga erishish, avliyolik haqiqatini anglash, yolg'izlik va poklanish yo'lidan o'tish imkoniyatidir. Markaziy Osiyoda bu ziyorat deb ataladi, ya'ni muqaddas joylarni ziyorat qilish demakdir. O'zbekiston har doim ko'plab madaniyatlar va sivilizatsiyalar kesishgan markaz bo'lib kelgan va bu yerda turli dinlar targ'ib qilingan, shuning uchun ham islom, buddaviylik va nasroniy dinlari bilan bog'liq noyob yodgorliklar saqlanib qolgan.



Farg‘ona vodiysi xususan Farg‘ona viloyatining Beshariq, Dang‘ara, Quva, Qo‘sh tepa, Bog‘dod, Uchko‘prik, So‘x, Yozyovon, Furqat tumanlarida turizm sohasi quyi darajada rivojlangandir. Bu hududlarda turizmning ayrim turlarini yuqori darajada rivojlantirishning imkoni bo‘lsada (masalan: So‘x tog‘li hududlarida, Yozyovonda suv ombori ekoturizmini rivojlantirish mumkin), past darajadagi rivojlanish ko‘rsatkichlari bilan cheklangan. Tahlillar shuni ko‘rsatadiki, bugungi kunda yurtimiz bo‘ylab faoliyat olib borayotgan sayyohlik tashkilotlarining 150 dan ortig‘i Farg‘ona viloyatida joylashgan bo‘lib, viloyatning qulay sharoiti turizmni rivojlantirish uchun katta imkoniyat yaratadi. Ayniqsa, Sirdaryo sohillari atrofidagi so‘lim go‘shalar, unga tutash hududlarda tarqalgan to‘qay o‘simliklari, osmonga bo‘y cho‘zgan manzarali daraxtlar, tog‘ yonbag‘irlari bo‘ylab o‘sayotgan dorivor giyohlar, tabiiy o‘rmonlar, baliqchilik xo‘jaliklari, muhofazaga olingan hayvonot dunyosi, turli xil tabiat yodgorliklari bilan tanishish nafaqat mamlakatimiz sayyohlarini balki, xorijlik turistlarni ham befarq qoldirmaydi. Albatta, bu imkoniyatlardan unumli foydalanish mamlakatimiz iqtisodiyotining jadallik bilan o‘shishiga ijobiy ta‘sir ko‘rsatadi.

Farg‘ona viloyatining turistik salohiyati yuqori ekanligini keltirilgan ma‘lumotlar isbotlab turibdi. Bu imkoniyatlardan samarali foydalanish uchun tizimli chora tadbirlar amalga oshrish talab etiladi. Bu borada bir qator takliflar berish mumkin. Misol uchun O‘zbekiston Respublikasiga tashrif buyurayotgan turistlar uchun eng avvalo aviachiptalarning narxlarini arzonlashtirish va turistlar uchun alohida yashash joylarini tashkillash lozim. Bu joylarda sayyohlar uchun qulay sharoitlar yaratish zarur. To‘g‘ri, hozirgi kunda mehmonxonalar yetarlicha mavjud, ammo, ularning hammasida yetarlicha sharoit mavjud emas. Shuning uchun, turistlarni jalb qilish maqsadida jaxon talablariga javob beradigan besh yulduzli mehmonxonalarni tashkillash va ularda qulay narxlar belgilash zarur. Bundan tashqari turistlar uchun vaqtinchalik turistik guvohnomasini tashkillash ham yaxshi samara beradi deb hisoblaymiz. Bu guvohnomalarni ma‘lum muddatga, masalan 1 oy yoki 1 yilga berilishi mumkin. Endi guvohnomaning imkoniyatlariga kelsak, bunday guvohnomani olgan turistlar uchun yana qayta mamlakatga tashrifida turistik xizmatlar uchun arzonroq narx belgilash kerak. Bu turistlarni mamlakatga yana qayta tashrif buyurishga qiziqish uyg‘otishi mumkin.



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LINGUISTICS AS SCIENCE ABOUT LANGUAGE

Adilova Zilola Xushnudovna

Tashkent International University of Financial Management and Technologies

Teacher of the Department of “Foreign Philology”

Tel: +998914374427

Email: zilolaxush@gmail.com

Abstract. Linguistics studies languages as defined code system adopted is a particular group of people for communication. In linguistics defined two levels of language learning: the mastery of correct speech, language subordinate standards, and mastery of appropriate speech and communicative qualification. Currently, the practice is becoming increasingly common ability of the individual visual to communicate in two or more languages, which is becoming increasingly important in the life of society.

Key words: linguistics; language; linguistic basis of language learning; language teaching methodology as a science.

Linguistics is one of the most ancient sciences. Having separated from the animal world and having begun to recognize himself as a subject opposed to nature as an object of his practical and cognitive activity, man turned his attention to himself. The subject of his reflections became himself, namely his place in the universe, the secrets of his origin, his physical and mental properties, his ability to communicate with his own kind, language as the main means of such communication, various aspects of the linguistic phenomenon.

The term "linguistics" is derived from the French word *linguistique* (*lingua* - "language"). It is a science about language, studying its many aspects: text linguistics, applied linguistics, mathematical, descriptive.

Linguistics studies not only existing (existing or possible in the future) languages, but also human language in general. In the broad sense of the word, linguistics is divided into scientific, i.e., presupposing the construction of linguistic theories, and practical. Most often, scientific linguistics is implied by linguistics.

Theoretical linguistics studies the laws of language and formulates them as theories. It can be descriptive (describing real speech) and normative (indicating how one “should” speak and write).



Linguistics includes observation; recording and description of speech facts; putting forward hypotheses to explain these facts; formulating hypotheses in the form of theories and models describing language; their experimental verification and refutation; forecasting speech behavior. Explanation of facts can be internal (through linguistic facts) or external (through physiological, psychological, logical or social facts).

One of the most important concepts of modern linguistics is the concept of units of language: word, sentence, phrase, syllable, phoneme, etc.

Linguistics is divided into sections according to different aspects of its subject: grammar (studies and describes the structure of words and word inflection, types of phrases and types of sentences);

- graphics (investigates the relationships between letters and signs);
- lexicology (studies the vocabulary of a language, or lexicon);
- morphology (rules for constructing nominative units (word forms) from the simplest significative units (morphemes) and, conversely, dividing word forms into morphemes);
- onomastics (studies proper names, the history of their origin and transformation as a result of long-term use in the source language or in connection with borrowing from other languages of communication);
- orthography (spelling, a system of rules that determine the uniformity of methods of conveying speech in writing);
- pragmatics (studies the conditions under which speakers use linguistic signs);
- semantics (the semantic side of language);
- semiotics (studies the properties of sign systems);
- stylistics (studies the various expressive possibilities of language);
- phonetics (studies the features of speech sounds);
- phonology (studies the structure of the sound system of language and the functioning of sounds in the language system);
- phraseology (studies stable turns of speech); – etymology (studies the origin of words).

Therefore, linguistics is a science that studies language. It provides information about what distinguishes language from other phenomena of reality, what its elements and units are, how changes occur in language.

Linguistic foundations of language teaching

Language, considered as a means of communication, is a complex phenomenon in which various aspects can be distinguished.

Thus, F. de Saussure distinguished between linguistic activity, an integral part of which is language, i.e. a system of signs that combine meaning and acoustic image, and speech, which he considered an individual act of will and understanding.

L.V. Shcherba distinguished three aspects of language: speech, by which he understood the process of speaking and understanding; language, i.e. grammatical and lexical rules; linguistic material, i.e. the sum of individual acts of speaking and understanding, continuing in memory.

Thus, language has two sides: the language system, which includes both the grammar system and the sound structure and vocabulary of the language, and speech, expressed in speech units, i.e. activity, which, naturally, should include the result of this activity - various kinds of texts, from fragments carved on stones to printed volumes of books.

V.D. Arakin gives the following definition of speech: it is human activity, formalized in speech units (sentences), constructed according to the rules of grammar of a given language and expressing certain thoughts. The simplest unit of speech is a sentence expressing a complete judgment and consisting of words of a given language, changed according to the rules of morphology and connected according to the rules of syntax of a given language.

Modern linguistics understands language as a socially significant communicative code and the rules of its functioning, fixed in the consciousness of a particular group of people. In other words, language is a system of linguistic means necessary and sufficient for communication, and the rules for their use. Speech is the realization of the linguistic system in specific acts of communication, i.e. it includes both the communication process itself and speech products or products of this process. Taking such a distinction into account is very important for methodology.

The study of language in the strict sense of the word, as L.V. Shcherba has shown, provides only knowledge of the language system, but does not lead to the use of this system as a means of communication. For the practical use of language, i.e. for mastering speech, it is necessary not only to know the language means and the rules for their use in speech, but also to use them automatically in acts of

communication. It follows from this that in the process of learning it is necessary to provide not only for the memorization and consolidation of language means in memory, the formation of skills in using them, but also for practice in communication, i.e. in the implementation of speech acts.

Both the language system and speech are inseparable from each other and, in fact, one does not exist without the other. Thus, the language system outside of speechBoth the language system and speech are inseparable from each other and, in fact, one does not exist without the other. Thus, the language system outside of speech in a given language loses its essence, since it cannot serve as a means of communication. Speech outside of the language system, i.e., not following the rules existing in a given language, becomes incoherent and again ceases to serve the purposes of communication, i.e., loses its essence. All changes occur first in speech in the form of individual facts. These individual facts, contradicting the established language system, gradually increase in number and acquire an increasingly pronounced systemic character, while still remaining in speech. Finally, they break the existing language system and, modifying it, pass from speech to the language system.

Thus, speech and the language system are two sides of a complex unity. When mastering a language, one should move in the direction from speech to language.

Methodology of language teaching as a science

The methodology is interpreted as a theory of language teaching, which is a strictly structured system of knowledge about the patterns of “communication” of a learner to a new linguistic culture (language + culture) in connection with the native language and original culture of the learner.

As is known, methodology as a scientific discipline is connected with the educational environment created by a person and in which he is the main actor. It is the personality, which is in the dimension of at least two linguacultures, that is recognized in modern linguodidactics as a value, while such categories as personal experience, emotions, opinions, feelings acquire special significance. This gives grounds to link foreign language education not only with the “appropriation” by the student of a certain set of foreign language knowledge, skills and abilities, but also with the change of his motives, relationships, personal positions, system of values and meanings. This is the main goal of language education at the present stage of its development.

In relation to the essence of language education, this means that students in an educational situation must demonstrate their own activity in order to solve communicative and cognitive tasks of a creative and problematic nature.

Since, from the position of the anthropocentric paradigm, a person masters a language through the awareness of his theoretical and practical activity in it and with its help, new semantic components of methodological theories/concepts/approaches are put forward in modern methods: “language education is not for life, but through life!”, “to learn not the language, but with the help of the language”. This also has quite specific methodological “consequences”, postulated as new linguapedagogical principles. For example, actualization of the cognitive, creative and research activities of the student; shifting the emphasis from teaching to activities related to language study/language acquisition; reducing the “simulation” of foreign language communication in favor of “authentic communication in the target language”; solving diverse problems with the help of language; activating the productive activity of students with an exit to the real socio-cultural context, etc.

Thus, methodological knowledge is the main object and result of cognition. At the same time, scientific knowledge, content and sequence of cognitive actions always occur in educational discourse at two levels: theoretical and empirical. At the theoretical level of methodological knowledge, the most important research methods are abstraction and idealization, which allow one to abstract from many factors that influence the real and very complex process of teaching and learning, and to formulate methodological concepts, substantiate concepts (models) of learning, as well as methodological approaches to learning.

In other words, the result of scientific research by methodologists are formulated theoretical postulates and theoretical constructs, which, as a rule, are tested in practice and confirmed by the practice of teaching. At the empirical level, where such methods as observation and experiment are used as analytical tools, the basis is created for the primary theoretical understanding of certain methodological phenomena, when certain ideas, data, and information that are of particular importance for the educational space are obtained in direct interaction with reality and taking into account the identified objective patterns.

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КУЛЬТУРНО-ЯЗЫКОВЫЕ ОТНОШЕНИЯ В ОБОГАЩЕНИИ ЛЕКСИКИ УЗБЕКСКОГО ЯЗЫКА

Арипджанова Ш.Г

к.ф.н., доцент кафедры зарубежной филологии

Ташкентского международного университета

финансового управлений и технологий

email: sh.aripdjanova@tift.uz

Аннотация: Заимствование слов как лингвистическое явления представляет собой результат социально-экономического общения, имевшего место между народами, заимствование слов как социальный фактор является тем, "причинным началом", которое образует сферу общения одного коллектива языковых носителей с другим таким же языковым коллективом, т.е., если можно так выразиться, сферу "международного" общения. Заимствование связано с двумя сферами языкового общения: сферой общения народов между собой и сферой общения между членами одной языковой среды.

Ключевые слова: Заимствование слов, исследование, культурно-языковые контакты, наука, культура, лингвистика, ученые-историки.

Abstract: Words borrowing as a linguistic phenomenon is the result of social-economical intercourse, taking place among different peoples. Words borrowing as a social factor, is a “starting point”, which forms a field of communication between one group of informants and another, the same, group of informants, thus forming international communication. Thanks to that, the process of borrowing words is closely connected to the following two fields of language interaction: the field of intercourse among peoples, and, the field of intercourse among the members of the same language environment.

Key words: words borrowing, research, lingua-cultural contacts, science, culture, linguistics, historians.

Введение. Ещё в далеком прошлом передовые узбекские мыслители широко проводили исследования, сделали научные открытия, которые составляют золотой фонд мировой, общечеловеческой науки и культуры. У истоков сокровищницы знаний стояли наши великие предки, имена которых известны во всем мире. Это мыслители-историки Бабур, Огахи, Абулгази Бахадырхан; энциклопедисты Беруни, Ибн-Сина; языковеды-поэты Кашкари, Юсуф Хос Хаджи, Алишер Навои и многие другие.

Как отмечает Ислам Абдуганиевич Каримов, “в развитие интеллектуального потенциала республики, расширение международных научно-культурных связей значительный вклад внесли ученые-историки, археологи, этнографы, языковеды. Исключительный интерес представляют работы, связанные с изучением этногенеза и воссозданием объективной истории узбекского народа, изучением его традиций, уклада жизни и культуры “ (Каримов, 278).

Процесс заимствования слов немислим без культурно-языковых контактов. Роль лингво-культурных контактов в развитии языка исключительно важна. В различные периоды развития языкознания она оценивалась по-разному. Так, в период расцвета "нового учения о языке" академика Н. Я. Марра значение контактов в языковом развитии оценивалось несколько гипертрофированно. Почти все происходящее в языке объяснялось действием языкового взаимовлияния. Более того, само происхождение множества языков объяснялось их контактами, "смешением".

Сам термин "языковые контакты" появился сравнительно недавно и принадлежит А. Мартине, хотя широкое распространение он получил после выхода в Нью-Йорке известной работы У. Вайнрайха "Languages in contact", первое издание которой появилось в 1953 г., второе - в 1963 (Холмурадов, 30). После этого термин "языковые контакты" начал широко использоваться в лингвистике.

Следует обратить внимание на такой реальный факт, что основное и наиболее очевидное следствие языкового контактирования - это лексическое взаимопроникновение двух языковых систем. В лингвистике этому вопросу

уделяется довольно большое внимание. Однако воздействие одного языка на другой этим не ограничивается.

Цель данного исследования. Предварительный анализ, проведенный нами, показывает, что длительные языковые контакты сказываются на всех уровнях языка - синтаксисе, морфологии, лексике, фонетике.

Итак, слова индоевропейского происхождения, издревле вошедшие в узбекский язык и прочно им усвоенные не наносят ущерба развитию родного языка, а, наоборот, способствуют его обогащению и совершенствованию. Языковую систему нельзя считать замкнутой в смысле абсолютной независимости от действия лингвистических факторов, связанных с влиянием на язык развития общества, мышления и производства.

В статье использованы следующие методы: 1) сравнительно - исторический; 2) этимологический.

Задача исследования заключается в конкретном описании тех исторических условий, в которых осуществлялся процесс заимствования слов.

Изучение контактов родственных и неродственных языков и, в частности, заимствования слов из одного языка другим имеет длительную историю. Все большее внимание стали привлекать языковые особенности каждого отдельного памятника письменности тюркского языка с целью выявить в системе его изоглосс субстантные явления, соотношение литературного и разговорного стилей и т.д. Предпринимается целый ряд попыток выделить родственные языки, найти общего предка этих языков, сгруппировать, дать классификацию известных языков на основе сходства и различий в их структурах.

Корни дружественных отношений и добрососедства тюрко-язычных и таджикского народов уходят в глубокую древность. В течение многих веков они жили на одной земле, как равноправные члены единой семьи, вместе разделяли радости и горести жизни, вместе отстаивали общие интересы. Поэтому истоки взаимовлияния этих языков были заложены еще в древности. Два дружественных соседа узбеки и таджики - веками жили в одних экономических, политических и культурных условиях жизни.

Взаимовлияние, взаимодействие языков издавна приобретают широкомасштабный характер. Исторические события привели к тому, что арабская лексика проникла в десятки языков народов, принявших ислам. Известны также факты взаимовлияния других языков Востока.

На исключительную важность учета языковых контактов обратил внимание лингвист-иранист В.И. Абаев: "В отличие от несколько загадочных "внутренних законов", языковые контакты с их последствиями это нечто абсолютно реальное, очевидное и осязаемое. Их действие можно наблюдать повседневно и повсеместно, где только языки и диалекты соприкасаются друг с другом".

Многовековую историю имеют русско-узбекские языковые взаимоотношения. Исторические корни связи русского народа с народами Средней Азии уходят в глубь веков. Уже на рубеже VII-VIII вв. началась торговля славян со Средней Азией. Указание на эти древние связи мы находим в работах арабского историка IX в. Абдул-Касым Убейдуллаха, более известного под именем Ибн-Хазрат Бега, акад. В.В. Бартольда, Б.Д. Грекова, в исследованиях узбекских историков Х.Х. Абдурахманова, А.М. Аминова и др.

Проникновение отдельных лексических элементов из русского языка в тюркские языки, в том числе и в узбекский, началось очень давно. Об этом говорит наличие в половецком словаре "Codex gumanicus"/XIV в./ таких русских слов, как изба, печь и некоторых других.

В текстах ярлыков, грамот, посольских писем, челобитных и других документов, отражающих торговые и дипломатические отношения между среднеазиатскими ханствами и Московским государством в XVI-XVII вв. находим такие русские слова, как урус. /"русский"/, Москав /"Москва"/, кноз /"князь"/, купчин /"купчий"/, июн у/"июнь"/, пут /"пуд"/, сужна /"дюжина"/, ящик /"ящик"/, чит /"ситец"/, поплин /"поплин"/, тик /"тик"/, камзур /"камзол"/, кампит /"конфета"/, самавор /"самовар"/, патнус /"поднос"/ и др.

Тем не менее, активное проникновение русских слов в узбекский язык начинается со второй половины XIX в. Массовое проникновение слов из русского языка в узбекский начинается лишь с середины прошлого века.

В первой половине XX в. число слов и выражений, заимствованных из русского языка, в узбекском языке из года в год возрастает.

Заимствование слов как лингвистическое явления представляет собой результат социально-экономического общения, имевшего место между народами, заимствование слов как социальный фактор является тем, "причинным началом", которое образует сферу общения одного коллектива языковых носителей с другим таким же языковым коллективом, т.е., если можно так выразиться, сферу "международного" общения. Благодаря этому, заимствование связано с двумя сферами языкового общения: сферой общения народов между собой и сферой общения между членами одной языковой среды.

Тенденция к увеличению русских лексических заимствований действует и во второй половине нашего века. Об этом свидетельствуют, в частности, материалы двуязычных академических словарей. В "Узбекско-русском словаре", изданном в 1959 г., зарегистрировано 5000 заимствований из русского языка, что составляет 12,5% от общего количества слов /около 40 000/. В "Узбекско-русском словаре" 1988 г. содержится около 50 000 слов, из них русские заимствования составляют 14% /7 000 слов/.

В конце 20-х и в 30-е годы в узбекский язык вошли многие термины из математической, биологической, общественно-политической, философской и других отраслей знаний. Часть узбекской лексики возникла путем калькирования. К 70-м годам произошло значительное расширение семантики слов общей узбекской лексики, в том числе заимствованных в древние времена из восточных языков.

Заимствованные слова, войдя в узбекский язык, довольно быстро начинают ощущаться в общей массе лексики "своими" словами. Подавляющее большинство носителей узбекского языка, кроме специалистов, не подозревает, например, что слова калам /карандаш/, мактаб /школа/, бино /здание/ и т.п. - арабского происхождения, бехи /айва/, гул /цветок/, барг /лист/ - персидского. Среди заимствований, прочно вросших в ткань узбекского языка, есть и слова из русского языка. Они подверглись действию грамматических законов узбекского языка, приняли его словообразующие и формообразующие аффиксы.

Наше исследование подтверждает вывод о том, что основные причины языковых заимствований связаны с контактированием народов и языков, с действием социальных факторов. Заимствование новых слов

отражает уровень развития общества и характер общественных отношений, социальную значимость нового предмета, понятия, явления. Заимствованное слово органически входит в систему узбекского языка и может подвергаться семантическим трансформациям, грамматическим преобразованиям, фонетическим изменениям.

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KANOP O‘SIMLIGI TARIXI UNING RIVOJLANISHI HAQIDA UMUMIY MA’LUMOTLAR

Mirboboyeva Gulxayo

Farg‘ona davlat texnika univeristeti

Yengil sanoat muhandisligi kafedrası katta o‘qituvchisi

g.mirboboyeva@ferpi.uz

Annotasiya: Ush bu ilmiy maqolada kanop o‘simligi haqida ma’lumotlar berilgan, Kanop o‘simligini kelib chiqish tarixi ini rivojlanishi honakilashtirilishi hamda o‘simlikni xususiyatlari sanoatda hozirgi kundagi o‘rni haqida ma’lumotlar keltirilgan.

Kalit so‘zlar: gazlama, tanda, arqoq, iplar, kanop, segmentlar soni, poyaning tashqi to‘qimasi, oddiy tolalarining uzunligi, poskon tolasi tarkibi

Kanop o‘simligini kelib chiqish tarixiga bir e’tibor qaratsak kanop o‘simligi qachon paydo bo‘gan degan savolga javob berishga xarakat qilamiz. Konoplya Xitoyda taxminan 4800 yil oldin parvarish qilingan. Xitoy mifologiyasida konoplya malikasi (xitoycha: 麻姑) — abadiy sehrli malika bo‘lib, u hayot eliksiri bilan bog‘liq va ayollar uchun ramziy himoyachi hisoblanadi. Konoplya (poslovnaya) Pliniy Kattaning «Tabiiy tarix» asarining 19 va 20-jildlarida tasvirlangan, u uni to‘quv, oziq-ovqat va dori sifatida qo‘llanilishini eslatadi. Unda aytilishicha, konoplya urug‘lari uy hayvonlarining ich qotishini davolashda yaxshi vosita, o‘t sharbati quloq yallig‘lanishiga yordam beradi, ildizi esa bo‘g‘im og‘rig‘i, podagra va kuyishlarni davolash uchun foydalaniladi. Konoplya qadimdan Armanistonda ham yetishtirilgan va arman oshxonasining bir qismi bo‘lgan. Kanop o‘simligi haqida tarixda qiziq ma’lumotlar keltirilgan, Genrix VIII Tyudor Angliyada diniy islohotlarni boshqarib, 1534 yilda Anglikan cherkovining rahbari deb e’lon qilinganidan so‘ng, 1536 va 1539 yillarda monastir yerlari keng ko‘lamda sekulyarizatsiya qilindi. Monastirlar texnik madaniyatlar — xususan, kemalar uchun juda muhim bo‘lgan konoplya yetishtirishning asosiy yetkazib beruvchilari bo‘lganligi sababli, ularning yerlari xususiy qo‘llarga o‘tishi Angliya dengiz flotining holatiga salbiy ta’sir ko‘rsatishi mumkin edi. Buni oldini olish maqsadida, Genrix 1533 yilda har bir dehqondan 6 akr ekin maydoni uchun chorak akr konoplya



ekishni buyuruvchi farmon chiqardi. Shu tariqa monastirlar o‘zlarining asosiy iqtisodiy afzalliklarini yo‘qotib, ularning mulkini tortib olish iqtisodiyotga zarar yetkazmadi [4].

Genrix VIII ning «Konoplya farmoni» Elizaveta I tomonidan ikki marta takrorlandi — 1563 va 1593 yillarda. XVII asrda Rossiyadan to‘qimachilik tolalarini (pen‘ka) import qilish yo‘lga qo‘yilgach, bunday farmonlarga ehtiyoj o‘z-o‘zidan yo‘qoldi.

Poslovnaya konoplya — yillik ikki uyli o‘t o‘simlikdir. Rossiyada urg‘ochi o‘simliklar **matka**, **materka** yoki oddiygina **konoplya** deb ataladi, erkak o‘simliklar esa **poskon**‘, **pustotsvet** yoki **zamashka** deb nomlanadi.



Konoplyaning ildizi asosiy bo‘g‘im ildiz bo‘lib, 1,5—2 m chuqurlikka kiradi. Ildizlarning asosiy qismi 40 sm gacha bo‘lgan qatlamda rivojlanadi. Peskonning ildizlari materkanikiga nisbatan 2—3 barobar kamroq vaznga ega.

Poya to‘g‘ri turg‘ich, oddiy, kamroq hollarda shoxlangan, pastki qismi dumaloq, yuqori qismi olti burchakli, chuqurchali va

bezakli tuklar bilan qoplangan. Odatda balandligi 1,5 m ga yetadi, ba‘zi navlarda esa (masalan, var. chinensis — xitoy konoplyasi) u 3—6 m gacha bo‘ladi.

Barglari uzun po‘stloqli, pastki barglari 5—7 (kam hollarda 9) tishli tor varaqchalardan tashkil topgan oyoqchalarga o‘xshash; yuqori barglari esa uch bo‘lakli yoki butun shaklda. Bo‘g‘im oralari uzun. Pastki barglar qarama-qarshi joylashgan, yuqori barglar esa navbatma-navbat. Barg ostida ikki alohida erkin qo‘shimcha bargchalar (prilistniklar) rivojlangan [1]. Poyasi to‘g‘ri turg‘ich, tagida dumaloq, o‘rtasida olti burchak, tepasida to‘rt burchak shaklida bo‘lib, ichi bo‘sh. Barglar qarama-qarshi joylashgan, tepasida esa navbatma-navbat joylashadi. Barglari po‘stloqli, oddiy, panjala-shaklida bo‘lib, 5-7 segmentdan iborat, segmentlar chetida tishli. Segmentlar soni poyaning tagidan o‘rta qismiga qarab



ko‘payadi, so‘ngra tepaga yaqin kamayadi (tagida va tepada barglar oddiy, uch bo‘lakli yoki butun bo‘ladi).

Konoplyaning gullari jinsga ko‘ra ajralgan. Urg‘ochi gul pistoqli bo‘lib, konus shaklida burilgan yashil qo‘llovchi barg ichida joylashgan. Pistoq yuqori qismida bir bo‘lakli urug‘don va tagida birlashgan ikki uzun, joylashgan o‘simlik qismi — riltalar mavjud. Erkak gulida beshta sariq-yashil gulchambar va beshta katta changchilikka ega tuklar bor. Gullari joylashgan bo‘lib, barg sohasidagi yon novdalarning tagida joylashgan. Mevalari — ikki qismli yong‘oqlar bo‘lib, tuxum shaklida yoki biroz cho‘zilgan bo‘ladi, ular gullashdan keyin qoladigan qo‘llovchi barglar ichida saqlanadi, silliq yoki yirik chiziqli, ko‘pincha kulrang-yashil, ba‘zan jigarrang rangda bo‘ladi.

Konoplya poyasining tuzilishi jinsi tolasi poya tuzilishiga o‘xshash. Poyaning tashqi to‘qimasi (teri) ko‘pburchak shaklidagi hujayralardan iborat. Uning ortida luba to‘plamlarining halqasi va parenximasi hamda markaziy qism joylashgan. Gullash vaqtida markaziy to‘qima yorilib, bo‘shliq hosil qiladi. Luba to‘plamlari poyaning yuqori qismida zichroq, pastki qismida esa kamroq joylashgan. Konoplya oddiy tolalarining uzunligi 4–5 sm va undan ortiq bo‘ladi. Luba tolalari bir-biriga bog‘langan va lignopektin bilan yopishtirilgan.

Konoplya poyasida kambiy ta‘sirida ikkinchi ichki luba to‘plamlari halqasi hosil bo‘ladi, undan keyin ko‘pincha uchinchi va to‘rtinchi halqalar ham paydo bo‘ladi. Ikkinchi darajali luba tolalari poyada notekis taqsimlangan. Eng ko‘p tolalar poyaning pastki qismida bo‘lib, yuqori qismda faqat birlamchi tolalar uchraydi. Poskon tolasi tarkibi 20–25%, matyor tolasi esa 15–20% ni tashkil qiladi. Kanopchilikda hosil o‘rim-yig‘imi eng sermehnat va mas‘uliyatli jarayon hisoblanib, ekinning 50 foizi texnik jihatdan pishib yetilgan paytida o‘rib-yig‘ib olinadi. Bu vaqtda poyaning uchida xanjarsimon barg paydo bo‘lib, ular elastik holatga keladi, ya‘ni egib ko‘rilganda kanop poyasi sinib ketmaydi. Agar ana shu muddat o‘tkazilib yuborilsa, olingan tola mo‘rt va dag‘al bo‘lib qolishi va oqibatda fermerning mehnati besamar ketishi hech gap emas. O‘rimni boshlashdan oldin o‘simlikning holatiga qarab kanopzorlar sug‘oriladi. Bunda har gektar yerga 600–650m³ suv sarflansa kifoya. Ana shunda kanop po‘stlog‘i o‘zagidan tez, oson va toza ajraladi. Bu esa mahsulotning yuqori sifatli bo‘lishini ta‘minlaydi hamda hosilning unumdor bo‘lishiga yordam beradi. [2].



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MODULLI TA'LIM TEXNOLOGIYASI KELIB CHIQISHI VA TAMOYILLARI

Dilshodbekova Mashrabxon Dilshodbek qizi
Namangan davlat pedagogika instituti
1-bosqich magistranti
+998505717275

Annotatsiya: Mazkur maqolada Modulli o'qitish terminiga, uning kelib chiqishi, keyingi rivoji hamda modulli o'qitishning o'ziga xos yutuqlari, modulli o'qitish tamoyillariga alohida to'xtalib o'tilgan.

Kalit so'zlar: modul, inruitsiya, gipoteza, faraz, Kognitiv vizuallik, uzviylik tamoyili, modullik tamoyili.

“Modulli o'qitish” termini xalqaro tushuncha - modul bilan bog'liq bo'lib (“modul”, lot. modulus), uning bitta ma'nosi faoliyat ko'rsata oladigan o'zaro chambarchas bog'liq elementlardan iborat bo'lgan tugunni bildiradi. Bu ma'noda u modulli o'qitishning asosiy vositasi sifatida, tugallangan axborot bloki sifatida tushuniladi.

Modul - bu fanning fundamental tushunchasini takdim etadi: muayyan jarayoni yoki qonuni, bo'limi, muayyan katta mavzusi, o'zaro bog'liq tushunchalar guruhidir.

Modul - bu fanning bir yoki bir necha tushunchalami o'zlashtirishga yo'naltirilgan, ishlab chiqilgan tamoyillar asosida shakllangan mantiqan tugallangan o'quv materialidir.

1982-yilgi YUNESKOning anjumandagi ma'ruzasida modulga “Mashqlarni xususiy tezlikda diqqat bilan tanishish va ketma-ket o'rganish orqali individual yoki guruh mashg'ulotlarida bir yoki bir necha malakaga ega bo'lish uchun mo'ljallangan alohida o'rgatuvi paket (to'plam)” deb ta'rif berilgan edi.

Modulli o'qitish - o'qitishning istiqbolli tizimlaridan biri hisoblanadi, chunki u odam bosh miyasining o'zlashtirish tizimga eng yaxshi moslashgandir.

Quyidagi tamoyillar modulli o'qitish texnologiyasining asosini tashkil etadi:

1. Faoliyatlik tamoyili: Bu tamoyil, modullar mutaxassisning faoliyat mazmuniga muvofiq shakllanishini anglatadi.

Bu tamoyilga ko‘ra modullar fan bo‘yicha faoliyat yondashuvi yoki tizimli faoliyat yondashuvi asosida tuzilishi mumkin. Modulli o‘qitish texnologiyasida fan bo‘yicha faoliyat yondashuvida, modullarni o‘quv rejasi va dasturlar tahlili natijasida, tuzishni taqozo etadi. Tizimli faoliyat yondashuvida, modullar bloki, mutaxassisning kasbiy faoliyat tahlili asosida, shakllantiriladi.

2. Tenglik, teng huquqlik tamoyili. Bu tamoyil, pedagog va o‘quvchining o‘zaro munosabati subyekt - subyekt xarakterligini belgilaydi.

Bu esa, modulli o‘qitish texnologiyasini, shaxsga yo‘naltirilgan texnologiyalar toifasiga taalluqliligini ko‘rsatadi. Ya’ni modulli o‘qitish texnologiyasi, shaxsning individual psixologik xususiyatlariga moslashgan bo‘ladi.

3. Tizimli kvantlash tamoyili. Bu tamoyil axborotni siqib berish nazariyasi, muhandislik bilimlar konsepsiyasi, didaktik biriiklarni yiriklash nazariyalarining talablariga asoslanadi.

Shular bilan bir qatorda, bu tamoyil quyidagi psixologik-pedagogik qonuniyatlarni hisobga olishni taqozo etadi:

- katta hajmdagi o‘quv material, qiyinchilik bilan va xohishsiz (istalmasdan) eslanadi;
- ma’lum tizimda qisqartirilgan holda berilgan o‘quv material, osonroq o‘zlashtiriladi;
- o‘quv materialidagi, tayanch qismlarning ajratilib ko‘rsatilishi, eslab qolish faoliyatiga ijobiy ta’sir ko‘rsatadi. Shu bilan bir qatorda o‘quv materialining asosini ilmiylik va fundamentallik tashkil etish lozim. Tizimli kvantlash tamoyili, o‘quv axborotning tegishli strukturasi modulda tuzish yo‘li bilan erishiladi.

Modul umumiy ko‘rinishda quyidagi elementlardan iborat bo‘lishi mumkin:

- tarixiy - bu muammo, teorema, masala, tushunchalarni tarixiga qisqacha sharh berish;
- muammoli - bu muammoni shakllantirish;
- izimli - bu modul tarkibining tizimli namoyon etish;
- faollashtirish - bu yangi o‘quv materialini o‘zlashtirish uchun zarur bo‘lgan tayanch iboralar va harakat usullarini ajratib ko‘rsatish;
- nazariy - bu asosiy o‘quv material! bo‘lib, unda - didaktik maqsadlar, muammoni ifodalash, gipoteza (faraz)ni asoslash, muammoni yechish yo‘llari oehib ko‘rsatiladi;
- tajribaviy - bu tajribaviy materialni (o‘quv tajribasi, ishni va boshqalarni)

bayon etish;

- umumlashtirish - bu muammo yechimining tasviri va modul mazmunini umumlashtirish;
- qo'llanish - bu harakatlarning yangi usullarini va o'rganilgan materialni amaliyotda qo'llash bo'yicha masalalar tizimini ishlab chiqish;
- xatoliklar - o'quvchining modul mazmunini o'rganishdagi o'zlashtirishda kuzatiladigan bir turdagi xatoliklarini ochib tashlash, ularning sababini aniqlash va tuzatish yo'llarini ko'rsatish;
- ulanish - o'tilgan modulni boshqa modullar bilan shu jumladan yondosh fanlar bilan bog'liqligini namoyon etish;
- chuqurlashtirish - iqtidorli o'quvchilar uchun yuqori murakkabli o'quv materialini taqdim etish;
- test-sinovlash - modul mazmunini o'quvchilar tomonidan o'zlashtirish darajasini testlar yordamida nazorat qilish va baholash.

O'quv materialining o'zlashtirilishiga mashg'ulotlar paytida modulning amaliy ahamiyati qay darajada ochib ko'rsatiganligi, modul mazmunini boshqa modullar bilan bog'liqligi, shu modulni o'rganishdagi o'quvchilarning bir xil xatoliklari tahlili muhim ahamiyatga ega.

4. Motivatsiya (qiziqishni uyg'otish tamoyili. Bu tamoyilning mohiyati, o'quvchining o'quv-bilim olish faoliyatini rag'batlantirishdan iborat bo'ladi. Bu asosiy qoidadir.

Modulning o'quv materialiga qiziqishni uyg'otish, bilim olishga rag'batlantirish, mashg'ulotlar paytida faol ijodiy fikrlashga da'vat etish, modulning tarixiy va muammoli elementlarining vazifalari hisoblanadi.

5. Modullik tamoyili. Bu tamoyil o'qitishni individuallashtirishning asosi bo'lib xizmat qiladi.

Birinchidan, modulning dinamik strukturasi fan mazmunini uch xil ko'rinishda namoyon etish imkoniyatini beradi:

- to'la
- qisqartirilgan
- chuqurlashtirilgan.

O'qitishning u yoki bu turini tanlash o'quvchiga havola qilinadi.

Ikkinchidan, modul mazmunini o'zlashtirishda, usul va shakllarning turliligida ham modullik namoyon bo'ladi. Bu esa o'qitishning faollashtirilgan shakl va usullari

(dialog, mustaqil o‘qish, o‘quv va imitatsion o‘yinlar va hokazo), hamda muammoli ma’ruzalar, seminarlar, maslahatlar bo‘lishi mumkin.

Uchinchidan, modullik, yangi materialni pog‘onasimon o‘zlashtirishda ta’minlanadi, ya’ni har bir fan va har bir modulda o‘qitish oddiydan murakkabga qarab yo‘nalgan bo‘ladi.

To‘rtinchidan, modulga kiruvchi o‘quv elementlarining moslanuvchanligi tufayli, o‘quv materialini muntazam ravishda yangilab turish imkoniyati ko‘zda tutiladi.

6. Muammolik tamoyili. Bu tamoyil muammoli vaziyatlar va mashg‘ulotlarni amaliy yo‘naltirilganligi tufayli, o‘quv materialining o‘zlashtirish samaradorligini oshishiga imkon beradi. Mashg‘ulotlar paytida gipoteza (faraz) qo‘yiladi, uning asoslanganligi ko‘rsatiladi va bu muammoning yechimi beriladi. Ko‘pchilik hollarda bizning o‘qituvchilar darslarda faqatgina dalillar keltiradilar (ular hatto yangi bo‘lsa ham), ammo misol uchun AQShda o‘qituvchi masalani o‘rganish uslubini, o‘zi qo‘ygan muammoni yechish yo‘llarini, tajriba xususiyatini, uning natijalarini ko‘rsatadi va tushuntiradi. Ya’ni u tadqiqotchi sifatida namoyon bo‘ladi.

Birinchi navbatda, ayniqsa, ana shu narsa o‘quvchini qiziqtirib qo‘yadi, unda ijodiy fikrlash va faollikni tug‘diradi.

7. Kognitiv vizuallik (ko‘z bilan kuzatiladigan) tamoyil. Bu tamoyil psixologik-pedagogik qonuniyatlardan kelib chiqadi, ularga ko‘ra o‘qitishdagi ko‘rgazmalar, nafaqat surat vazifasini, shubilan birga kognitiv vazifani bajargan taqdirdagina o‘zlashtirish unumdorligini oshiradi.

Aynan, shuning uchun kognitiv grafika-sun’iy intellekt nazariyasining yangi muammoli sohasi bo‘lib, murakkab obyektlar kompyuter suratchalari ko‘rinishida tasvir etiladi. Modulning tarkibiy tuzilmasi bo‘lib, rangli bajarilgan, kognitiv-grafik o‘quv elementlari (rasmlar bloki) xizmat qiladi. Shuning uchun rasmchalar, modulning asosiy bosh element! hisoblanadilar. Bu esa:

Birinchiidan, o‘quvchining ko‘rish va fazoviy fikrlash qobiliyatini rivojlantiradi, ya’ni o‘rganish jarayoniga miyaning tasviriy o‘ng yarim shari boy imkoniyatlari qo‘shiladi.

Ikkinchiidan, o‘quv materiali mazmunini o‘zida zich joylashtirib ravshan ko‘rsatuvchi surat (rasm), o‘quvchida tizimli bilim shakllanishiga yordam beradi.

Uchinchidan rangli suratlar, o‘quv informatsion materianni qabul qilinish va eslanish samarasini oshiradi, hamda o‘quvchilarni estetik tarbiyalash vositasi bo‘lib xizmat qiladi.

Insonning bilim olishi, fikrlashning xuddi ikkita mexanizmdan foydalanganidek bo‘ladi: ulaming biri simvolli bo‘lsa, ikkinchisi geometrik (algebraik) bo‘ladi.

Kognitiv grafikaning asosiy vazifasi bilim olish jarayonining faollashtiruvchi fikrlashning simvolli va geometrik (algebraik) mexanizmlarni o‘z ichiga olgan, bilim berishni uyg‘unlashgan modellarini yaratishdan iboratdir.

Grafik (ko‘zga ko‘rinuvchi) axborot miyaning o‘ng yarim shari imkoniyatlarini faollashtiradi, oliy ma‘lumotli mutaxassis uchun zarur bo‘lgan, tasviriy fikrlash qobiliyatini, intuitsiyasini rivojlantiradi. Buyuk olim A. Eynshteyn aytganidek “intuitsiya xaqiqatda eng katta boylikdir. Mening ishonchim komilki, bizning fikrlashimiz asosan simvollar orqali shu bilan birga biz anglamasdan kechadi”. Haqiqatda ilm-fan gepotezasiz (farazsiz), faraz zsa intuitsiyasiz mavjud bo‘lmaydi.

Shu bilan birga, ko‘rgazmali axborot og‘zaki axborotdan ko‘ra, ahamiyatliroq va unumliroqdir. Ko‘rish mexanizmining axborotni qabul qilish qobiliyati, eshitishnikidan ko‘ra ancha yuqoridir. Bu esa o‘z navbatida, ko‘rish tizimiga, inson qabul qilinadigan axborotning qariyb 90 foizini yetkazish imkoniyatini beradi. Undan tashqari ko‘rgazmali axborot bir vaqtning o‘zida beriladi. Shuning uchun axborotni qabul qilish va eslashga og‘zaki axborotdan ko‘ra kam vaqt talab etiladi. Ko‘rgazmali axborot ishlatilganda, tasavvur hosil bo‘lishi og‘zaki bayondan ko‘ra o‘rtacha 5-6 martaba tezroq kechadi. Insonning ko‘rgazmali axborotdan ta’sirlanishi, og‘zaki axborotdan ko‘ra ancha yuqori bo‘ladi. Ko‘pchilik hollarda u oxirgisini o‘tkazib yuboradi. Ko‘rgazmali axborotni qayta takrorlash oson va aniqroqdir. Odamning ko‘rgazmali axborotga ishonchi, og‘zaki axborotdan ko‘ra yuqori bo‘ladi. Shuning uchun “yuz bor eshitgandan ko‘ra, bir bor ko‘rmoq afzabroqdir” deb bejiz aytilmagandir.

Shu bilan birga, ko‘rgazmali axborotda, qabul qilish va eslash unumi, uni ko‘rsatilishi orasidagi muddatni uzoqligiga bog‘liq bo‘lmaydi, og‘zaki axborotning o‘zlashtirilishi esa bunga bog‘liq bo‘ladi. O‘rni kelib yana bir muhim tafsilotni qayd etish lozim: simvolli-ko‘rgazmali axborotni qabul etish, o‘qitish samarasini oshiradi. Shuning uchun o‘quv-ilmiy adabiyotdan va kompyuter texnikasi vositasida olinadigan axborotni ko‘paytirishga shart-sharoit yaratish zarur. Bu esa, o‘qitishni individuallashtirish zarurligini ko‘rsatadi.

8. Xatoliklarga tayanish tamoyili. Bu tamoyil o‘qitish jarayonida doimiy ravishda xatoliklarni izlash uchun vaziyatlar yaratilishiga, o‘quvchilarning ruhiy faoliyati



funksional tizimi tarkibida oldindan payqash tuzilmasini shakllantirishga qaratilgan didaktik materiallar va vositalarni ishlab chiqishga yo‘naltirilgan bo‘ladi.

Bu tamoyilning amalga oshirilishi, o‘quvchida tanqidiy fikrlash qobiliyatini rivojlanishiga yordam beradi.

9. O‘quv vaqtini tejash tamoyili. Bu tamoyil o‘quvchilarda individual va mustaqil ishlash uchun o‘quv vaqtining zahirasini yaratishga yo‘naltirilgan bo‘ladi.

To‘g‘ri tashkil qilingan modulli o‘qitish, o‘qish vaqtini 30% va undan ortiq tejash imkoniyatini beradi. Bunga esa modulli o‘qitishning barcha tamoyillarini to‘la amalga oshirilganda, o‘quv jarayoni kompyuterlashtirilganda, yondosh fanlarning o‘quv dasturlari muvofiqlashtirilganda erishish mumkin.

10. Texnologik tamoyili. Bu tamoyil o‘quvchilar tomonidan o‘qitishning ko‘zlangan natijalarga erishish kafolatini ta‘minlovchi, o‘qitish va bilimni o‘zlashtirish jarayonini, tizimli modulli yondashuv asosida ro‘yobga chiqarishni anglatadi. Mazkur tamoyil quyidagilar orqali ta‘minlanadi:

- maksimal aniqlashtirilgan o‘quv maqsadlarni ishlab chiqish, ularni o‘lchash va baholash mezonlarini tanlash;
- qo‘yilgan o‘quv maqsadlarga erishishga yo‘naltirilgan o‘quv jarayonini ishlab chiqish va aniq tasvirlash;
- o‘quv maqsadlarini, butun o‘quv jarayonini o‘qitish natijalariga kafolatli erishishga yo‘naltirish;
- o‘qitish natijalarini tezkor baholash va o‘qitishga tuzatishlar kiritish;
- o‘qitish natijalarini yakuniy baholash.

Texnologik tamoyili, o‘qitishni qayta takrorlanadigan jarayonga aylanishiga imkon beradi. Modulli o‘qitish tizimida o‘rgaruvchi sikllar soni, o‘quv fanining modullari soniga teng bo‘ladi. O‘quv maqsadlariga erishish uchun o‘quv me‘yoriy hujjatlarning uzviylikini ta‘minlash tayanch sharoitlarini yaratish zarur. Ushbu maqsadlarda uzviylik tamoyilini qo‘llash tavsiya etiladi.

11. Uzviylik tamoyili. Bu tamoyil o‘quv maqsadlariga erishish imkoniyatini ta‘minlash uchun o‘quv rejasi va dasturlarni ishlab chiqishda tizimli yondashishini anglatadi. Bunda fanlarning maqsadlariga ko‘ra, o‘quv rejadagi soatlar mosligi ta‘minlanadi. Modulli o‘qitish tamoyillari - modulli o‘qitish texnologiyalarning nazariy asoslaridir.

Modulli ta‘lim texnologiyasi pedagogik va psixologik nazariyalarga asoslangan holda ta‘lim jarayonini tizimli, moslashuvchan va samarali qilishga

xizmat qiladi. Uning kelib chiqishi XX asrning ilmiy-texnologik yutuqlari bilan bog‘liq bo‘lib, bugungi kunda raqamli va masofaviy ta’lim bilan integratsiyalashgan holda rivojlanmoqda. Ilmiy tadqiqotlar shuni ko‘rsatadiki, modulli ta’lim o‘quvchilarning mustaqilligi, motivatsiyasi va bilim sifatini oshiradi, lekin muvaffaqiyat o‘qituvchilarning tayyorgarligi, resurslar mavjudligi va o‘quvchilarning faolligiga bog‘liq. Kelajakda sun‘iy intellekt, adaptiv ta’lim tizimlari va raqamli texnologiyalar modulli ta’limning yanada rivojlanishiga zamin yaratadi. Ushbu texnologiyani O‘zbekiston ta’lim tizimida yanada keng joriy etish va sifatini oshirish uchun davlat, ta’lim muassasalari va xalqaro tashkilotlar o‘rtasida hamkorlikni kuchaytirish zarur.

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IQBOL MIRZO ASARLARINI O‘QITISHNING TARBIYAVIY AHAMIYATI (“DARAXTLAR” SHE’RI MISOLIDA)

Xudayberganova Diana Vladimirovna,
Urganch davlat pedagogika instituti
o‘zbek tili va adabiyoti yo‘nalishi talabasi
<https://orcid.org/0009-0000-2398-1612>
e-mail: kudaybergenovadiana@gmail.com

Annotatsiya. Mazkur maqolada o‘rta ta’lim maktab o‘quvchilariga badiiy adabiyotlarni o‘qitish orqali ularda ezgu fazilatlarni shakllantirish, atrofimizdagi har bir jonli va jonsiz narsalarga nisbatan hurmat, sevgi, sadoqat, vafo, samimiyat, halollik, rostgo‘ylik kabi insoniy hislatlar haqida fikr yuritildi. Xususan mahoratli, iste’dodli, qalbida olov yonib turadigan, O‘zbek adabiyotida o‘z o‘rniga ega bo‘lgan Iqbol Mirzoning “Daraxtlar” she’ri tahlilga tortildi. Muhokama davomida daraxtlarga alohida ehtirom ko‘rsatilgani, ularning matonatli, qanoatli, tabiatning har qanday mavsumiga tayyor ekanligi yoritilib berildi.

Kalit so‘zlar: She’r, tafakkur, tarbiya, daraxt, qish, kuz, matonat, qanoat, meva, yaxshilik, ezgulik, g‘amxo‘rlik.

Abstract. This article discusses the formation of noble qualities in secondary school students through teaching them fiction, such as respect for every living and inanimate thing around us, love, loyalty, fidelity, sincerity, honesty, and truthfulness. In particular, the poem "Trees" by Iqbol Mirzo, who is skillful, talented, and has a fire burning in his heart, and has a place in Uzbek literature, was analyzed. During the discussion, it was highlighted that trees are shown special respect, that they are strong, content, and ready for any season of nature.

Keywords: Poetry, contemplation, education, tree, winter, autumn, perseverance, contentment, fruit, goodness, kindness, care.

Аннотация. В данной статье рассматривается формирование благородных качеств у учащихся средних школ посредством обучения их художественной литературе, таких как уважение ко всему живому и неживому вокруг нас, любовь, преданность, верность, искренность, честность и правдивость. В частности, было проанализировано стихотворение «Деревья» Икбола Мирзо, который искусен, талантлив, в его сердце горит огонь, и имеет

место в узбекской литературе. В ходе обсуждения было подчеркнуто, что деревьям оказывается особое уважение, что они сильны, довольны и готовы к любому сезону природы.

Ключевые слова: Поэзия, размышление, образование, дерево, зима, осень, настойчивость, удовлетворенность, плод, доброта, забота.

Bugungi kunda zamonaviy texnologiyalar, sun'iy intellekt kundan-kunga avj olib bormoqda va har qanday yoshdagi insonni ham o'ziga tortmoqda. Hamma narsaning ijobiy va salbiy tomonlari bo'lganligi kabi uning ham bir qancha afzalliklari va kamchiliklari bor. Jumladan, qulayligini zamon bilan hamnafas bo'lishni, savollarga qisqa muddat ichida javob olishni, uzog'imizni yaqin qilib tezda bog'lana olishimizni ta'minlab beryapti desak adashmagan bo'lamiz. Biroq, uning kamchiligi sifatida ba'zi bir yoshlar undan oqilona foydalana olmasligini, o'ziga berilgan vaqtni havoga sovurib, munkasidan ketib unga bog'lanib qolganini aytishimiz mumkin. Otabek Xasanov "Liderlar kitobi" nomli risolasida quyidagicha fikr keltirib o'tadi: "Internetning yaxshi yoki yomonligini muhokama qilib, yoshlar tarbiyasini buzyapti, deb undan voz kecha olmaymiz" [1.140]. Demak bu vaziyat bilan jiddiy shug'ullanib, kelajak-avlod tarbiyasiga befarq bo'lmaslik har birimizning vazifamizdir. Bu jarayon aynan o'rta ta'lim maktablarida o'qish davomida yuzaga keladi desak mubolag'a bo'lmaydi. Chunki ayni shu paytda o'smirlik yoshini boshdan o'tkazayotgan o'quvchining ong-shuuriga yomon illatlardan qochish, insoniy fazillatlarni shakllantirish to'g'risida yetarlicha bilim, tarbiya berish muhimdir. Shu nuqtayi nazardan darsliklarda o'qitiladigan har qanday adabiyotlarni chuqur o'zlashtirishiga, mavzuni puxta egallashini ta'minlashga yordam berish zarur. Buni O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev o'zining "Niyati ulug' xalqning ishi ham ulug', hayoti yorug' va kelajagi farovon bo'ladi" asarida quyidagicha xitob qiladi: "Biz O'zbekistonning buyuk kelajagini barpo etishga mahkam bel bog'lagan ekanmiz, bu ulug' ishni ertaga emas, bugun boshlashimiz, buning uchun avvalo navqiron yoshlarimizga zarur sharoitlarni aynan bugun yaratib berishimiz kerak" [387]. O'zbek adabiyotining yirin namoyondalaridan bo'lgan, davlat va jamoat arbobi, bir qator davlat mukofotlari sovrindori Iqbol Mirzoning asarlarida ham shunday ezgu, insoniy fazillatlarni ko'rishimiz mumkin. Adibning to'liq ismi Iqboljon Mirzaaliyev bo'lib, Iqbol Mirzo uning taxallusidir. U 1967-yilda Farg'ona viloyatida ziyolilar oilasida tavallud topgan [200]. Har bir insonning hayotda o'rnini topishiga, bilim olishiga sharoit

yaratib berishida albatta ota-onaning o‘rni beqiyosdir. Yozuvchining ham shunday teran fikrlashi, tafakkurining yuksak darajada bo‘lishida o‘qituvchilar oilasida dunyoga kelgani deb aytsak mubolag‘a bo‘lmaydi. To‘g‘ri jamiyatning har qanday sohasida faoliyat olib boradigan shaxslar lozim. Lekin maktab davridagi murabbiy eng avvalo o‘zini anglab olishi, umri davomida qo‘llaydigan bilimni berishi, jamiyatga kerakli bo‘lib yetishtirishda tutgan o‘rni bilan boshqa sohalardan ajralib turadi. Adib ushbu she‘ri orqali tabiatning har faslida har xil vaziyatlarga to‘g‘ri kelib qolganida ham, qaddini tik tutib, hammasiga sabr, bardosh qilishi kerakligini yoritib o‘tgan. Jumladan qishning qahraton sovuqligidan, kuzning yomg‘irlaridan aziyat chekishiga qaramasdan, o‘zining saxovatpeshaligi bilan shirin-shakar mevalarni berishi taqsinga loyiqdir. She‘r nafaqat daraxtlar haqida, balki boshiga qanday kun kelishidan qat‘iy nazar Vatanini qo‘riqlaydigan, himoya qiladigan, Vatani uchun kerak bo‘lsa jonini beradigan insonlar haqida desak nur ustiga a‘lo nur bo‘ladi.

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ТЕХНОЛОГИЧЕСКИЙ АНАЛИЗ СЕПАРАТОРА СС-15А, ИСПОЛЪЗУЕМОГО НА ХЛОПКОПРИЁМНЫХ ПУНКТАХ

Хуршидбек Имомназаров

Ассистент, Ферганский государственный технический университет,
Узбекистан, г. Фергана

Ахмадалиева Сарвиноз Хилолиддиновна

Студентка, Ферганский государственный технический университет,
Узбекистан, г. Фергана

Аннотация

На хлопкоприёмных пунктах при межцеховой транспортировке семенного хлопка широко применяется пневматический метод. Сепараторы СС-15А предназначены для отделения хлопковой массы из воздушного потока, поступающего по системе пневмотранспорта. В данной статье рассматривается технологический анализ конструкции и функционирования сепаратора СС-15А, его основные рабочие элементы и параметры, а также факторы, влияющие на эффективность отделения хлопка. Проведена оценка рабочих характеристик и предложены направления повышения эффективности оборудования.

Ключевые слова: сепаратор СС-15А, вакуумный клапан, лопатка, семенной хлопок, частота вращения, эффективность.

Введение

В настоящее время в хлопкоочистительных предприятиях одним из основных и наиболее эффективных способов внутрипроизводственной транспортировки семенного хлопка от складов к перерабатывающим участкам является пневматический транспорт. Этот метод отличается высокой надёжностью, простотой в обслуживании и ремонте, а также минимальными потерями сырья при перемещении [1].

Пневмотранспортная система представляет собой совокупность трубопроводов, вентиляторов, сепараторов и других устройств, обеспечивающих непрерывную подачу хлопка за счёт разреженного или

нагнетаемого воздуха. Важнейшим элементом этой системы являются хлопковые сепараторы, предназначенные для эффективного отделения хлопка из воздушного потока. В частности, сепаратор СС-15А, как и аналогичный тип СХ, широко используется на предприятиях по приёму и первичной обработке хлопка в Узбекистане и странах СНГ [2].

Сепараторы выполняют несколько важных технологических функций. Во-первых, они обеспечивают надёжное отделение волокон и семенного хлопка от воздуха, подаваемого по пневмотрассе. Во-вторых, благодаря особенностям конструкции (наличие лопаток, камеры вихревого движения и фильтрующих элементов), сепараторы частично очищают хлопок от мелких загрязнений и пыли [3]. Таким образом, сепараторы не только участвуют в транспортировке, но и повышают качество исходного сырья.

Техническая эффективность пневмотранспортной системы в значительной степени зависит от состояния и характеристик сепаратора. Нарушение герметичности, износ лопаток, некорректная частота вращения ротора — всё это приводит к снижению производительности, увеличению потерь и пылеобразованию в помещениях [4]. Поэтому анализ конструкции, режимов работы и параметров сепараторов, таких как СС-15А, является актуальной научно-производственной задачей.

По данным последних технических отчётов, сепараторы СС-15А могут достигать эффективности отделения хлопка до 98%, при условии соблюдения всех эксплуатационных параметров и регулярного обслуживания [5]. Однако в реальных условиях эта эффективность может снижаться, что требует проведения технологического анализа и выработки рекомендаций по повышению производительности.

Сепаратор хлопка марки СС-15А

Сепаратор СС-15А представляет собой полностью металлическое (стальное) технологическое устройство, отличающееся высокой надёжностью и производительностью в условиях непрерывной эксплуатации. Основное его назначение — отделение семенного хлопка от воздуха в составе пневмотранспортной системы.

Смесь семенного хлопка с воздухом поступает в сепарационную камеру через подводящую трубу с большой скоростью. Благодаря своей инерции хлопок движется по внутренней поверхности камеры и попадает на



вращающиеся лопатки вакуумного клапана, расположенные в нижней части устройства. Под действием вращательного момента лопаток хлопковая масса механически вытесняется наружу — через выгрузное отверстие сепаратора.

Воздух, в свою очередь, внутри камеры постепенно теряет свою начальную скорость, изменяет направление потока и через сетчатые отверстия, расположенные по бокам камеры, направляется к пылеулавливающим устройствам. Перемещение воздуха происходит за счёт всасывающего действия вентилятора, подключённого к системе отвода (см. рис. 1) [2].

Такая конструкция обеспечивает:

- надёжное разделение хлопка и воздуха;
- предварительную очистку хлопка от мелкодисперсных загрязнений;
- снижение пылеобразования в производственных помещениях;
- устойчивую работу пневмотранспортной линии в целом.

Эффективность работы устройства определяется следующими основными параметрами:

- геометрия и износ лопаток;
- частота вращения ротора;
- степень герметичности вакуумного клапана;
- плотность и влажность хлопка на входе.

В комплексе, эти параметры определяют аэродинамическое поведение воздушно-хлопковой смеси внутри камеры и степень её разделения. Регулярное техническое обслуживание сепаратора СС-15А позволяет сохранять его производительность на уровне 95–98% при оптимальных условиях эксплуатации.

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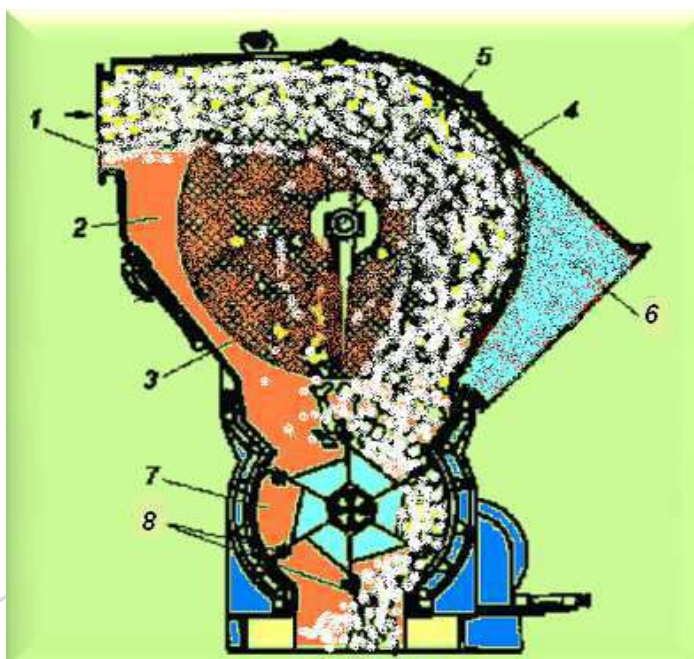


Рисунок 1. Поперечный разрез хлопкоотделителя СС-15А.

Таблица 1. Технические параметры сепаратора СС-15А [3,4].

1	Производительность хлопка, кг/ч	15000
2	Эффективность удаления мелкой грязи, %	5 ÷ 7
3	Частота вращения вала ножа, об/мин	150
4	Частота вращения вращающихся лопастей вакуумного клапана, мин/сек	93
5	Сопротивление давлению воздуха в сепараторе, Н/м ²	970
6	Потребляемая мощность электродвигателя, кВт	7,5

Вакуумный клапан в текущей конфигурации вращается со скоростью 93 оборота в минуту, что соответствует примерно 1,5 оборота в секунду. В рамках нашего технического предложения рассматривается возможность увеличения частоты вращения вакуумного клапана до 2 оборотов в секунду, то есть до 120 оборотов в минуту.



Для реализации данной модификации предлагается изменить передаточное число зубчатой передачи, приводящей в движение вал вакуумного клапана. Увеличение числа оборотов позволит повысить интенсивность выброса семенного хлопка из камеры сепарации и, как следствие, повысить общую производительность сепаратора.

Однако при увеличении скорости вращения возникает риск образования заторных ситуаций в рабочей камере сепаратора, обусловленных тем, что хлопок не успевает равномерно распределяться по поверхности, перед попаданием на лопатки клапана. Во избежание подобных нарушений технологического процесса нами предлагается уменьшить количество лопаток на вакуумном клапане на одну единицу.

Это изменение создаёт большую открытую площадь между лопатками, за счёт чего увеличивается просвет для свободного падения хлопка. Таким образом, обеспечивается:

- снижение вероятности засоров;
- равномерное распределение хлопковой массы;
- стабильная работа при повышенных оборотах.

Предлагаемая модификация может быть реализована без значительной модернизации корпуса устройства и не требует дорогостоящих доработок, что делает её технологически целесообразной и экономически выгодной.

Выводы

1. Сепаратор хлопка марки СС-15А является важнейшим элементом пневмотранспортной системы, обеспечивая эффективное отделение семенного хлопка от воздушного потока и его частичную очистку от пыли и мелких загрязнений.

2. Проведённый технологический анализ показал, что основными параметрами, влияющими на эффективность работы сепаратора, являются: частота вращения вакуумного клапана, геометрия и количество лопаток, а также аэродинамический режим внутри сепарационной камеры.

3. Предложено увеличить частоту вращения вакуумного клапана с 1,5 до 2 оборотов в секунду (с 93 до 120 об/мин) путём изменения передаточного числа зубчатой передачи. Это способствует повышению производительности сепаратора.

4. Во избежание засоров и перегрузки рабочей камеры при повышенной скорости вращения, рекомендовано уменьшить количество лопаток вакуумного клапана на одну единицу. Это позволит увеличить свободное пространство для падения хлопка и обеспечить стабильную работу системы.

5. Внедрение указанных конструктивных изменений может быть осуществлено без капитальной модернизации оборудования и обеспечит повышение надёжности, производительности и устойчивости технологического процесса на хлопкоприёмных пунктах.

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UDK: 916; 796.5

SURXONDARYO VILOYATIDAGI SPORT VA EKOTURISTIK MASKANLAR

Hamrayeva Dilbar Hamza qizi
Termiz davlat pedagogika instituti talabasi.
@hamrayevadilbar0707@gmail.com

Annostatsiya: Ushbu maqolada Surxondaryo viloyatidagi sport turizmi va ekoturistik maskanlar haqida ma'lumotlar berilgan. Viloyatda sport turizmi va ekoturizmning rivojlanish yo'nalishlari tahlil qilingan. Muallif tomonidan mazkur maqolada viloyatdagi sport turizmi va ekoturizm maskanlarini rivojlantirish bo'yicha bir qancha takliflar berilgan.

Kalit so'zlar: turizm, sport turizmi, ekoturizm, Sangardak sharsharasi, ekoturistik rayonlashtirish, Teshik-tosh g'ori, ekoturistik maskanlar.

Kirish: Odamlar dunyoning boshqa mamlakatlarga aniq maqsadlar bilan sayohat qilishi qadim zamonlardan ma'lum bo'lib, bu orqali millatlar va davlatlarni bir-biriga yaqinlashtiruvchi ko'prik vazifasini bajaradi. Insoniyat tarixi davomida sayohatlar, yangi hududlarni o'rganish, kashfiyotlar, madaniy aloqalar, xalqlarning rivojlanishiga katta hissa qo'shgan. Turizm insonlarni o'zaro birlashtiribgina qolmay, turli millat vakillarining hayot tarzi, urf odatlari, madaniyati, san'ati bilan tanishtiradi.

O'zbekiston Respublikasi Mustaqillikka erishgach turizm sohasida muhim o'zgarishlar ro'y berdi. Mamlakatimizda turizmning bir qancha yo'nalishlarini rivojlantirish salohiyati mavjud bo'lib, sohalarni modernizatsiyalash orqali turistlar salmog'ini oshirish mumkin.

Bizga ma'lumki, sport turizmi turizm sohasining asosiy yo'nalishlaridan biri. Prezidentimizning 2020-yil 30-oktabrdagi PF-6099-sonli “Sog'lom turmush tarzini keng tadbiq etish va ommaviy sportni rivojlantirish chora-tadbirlari to'g'risida”gi Farmoni¹ e'lon qilingan bo'lib, ushbu farmon ijrosi shuni ko'rsatdiki aholi salomatligini mustahkamlash, yosh avlodning sog'lom va barkamol bo'lib voyaga yetishini ta'minlash davlat siyosati darajasiga ko'tarilganligidan dalolat beradi.

¹ O'zbekiston Respublikasi Prezidentining 2020-yil 30-oktabrdagi PF-6099-son Farmoni.



Sport va turizmning birlashuvi yangi yo‘nalish tarzida sport turizmiga birlashadi. **Sport turizmi**-sport o‘yinlariga va sport musobaqalari o‘tkaziladigan mintaqaga yoki mamlakatlarga sportchilar bilan birgalikda tashrifi demakdir. Sport turizmi tarixan Sobiq Ittifoq davlatlarida yaxshi rivojlangan bo‘lib, hozirgi paytda turizmning bu tarmog‘i katta daromad manbai sifatida tez o‘sib bormoqda. Sport turizmi-sport turlari bilan bog‘liq holda rivojlangan. Sport turizmining turlariga quyidagilar kiradi:

- piyoda yurish;
- chang‘i turizmi;
- tog‘ turizmi;
- suv turizmi;
- transport vositalari turizmi;
- speloturizm;
- yelkanli turizm;
- mototsikl turizmi va boshqa turlarga bo‘linishi mumkin.

O‘zbekistonning qulay iqlim sharoitlari va o‘ziga xos landshaftini hisobga olsak sport va ekoturizmning rivojlanishi uchun barcha sharoitlar mavjud. Surxondaryo viloyatining ko‘plab tog‘ tizmalari daraxtzorlar va tog‘ daryolariga boy. Tog‘larning toza havosi quyoshli kunlarning ko‘pligi turistlarning tashrif buyuruvchi obyektlarga aylantirish imkoni mavjud. Tog‘ning baland qalin qorli qismlarida alpinizm, daryo turizmi kabi turli sport turizmini amalga oshirish imkonini beradi. Toshkent viloyatida joylashgan Chimyon sport dam olish majmuasini Surxondaryo viloyatining tog‘li mintaqalarida ham tashkil etish mumkin. Surxon daryosi va Oqtepa suv havzasida suv sport turlari uchun mos joy. Bu joylarda qayiqlarda suzish, baliq ovlash va dam olish zonalarini tashkil etsa bo‘ladi. Viloyatning tog‘li hududlari-Boysun va Hisor tizmalari sport turizmining turlari yo‘nalishlarini tashkil etish, sayyohlar va sport ixlosmandlari uchun katta qiziqish uyg‘otadi.

Bulardan tashqari Surxondaryo viloyatida sportning milliy kurash, piyoda yurish, veloturizm, ot sporti turizmlarini yanada rivojlantirish to‘g‘risida qonun va qarorlar ishlab chiqilmoqda. Surxondaryo viloyati tog‘ turizmi va ekoturizmni rivojlantirish uchun yetarli salohiyat mavjud. Viloyatda tabiiy landshaftining betakrorligini ko‘rsatadigan g‘orlar, massivlar, sharsharalar va daralarni ko‘rish mumkin. Bu joylar turistlar va sarguzasht izlovchilarning katta



e'tiborini tortadi. Vohamizning noyob va shifobaxsh o'simliklarning ko'pligi ularning inson salomatligiga ta'siri ko'plab sayyohlar va chet ellik turistlar orasida qiziqish uyg'otadi.

O'zbekiston hududini ekoturistik rayonlashtirilganda Surxondaryo viloyatining Hisor rayonidagi “Hisor davlat qo'riqxonasi” va Ko'hitang tog'li hududida “Surxon davlat qo'riqxonasi” kabi ekoturistik maskanlar mavjud. Surxon davlat qo'riqxonasi O'zbekistonning eng qadimiy qo'riqxonalaridan biri bo'lib, bu yerda kamayib borayotgan hayvonlar va o'simlik turlari himoyalanaadi [4; 181-bet].

Ekoturizm-nafaqat ma'muriy-manaviy maqsadlarni ko'zlagan holda betakror tabiiy hududlarga, ularning hayvonot va o'simlik dunyosiga sayohat, balki ijtimoiy-iqtisodiy masalalarni amalga oshirilishi yordamida ekologik muammolarni hal qilish bilan bir-biriga bog'liq majmualar yig'indisini tushunamiz [3; 35-bet]. Surxondaryo viloyatida ekoturizmni rivojlantirish uchun shart-sharoitlar, imkoniyatlar katta. Ekoturni yilning barcha fasllarida o'tkazish va uni tarixiy, diniy turizm bilan qo'shib olib borish mumkin. Ekoturistlar uchun qiziqarli bo'lgan obyektlar, alohida muhofazaga olingan hududlar tabiat ta'siri natijasida yuzaga kelgan g'aroyib landshaft zonalari ham uchraydigan va kamayib borayotgan o'simlik va hayvonot olami, tarixiy yodgorliklar ekoturizmni rivojlantirishning muhim asosi hisoblanadi. Viloyatda ekoturizmni rivojlantirishda ko'plab samarali ishlar olib borilmoqda. Ekoturizm uchun asos bo'ladigan noyob tabiiy resurslar mavjud bo'lib, ularning ayrimlari haqida ma'lumot berib o'taman.

Boysun tog'lari. Bu hudud tabiatining qizil kitobga kiritilgan ko'plab o'simlik va hayvon turlari bilan mashhur. Boysunning marmar qoyalari bag'rida Teshik-tosh deb nomlangan katta teshigi bor ulkan tosh mavjud. Bu joyda 9 yoshli Neandertal bola va qadimgi hayvonlarning qoldiqlari topilgani bilan ham mashhur. Bugungi kunda Teshik-tosh O'zbekistonning noyob arxeologik qo'riqxonalaridan biridir. An'anaviy tarzda o'tkaziladigan xalqaro ochiq folklor festivali ham aynan shu hududda o'tkaziladi. Bundan tashqari tog' yurishlari va chodir tikib dam olish uchun ham ajoyib joydir.

Surxondaryo mo'jizasi bo'lmish Sangardak sharsharasi qadimdan odamlarni o'ziga rom qilib kelayotgan so'lim maskanlardan biri hisoblanadi. Sangardak sharsharasi O'zbekistonning Tojikiston bilan chegaradosh Sariosiyo tumanida joylashgan. Bu tabiatning bebaho in'omidir. Uning tiniq suvlari tog'lardagi daralar orasidan jaranglab tushadi. Yozning issiq kunlarida bu yerda salqinlik hukm suradi.



Bu yerda nafaqat mahalliy aholi balki turli viloyatlardan kelgan sayyohlar uchun ham chinakam dam olish maskaniga aylangan. Bugun bu yerda yo‘lakchalar, dam olish joylari, sayyohlar uchun qulay sharoitlar yaratilmoqda. Atrofdagi qoyalarga urilib 60-70 metr, bahor oylarida 100 metrgacha bo‘lgan balandlikdan oqadigan tabiatning fusunkor mo‘jizasi ko‘zni quvontiradi.

Surxondaryo viloyati tabiiy va madaniy boyliklari bilan sport turizmi uchun katta imkoniyatlarni taqdim etadi. Tog‘lar, g‘orlar va daryolar bu hududni nafaqat jismoniy faollik uchun, balki sarguzasht izlovchilar uchun ham jozibador qiladi. Agar to‘g‘ri boshqaruv va infratuzilma yaratilsa, Surxondaryo viloyati nafaqat O‘zbekiston, balki Markaziy Osiyo sport turizmi markazlaridan biriga aylanishi mumkin. Ekoturistlar bu joyda tabiatni tomosha qilish va ekologik ta’lim olish imkoniga ega.

Surxondaryo viloyatida ekoturizmni rivojlantirish orqali quyidagilar o‘zgarishi kuzatiladi:

1. Tabiatni muhofaza qilish. Noyob tabiiy boyliklar himoya qilinadi va kelajak avlodga yetkaziladi;
2. Mahalliy iqtisodiy rivoji. Mahalliy aholining daromadi oshadi va ularning turmush darajasini yaxshilashga xizmat qiladi;
3. Xalqaro e’tiborni jalb qilish. Ekoturizm Surxondaryoni xalqaro xaritasida taniqli joyga aylantiradi.

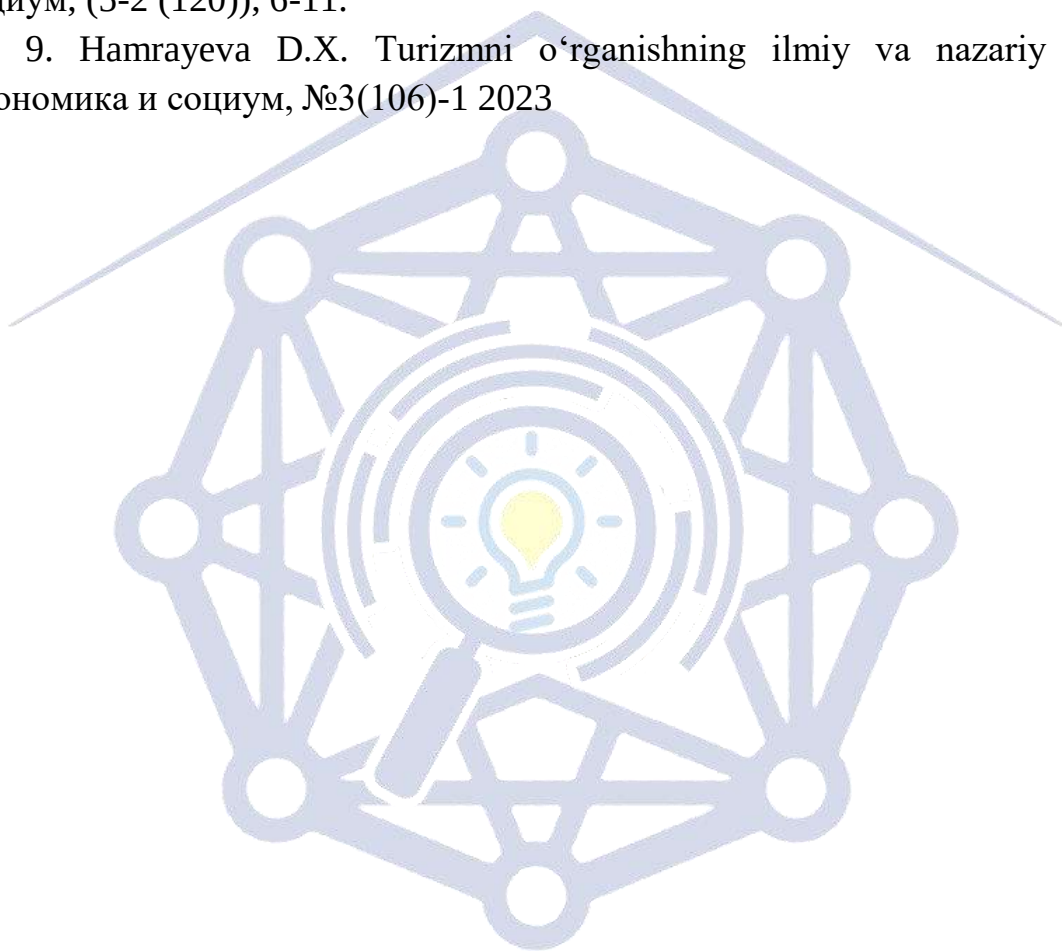
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**Research Science and
Innovation House**



Charm poyabzal chiqindilaridan samarali foydalanish usullari.
Методы эффективного использования отходов кожаной обуви.
Methods for effective use of leather shoe waste.

Namangan davlat texnika universiteti

PhD. dot A.O.Xomidjonov

Namangan davlat texnika universiteti

tayanch doktorant M.A.Jumayeva

Annotatsiya: Charm-poyabzal sanoati mahalliy xomashyo - hayvonlar terisidan yumshoq va qattiq charm, tabiiy va sun'iy charmdan poyabzal, shuningdek, telpak, ot-ulov asboblari, attorlik buyumlari, to'qimachilik va boshqa mashina uchun detallar ishlab chiqaradi. Charm sanoati O'zbekistonda hunarmandchilikning qadimiy turi sifatida mavjud. Toshkent, Samarqand, Buxoro, Qo'qon shaharlarida, Xorazmda yuzlarcha ko'nychilik do'konlari bo'lib, ularda teridan turli nav charmlar tayyorlangan.

Kalit so'zlar: charm, teri, charm chiqindilar, to'qimachilik - tolalar, poyabzal, pardozlash, xayvon terilari, galanteriya buyumlari.

Ko'nychilik korxonalari ustki kiyim, poyabzal, galanteriya buyumlari (sumka, belbog') tikish uchun material sifatida, mebel, avtomobil o'rindiqlarini qoplash, jabduqlar va jihozlar uchun, shuningdek, mashina qismlari va texnik maqsadlarda ishlatiladigan charm ishlab chiqarish bilan shug'ullanadi. Teri xomashyosi asosan sigir, buzoq va cho'chqa terilari, shuningdek, echki, qo'y va ot terilari hisoblanadi. Ishlab chiqarish ustaxonalarida terini ko'p bosqichli ketma-ket qayta ishlash amalga oshiriladi, bu sochlarni olish, strukturani ajratish, to'gridan-to'g'ri ko'nychilik, barabanni bo'yash va keyingi bir qator pardozlash jarayonlari va operatsiyalaridan iborat.

Eng yirik korxonalar tomonidan ishlab chiqarilgan haqiqiy charm assortimenti, shuningdek uni ishlab chiqarish uchun ishlatiladigan xom ashyoning qisqacha tavsifi, 1-jadvalda keltirilgan.

Poyabzal korxonalardan chiqayotgan charm chiqindilarini o'rganish.

Ushbu maqolada Farg'ona shahridagi "Uzsalaman" QK hamda "Kamron shoes" poyabzal ishlab chiqaruvchi korxonalari misolida ulardan chiqadigan chiqindilari va ulardan foydalanishning yo'nalishlari muhokama qilinadi. Teri



ishlab chiqarish chiqindilaridan foydalanish muammosi tahlil qilinib, chiqindilar turlari ko‘rib chiqildi. Ishda dunyoda qo‘llanilayotgan charm buyum ishlabvchiqaruchi korxonalari chiqindilarini qayta ishlashning mashhur usullari va texnologiyalari tizimlashtirilgan. Chiqindilarni ishlatishning asosiy yo‘nalishlari aniqlandi: tolali tuzilmani saqlash, kollagen molekulalarini saqlash va kollagenni turli usullar bilan to‘liq yoki qisman parchalash. Bu sanab o‘tilgan usullarni tanlanmagan teri chiqindilariga ham qo‘llash mumkinligi ko‘rsatilgan. Yuqoridagi korxonalarda o‘rganishlar natijasida yiliga 30-35 ming to‘nna charm qoldiq chiqindilarini chiqishini aniqladik.



1-rasm. Texnologik jarayonlardagi chiqayotgan charm chiqindilari namunalari.





2-rasm. Texnologik jarayonlardagi chiqayotgan charm namunalari.

Poyabzal chiqindilariga yelim, kauchuk, plastiklarga ajratiladi. Bunda Granulatsiya va qayta plastifikatsiya texnologiyasini qo'llash orqali foydali holatga o'tkazishimiz mumkin. Bunda quyidagi jarayonlar olib boriladi, chiqindilarni ajratish va tasniflash, yuvish va quritish, maydalash (shrederlar yordamida), ekstruziya yo'li bilan granula olish. Ushbu texnologiyani mohiyati shundaki $400-800^{\circ}\text{C}$ da chiqindilar kislorodsiz muhitda parchalanadi. Bunda piroliz moyi va gaz va uglerod qoldiqlari hosil bo'ladi. Ushbu texnologiyadan foydalanishning afzalligi shundaki, atmosferaga zararli chiqindilarning kamayishi va plastmassalardan energiya olish imkoniyatini beradi. Materialning tuzilishiga chuqur integratsiyalashgan yuqori texnologiyali jarayonlardan foydalanish katta energiya xarajatlarini talab qilishi ko'rsatilgan, ammo bu jarayonlar charm sanoati korxonalarida amalga oshirilishi mumkin. Kamroq energiya sarflaydigan jarayonlar, jumladan, mahsulotni maydalash va uni turli mahsulotlarda, masalan, qurilish materiallari, teriga o'xshash materiallarda bezak dettalar sifatida ishlatish va tikuvchilik korxonalriga ilmiy loyiha sifatida sotish uchun eng maqbul variantlardir.



Qayta ishlash usullari bilan bir qatorda texnologik jarayonlar natijasida olingan mahsulotlardan foydalanish sohalari aniqlanadi. Ushu qoldiq chiqindilarni ustki kiyim uchun bezak va erkaklar va ayollar bosh kiyimlarida bezak detallar va yeng detallari vazifasini bajarish qo‘llanilishini va resurs tejamkor texnologiyasini ishlab chiqishni taklif etamiz.

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O‘zbek va nemis tillarida hayvon va o‘simliklar bilan bog‘liq paremiyalarning tarjima muammolarini tahlil qilish

Raximova Malika Sultonovna

Urganch davlat universiteti tayanch doktoranti

M.B.Tillayeva

Filologiya fanlari nomzodi

Urganch davlat universiteti dotsenti

Annotatsiya. Ushbu maqolada o‘zbek va nemis tillarida hayvon hamda o‘simlik obrazlari ishtirokidagi paremiyalar lingvomadaniy jihatdan tahlil qilinadi. Paremiyalarning semantik xususiyatlari, milliy tafakkurdagi obrazli ifodalar, ularning madaniy kod sifatidagi o‘rni o‘rganiladi. Tarjima jarayonida uchraydigan asosiy muammolar – ekvivalentlik, konnotativ tafovut va madaniy moslik masalalari misollar asosida tahlil qilinadi. Shuningdek, maqolada funksional va kontekstual tarjima strategiyalari asoslanadi.

Kalit so‘zlar: paremiya, maqol, tarjima muammosi, hayvon obrazi, o‘simlik obrazlari, lingvomadaniyat, semantika, madaniy tafakkur, qiyosiy tahlil, o‘zbek tili, nemis tili.

Kirish. Globallashuv jarayonida madaniyatlararo muloqot va til o‘rganishga bo‘lgan ehtiyoj ortib borayotgan bir paytda, xalq ijodining noyob shakllaridan biri bo‘lgan paremiyalarning tarjimasi dolzarb masalaga aylanmoqda. Paremiyalar har bir xalqning tarixiy tajribasi, hayotga bo‘lgan qarashi, madaniy qadriyatlar va mentalitetini ifodalovchi qisqa, obrazli iboralardir. Ular ko‘pincha hayvon yoki o‘simlik obrazlari orqali ramziy ma‘no kasb etadi, bu esa ularning tarjimasini murakkablashtiradi.

Til – bu nafaqat kommunikatsiya vositasi, balki xalq ruhiy dunyosining ifodasidir. Xalq tilida yashab kelayotgan maqol va matallar insonning atrof-muhit bilan bo‘lgan o‘zaro munosabatini, ijtimoiy tajribasini, axloqiy qarashlarini aks ettiradi. Ayniqsa, hayvon va o‘simliklar bilan bog‘liq paremiyalar orqali inson hayoti, fazilatlar, yomon yoki yaxshi sifatlar ramziy shaklda ifoda etiladi.

Biroq paremiyalardagi obrazlar har ikki tilda bir xil semantik yuklama bilan qo‘llanilavermaydi. Hayvon yoki o‘simlik bir tilda ijobiy ma‘no berishi mumkin bo‘lsa, boshqa tilda salbiy konnotatsiyaga ega bo‘lishi mumkin. Natijada, so‘zma-

soʻz tarjima maʼnoni buzadi yoki madaniy mos kelmaslik holatlari yuzaga keladi. Shu sababli paremiya tarjimasi faqat til vositasi sifatida emas, balki lingvomadaniy va kulturologik yondashuv bilan olib borilishi lozim.

Metodologiya. Tadqiqotda qiyosiy-tahliliy, lingvomadaniy, semantik va tarjimaviy yondashuvlardan foydalanilgan. Oʻzbek va nemis tilidagi paremiyalar tanlab olinib, ularning semantik-strukturaviy xususiyatlari tahlil qilindi. Shuningdek, tarjima jarayonida yuzaga keladigan madaniy nomuvofiqliklar real misollar asosida baholandi va interpretatsiya qilindi.

Natijalar. Paremiyalar – bu xalq tafakkurining tiqilgan namunasi, yaʼni qisqa, obrazli, koʻp hollarda nasihatbop shakldagi xalq donishmandligidir. Ular xalqning koʻp asrlik tajribasi, qarashlari, madaniy qadriyatlarini oʻzida mujassamlashtiradi. Paremiyalarni tarjima qilish esa oddiy leksik tarjima emas, balki kulturologik, semantik, lingvistik va psixologik yondashuvni talab etadi.

Paremiyalar tarjimasida quyidagi muammolar kuzatiladi:

- **Madaniy nomuvofiqlik:** Hayvon yoki oʻsimlik obrazining bir tilda ijobiy, boshqa tilda esa salbiy konnotatsiyada boʻlishi.
- **Obrazli ifodaning yoʻqligi:** Baʼzi paremiyalar boshqa tilda umuman mavjud emas.
- **Simvolik maʼnoning notoʻgʻri talqini:** Soʻzma-soʻz tarjimada ramziy maʼno yoʻqoladi yoki chalkash tushuniladi.
- **Funksional tenglikning topilmasligi:** Paremiyaning grammatik shakli tarjimada saqlansa-da, emotsional va semantik yuklamasi mos kelmasligi mumkin.

Tarjimadagi nazariy yondashuvlar. Paremiyalarni tarjima qilishda bir necha asosiy nazariy yondashuvlar mavjud:

a) Ekvivalent tarjima. Bu yondashuvda tarjimon manba tilidagi paremiya uchun maqsad tilida toʻgʻridan-toʻgʻri mos keluvchi ekvivalentni topishga harakat qiladi.

Misol:

- Oʻzbekcha: It hurar, karvon oʻtar
- Nemischa: Die Hunde bellen, aber die Karawane zieht weiter.

b) Funksional tarjima. Agar toʻgʻridan-toʻgʻri ekvivalent boʻlmasa, paremiya mazmunan mos boshqa bir ibora bilan almashtiriladi. Misol:

- Oʻzbekcha: Sichqon chiqmas joydan mushuk chiqmaydi
- Nemischa funksional tarjima: Wo kein Rauch ist, ist auch kein Feuer.

c) Literal (so‘zma-so‘z) tarjima. So‘zlarning grammatik tuzilmasi saqlangan holda tarjima qilinadi. Bu usul ko‘p hollarda samarasiz bo‘lib, paremiya asl ma‘nosini yo‘qotishi mumkin. Misol:

- O‘zbekcha: Eshakni hammomga olib borsang ham sulton bo‘lmaydi
- Literal tarjima: Wenn du einen Esel ins Bad bringst, wird er kein Sultan.

Bu tarjima nemis tilida tabiiy emas va obraz noto‘g‘ri tushuniladi.

d) Izohli tarjima. Paremiya ma‘nosi yoki mazmuni izoh bilan beriladi. Bu usul ilmiy matnlarda yoki o‘quv materiallarida qo‘llaniladi. Misol:

- O‘zbekcha: Gulga suv quy, tikaniga emas
- Izohli tarjima: Du sollst das Gute unterstützen, nicht das Schlechte (bildlich: die Blume gießen, nicht den Dorn).

Lingvomadaniy tafovutlar roli. Hayvon va o‘simlik obrazlari milliy tafakkurda turlicha qabul qilinadi:

- O‘zbeklarda “it” so‘zi ko‘pincha salbiy (pastkashlik, ifloslik) obrazda bo‘lsa, nemislarda u sadoqat, do‘stlik ramzidir.
- O‘zbek tilida “cho‘chqa” salbiy diniy asosga ega, nemis tilida esa bazi paremiyalarda baxt va omad ramzi sifatida ishlatiladi (Schwein haben – omadi kelmoq).

Bu farqlar tarjimada konnotativ muammolarni keltirib chiqaradi.

Muhokamalar. O‘zbek va nemis tillarida xalq og‘zaki ijodining muhim qatlami bo‘lgan paremiyalar tilshunoslikda nafaqat grammatika va semantikasi, balki madaniyatlararo tafakkurni ham o‘rganishda asosiy materiallardan biri hisoblanadi. Ayniqsa, hayvon va o‘simliklar obrazlari ishtirok etgan paremiyalar xalqning qadimiy tabiatga munosabati, axloqiy qarashlari, ijtimoiy me‘yorlari hamda hayotiy falsafasini aks ettiradi. Bu obrazlar universal bo‘lishiga qaramay, ularning ramziy ma‘nosi har bir xalqda o‘ziga xos tarzda shakllangan. Shu bois bunday paremiyalarni tarjima qilishda ko‘plab lingvomadaniy va konnotativ to‘siqlar yuzaga keladi.

Masalan, o‘zbek tilidagi "Bo‘ri qachon to‘ygan?" degan paremiya orqali ochko‘z, o‘z manfaati yo‘lida hech to‘xtamaydigan odam nazarda tutiladi. Nemis tilida esa bo‘ri obrazini ifodalovchi ekvivalent to‘g‘ridan-to‘g‘ri mavjud emas, biroq "Der Wolf verliert sein Haar, aber nicht seine Natur" (Bo‘ri yungi to‘kiladi, lekin tabiati o‘zgarmaydi) degan maqol o‘xshash semantik yuklama bilan aytiladi. Bu

yerda tarjimada to‘g‘ri ekvivalent topish emas, balki funksional va mazmuniy tenglikni saqlab qolish muhim bo‘ladi.

Yana bir misol: o‘zbek tilida "Gulga suv quy, tikaniga emas" degan paremiya yaxshilikni qo‘llab-quvvatlash, yomonlikdan yiroq yurish g‘oyasini beradi. Nemis tilida bu kabi obrazli ibora to‘g‘ridan-to‘g‘ri mavjud emas, shuning uchun tarjimada izohli yoki funksional yondashuv tanlanadi. Masalan, "Pflege das Gute, meide das Schlechte" (Yaxshilikni parvarishla, yomonlikdan saqlan) shaklida ifodalash mumkin.

Ko‘plab hayvon obrazlari ham tilda milliy tafakkurga bog‘liq holda turlicha talqin qilinadi. O‘zbek tilida "it" obraziga ko‘p hollarda salbiy konnotatsiya yuklanadi ("It hurar, karvon o‘tar", "It egasini tanimasa, hurar"), bu obraz insonning pastkashligi, noma‘qulligi yoki keraksiz tanqidga ishora qiladi. Aksincha, nemis tilida "Hund" ko‘plab holatlarda sadoqat, fidoyilik, do‘stlik ramzi sifatida qabul qilinadi. Masalan, "Der Hund ist der beste Freund des Menschen" (It – insonning eng yaxshi do‘sti) kabi iboralar mavjud. Tarjimada bu tafovutlarni inobatga olmaslik ma‘noni noto‘g‘ri tushunishga olib kelishi mumkin.

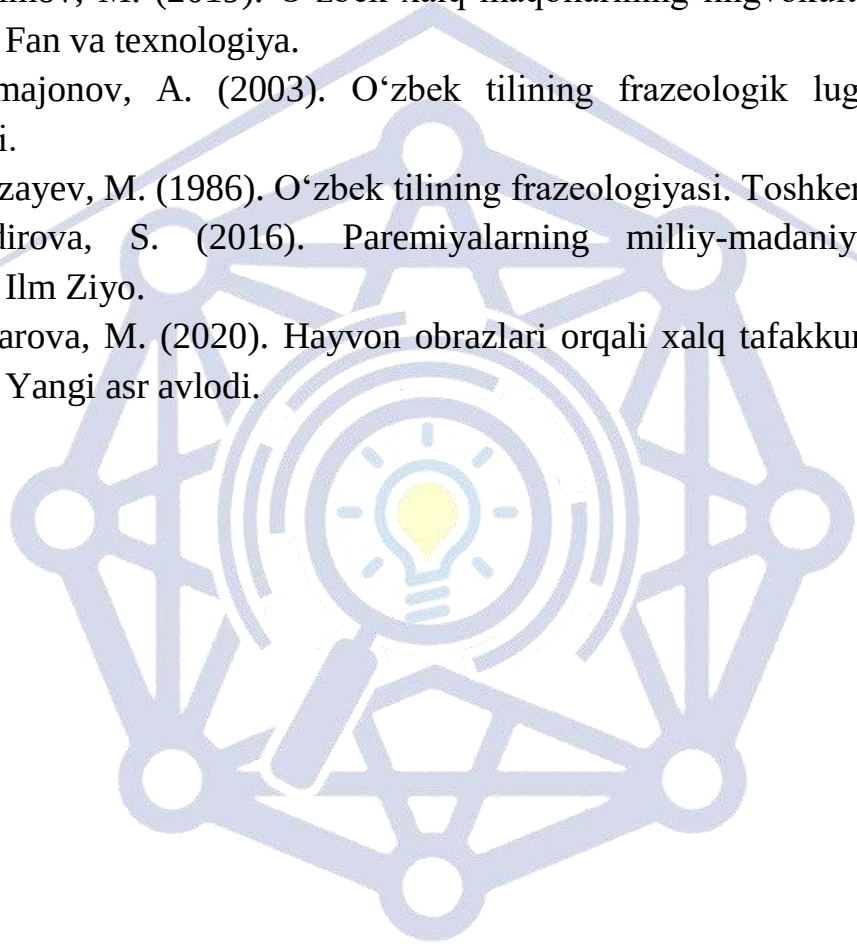
Xulosa. Bunday paremiyalarni tarjima qilishda to‘g‘ridan-to‘g‘ri so‘zma-so‘z yondashuv ko‘pincha yetarli bo‘lmaydi. Bu holatlarda tarjimon madaniyatlararo tafakkurni chuqur anglab, paremiya orqali ifodalanayotgan mazmunga teng keladigan kontekstual obrazni topishi kerak bo‘ladi. Tarjimon nafaqat tildagi so‘zlarni, balki xalqning dunyoqarashi, qadriyatlari, tarixiy tajribasini ham tarjima qilayotgani bois, paremiya tarjimasi katta madaniy mas‘uliyatni ham o‘z zimmasiga oladi.

Shunday qilib, o‘zbek va nemis tillaridagi hayvon va o‘simliklarga oid paremiyalarni o‘rganish va ularning tarjima muammolarini tahlil qilish orqali nafaqat lingvistik jihatdan, balki madaniy tafakkur darajasida ham chuqur qiyosiy tahlil olib borish mumkin. Bu esa tarjima amaliyotini takomillashtirishda, til o‘rgatish metodikasini boyitishda va madaniyatlararo muloqotni chuqurlashtirishda muhim ahamiyatga ega.

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Mintaqada investitsion faollikni oshirishda yashil iqtisodiyotning ahamiyati

Masharipov Sardorbek Farxadovich

Urganch Ranch texnologiya universiteti katta o‘qituvchisi

Abu Rayhon Beruniy nomidagi UrDU tadqiqotchisi

sardorbekmf74@gmail.com

Annotatsiya: Yashil iqtisodiyot - bu iqtisodiy o‘rish va rivojlanishni ekologik barqarorlik bilan uyg‘unlashtirishga qaratilgan iqtisodiy modeldir. Mintaqada investitsion faollikni oshirishda yashil iqtisodiyotning roli alohida ahamiyatga ega. Ushbu tezisda yashil iqtisodiyotning mintaqaviy iqtisodiyotni barqaror rivojlantirishdagi o‘rni, investitsiya jalb qilishda uning afzalliklari va ahamiyati tahlil qilinadi. Yashil iqtisodiyot investitsion faoliyatni faollashtirish uchun yangi imkoniyatlar yaratadi, xususan, qayta tiklanadigan energiya manbalariga, ekologik toza texnologiyalarga, va yashil infratuzilmalarga sarmoya kiritishni rag‘batlantiradi. Mintaqada yashil iqtisodiyotga oid investitsion loyihalar nafaqat ekologik muammolarni hal qilishga yordam beradi, balki iqtisodiy o‘rishni va ish o‘rinlarini yaratishni qo‘llab-quvvatlaydi. Ushbu tezisda, yashil iqtisodiyotning mintaqaviy investitsion rivojlanishga ta’siri, iqtisodiy va ekologik foydalari hamda davlatlar va xususiy sektorning roli ko‘rib chiqiladi.

Kalit so‘zlar: yashil iqtisodiyot, investitsiya faolligi, mintaqaviy rivojlanish, barqarorlik, ekologiya, qayta tiklanadigan energiya, ekologik toza texnologiyalar.

Аннотация: Зеленая экономика — это экономическая модель, направленная на согласование экономического роста и развития с экологической устойчивостью. Роль зеленой экономики в повышении инвестиционной активности в регионе имеет особое значение. В данной работе анализируется роль зеленой экономики в стабильном развитии региональной экономики, ее преимущества и значение при привлечении инвестиций. Зеленая экономика создает новые возможности для активизации инвестиционной деятельности, в частности, стимулирует вложения в возобновляемые источники энергии, экологически чистые технологии и зеленую инфраструктуру. Инвестиционные проекты в области зеленой экономики в регионе помогают не только решать экологические проблемы, но

и поддерживать экономический рост и создание рабочих мест. В данной работе рассматривается влияние зеленой экономики на региональное инвестиционное развитие, экономические и экологические преимущества, а также роль государственных и частных секторов.

Ключевые слова: зеленая экономика, инвестиционная активность, региональное развитие, устойчивость, экология, возобновляемая энергия, экологически чистые технологии.

Annotation: Green economy is an economic model aimed at reconciling economic growth and development with environmental sustainability. The role of green economy in increasing investment activity in the region is of particular importance. This thesis analyzes the role of green economy in the sustainable development of regional economy, its advantages and significance in attracting investments. Green economy creates new opportunities for stimulating investment activities, particularly encouraging investments in renewable energy sources, eco-friendly technologies, and green infrastructure. Investment projects related to green economy in the region not only help address environmental issues but also support economic growth and job creation. This thesis examines the impact of green economy on regional investment development, economic and ecological benefits, as well as the role of public and private sectors.

Keywords: green economy, investment activity, regional development, sustainability, ecology, renewable energy, eco-friendly technologies.

Kirish: O'zbekistonning 2030 yilgacha bo'lgan ijtimoiy-iqtisodiy rivojlanish strategiyasini ta'minlashda barqaror rivojlanishga erishish vositalari hisoblangan iqtisodiy, ijtimoiy va ekologik komponentlarni o'zaro muvofiqlashtirish murakkab vazifa hisoblanadi. Iqtisodiy va ijtimoiy komponentlar jamiyat oldiga bir avlod mobaynida adolatga erishish va aholining kambag'al guruhlariga maqsadli yordam ko'rsatish kabi yangi vazifalarni qo'ymoqda. Iqtisodiy va ekologik komponentlarning atrof-muhitga tashqi ta'siri qiymatini baholashning zarurligi bilan bog'liq yangi g'oyalar va yondashuvlarning shakllanishiga olib keladi. Barqaror iqtisodiy rivojlanishning ijtimoiy va ekologik komponentlari esa avlodlar o'rtasida tenglikni ta'minlash kabi masalalarning dolzarbligini yanada oshirmoqda. Mamlakatimizda "yashil iqtisodiyot" asosida barqaror rivojlanishni ta'minlashda O'zbekiston Respublikasi Prezidenti tomonidan 2019 yil 4 oktyabrda tasdiqlangan "2019–2030 yillarda O'zbekiston Respublikasini "yashil" iqtisodiyotga o'tish

strategiyasi” muhim dasturiy amal hisoblanadi. “Yashil iqtisodiyot”ga o’tishning muhim vazifalari qatoriga iqtisodiyotning energiya samaradorligini oshirish va tabiiy resurslarni oqilona iste’mol qilish kiradi. Ushbu belgilangan maqsadli indikatorlarga texnologiyalarni modernizatsiya qilish va moliyaviy mexanizmlarni rivojlantirish orqali erishiladi. 2030 yilgacha bo’lgan davrda strategiyani amalga oshirish jarayonida yalpi ichki mahsulot birligiga issiqxona gazlarining solishtirma chiqindilari 2010-yil darajasidan o’n foizga kamayadi, aholi va iqtisodiyot tarmoqlarining yuz foizga qadar zamonaviy, arzon va ishonchli elektr ta’minotidan foydalanish ta’minlanadi. Ekologik jihatdan yaxshilangan motorli yoqilg’i va avtomobil ishlab chiqarish hamda ulardan foydalanish kengaytiriladi, elektr transporti rivojlanadi.¹

Dunyo miqyosida ekologik muammolar va iqlim o’zgarishlari tobora dolzarb masalalarga aylanmoqda. Bu global iqtisodiyotning barqaror o’sishi va rivojlanishini ta’minlashga bo’lgan talabni kuchaytiradi. Shu nuqtai nazardan, yashil iqtisodiyot modelining ahamiyati kundan-kunga ortib bormoqda. Yashil iqtisodiyot, o’z ichiga ekologik toza texnologiyalarni, qayta tiklanadigan energiya manbalarini va barqaror ishlab chiqarish tizimlarini olgan holda, iqtisodiy o’sishning ekologik nuqtai nazardan barqaror bo’lishini ta’minlashga qaratilgan. Mintaqaviy darajada yashil iqtisodiyotga asoslangan investitsiyalar faolligini oshirish, mintaqaviy rivojlanishning uzluksiz va barqarorligini ta’minlashda muhim rol o’ynaydi.

Ko‘plab rivojlanayotgan va o‘rta darajadagi mamlakatlar iqtisodiy o’sishni ta’minlash uchun yangi investitsiya manbalarini izlamoqda. Shu bilan birga, ekologik barqarorlikni ta’minlash maqsadida yashil iqtisodiyotga sarmoya kiritish, mamlakatlar va mintaqalar uchun nafaqat iqtisodiy imkoniyatlarni kengaytiradi, balki ekologik xavflarni kamaytirishga ham yordam beradi. Bunday investitsiyalar nafaqat resurslarni samarali boshqarish, balki yangi ish o‘rinlari yaratish va ijtimoiy farovonlikni oshirish imkonini beradi.

Maqsadli ravishda, ushbu tezisda yashil iqtisodiyotning mintaqaviy investitsion faollikni oshirishdagi ahamiyati va uning iqtisodiy, ekologik va ijtimoiy foydalari o‘rganiladi. Shuningdek, yashil iqtisodiyotga asoslangan loyihalar va

¹ O‘zbekiston Respublikasi Prezidentining 2019 yil 4 oktyabrdagi “2019 — 2030 yillar davrida O‘zbekiston Respublikasining “yashil” iqtisodiyotga o’tish strategiyasini tasdiqlash to’g’risida”gi PQ-4477son Qarori



investitsiyalarni joriy etishda davlatlarning siyosiy va iqtisodiy roli, shuningdek, xususiy sektorning ulushi ko‘rib chiqiladi.

Asosiy qism: "Mintaqada investitsion faollikni oshirishda yashil iqtisodiyotning ahamiyati" mavzusining dolzarbligi bugungi kunda ekologik barqarorlik, iqtisodiy o‘sinh va ijtimoiy farovonlikni birlashtiruvchi yagona yo‘l sifatida yashil iqtisodiyotning o‘rni tobora muhimlashib bormoqda. Global iqlim o‘zgarishlari, tabiiy resurslarning kamayishi, atrof-muhitga zarar yetkazishning oldini olish zaruriyati kabi global muammolar, iqtisodiy taraqqiyot va ekologik barqarorlikni uyg‘unlashtirishni talab qilmoqda. Shu bilan birga, ko‘plab mamlakatlar o‘zlarining iqtisodiy rivojlanish strategiyalarida yashil iqtisodiyotning asosiy tamoyillarini joriy etishga harakat qilmoqda.

Mintaqaviy investitsiyalarni oshirishda yashil iqtisodiyotning ahamiyati quyidagilardan iborat:

1. **Atrof-muhitni muhofaza qilish va barqaror rivojlanish:** Yashil iqtisodiyot investitsiyalarni faqat iqtisodiy foyda olish uchun emas, balki ekologik barqarorlikni ta‘minlash uchun ham amalga oshirishni taqozo etadi. Bunda, energiya samaradorligini oshirish, qayta tiklanuvchi energiya manbalariga sarmoya kiritish va chiqindilarni kamaytirish kabi masalalar alohida o‘ringa ega.

2. **Yashil texnologiyalar va innovatsiyalar:** Yashil iqtisodiyot doirasida mintaqada yangi texnologiyalarni rivojlantirishga va ularni ishlab chiqarish jarayonlarida qo‘llashga alohida e‘tibor qaratiladi. Bu nafaqat ekologik toza texnologiyalarni rivojlantirishni, balki yangi ish o‘rinlari yaratishni ham anglatadi.

3. **Iqtisodiy diversifikatsiya:** Yashil iqtisodiyot mintaqalarda iqtisodiy diversifikatsiyani ta‘minlaydi. Masalan, ko‘mir yoki neftga tayanish o‘rniga, qayta tiklanuvchi energiya manbalarini, ekologik toza sanoatni rivojlantirish orqali yangi iqtisodiy sohalar yaratish mumkin.

4. **Xalqaro hamkorlik va investitsiyalar:** Yashil iqtisodiyot global miqyosda o‘zining ahamiyatini oshirmoqda, shuningdek, xalqaro tashkilotlar va donor mamlakatlar tomonidan yashil iqtisodiyotga oid loyihalar uchun investitsiyalar jalb qilinadi. Mintaqalarda bunday investitsiyalarni oshirish, iqtisodiy o‘sinh va atrof-muhitni himoya qilishni birlashtiradi.

Shu sababli, yashil iqtisodiyotning ahamiyatini tushunish va uni mintaqaviy rivojlanish strategiyalariga joriy etish bugungi kundagi eng dolzarb vazifalardan

biridir. Bu nafaqat mintaqaviy iqtisodiyotni modernizatsiya qilish, balki global ekologik muammolarga qarshi kurashish uchun ham muhimdir.

Yashil iqtisodiyotning asosiy tamoyillari quyidagi jadvalda keltirilgan:

Tamoyil	Izoh
Barqaror rivojlanish	Atrof-muhitni muhofaza qilish va iqtisodiy o‘sishni birlashtirish.
Energiya samaradorligi	Energiya resurslarini tejash va energiya manbalarini qayta tiklash.
Resurslardan samarali foydalanish	Tabii resurslardan samarali va oqilona foydalanish, chiqindilarni kamaytirish.
Innovatsion texnologiyalar	Yashil texnologiyalarni rivojlantirish va qo‘llash orqali sanoatni ekologik jihatdan toza qilish.
Ijtimoiy mas'uliyat	Jamiyat va ekologik tizimlar uchun ijtimoiy manfaatlarni ta'minlash.

Investitsiyalarning yashil iqtisodiyotga ta'siri jadval ko‘rinishida quyidagicha bo‘lishi mumkin:

Investitsiya turi	Ta'siri
Qayta tiklanuvchi energiya	Energiya ishlab chiqarishning ekologik jihatdan toza usullariga sarmoya kiritilishi.
Yashil texnologiyalar	Innovatsion texnologiyalarni rivojlantirish va ularni sanoatga tatbiq etish.
Ekologik toza sanoat	Kam zararli ishlab chiqarish texnologiyalari va ishlab chiqarishni diversifikatsiya qilish.
Transport infratuzilmasi	Ekologik transport tizimlariga sarmoya kiritish va ularning rivojlanishini ta'minlash.

Muhokama: Yashil iqtisodiyot – bu iqtisodiy o‘sish, barqarorlik va ekologik barqarorlikni birlashtirishga qaratilgan iqtisodiy modeldir. Yashil iqtisodiyot nafaqat atrof-muhitni saqlashni, balki iqtisodiy o‘sishni, yangi ish o‘rinlarini



yaratishni va barqaror rivojlanishni ta'minlashni maqsad qiladi. Mintaqada investitsion faollikni oshirishda yashil iqtisodiyotning o'rni va ahamiyati haqida bir nechta nuqtai nazardan muhokama o'tkazish mumkin.

1. Yashil iqtisodiyot va investitsion faollikning bog'liqligi

Yashil iqtisodiyotni rivojlantirishda investitsiyalarning ahamiyati katta. Yashil iqtisodiyotning asosiy tamoyillari ekologik barqarorlik, qayta tiklanadigan energiya manbalari, energiya samaradorligi va ekologik toza texnologiyalarni rivojlantirishga yo'naltirilgan bo'lsa, bu sohalar investitsiyalarni jalb qilishni talab qiladi. Mintaqalarda yashil iqtisodiyotga oid investitsion loyihalar nafaqat atrof-muhit muammolarini hal qilishga yordam beradi, balki iqtisodiy o'sish va ijtimoiy barqarorlikni ham ta'minlaydi.

Misol: Yevropa Ittifoqi va AQShda qayta tiklanuvchi energiya sektori yangi texnologiyalar va investitsiyalarni jalb qilishda muhim rol o'ynaydi. Mintaqalarda ham ushbu yo'nalishdagi sarmoyalar, masalan, quyosh va shamol energiyasiga oid loyihalar iqtisodiy o'sishga, yangi ish o'rinlari yaratishga olib kelmoqda.

2. Yashil iqtisodiyot va iqtisodiy o'sish

Yashil iqtisodiyot investitsiyalari faqat ekologik foyda keltiribgina qolmay, balki iqtisodiy o'sishni rag'batlantiradi. Yashil texnologiyalar va ekologik toza infratuzilmalarga sarmoya kiritish iqtisodiy tizimni diversifikatsiya qilishga yordam beradi. Misol uchun, yashil iqtisodiyotdagi investitsiyalar qayta tiklanadigan energiya manbalariga va ekologik texnologiyalarga sarmoya kiritishni ta'minlaydi, bu esa yangi sanoatlarning rivojlanishiga, innovatsiyalarga va raqobatbardoshlikning oshishiga yordam beradi.

Misol: Germaniya misolida ko'rishimiz mumkin, chunki bu davlatda yashil iqtisodiyotga oid investitsiyalar iqtisodiy o'sishni ta'minlash bilan birga, ishsizlikni kamaytirishga ham yordam berdi. Qayta tiklanuvchi energiya sohasiga sarmoya kiritish, yangi texnologiyalarni ishlab chiqish va yashil sanoatni rivojlantirish iqtisodiyotning muhim qismlariga aylandi.

3. Atrof-muhitni muhofaza qilish va ijtimoiy barqarorlik

Yashil iqtisodiyot mintaqada investitsiyalarni jalb qilish orqali atrof-muhitni muhofaza qilishda muhim rol o'ynaydi. Bu ekologik toza texnologiyalarni rivojlantirish, chiqindilarni kamaytirish, energiya samaradorligini oshirish kabi masalalarni hal qilish imkonini beradi. Yashil iqtisodiyotning ijtimoiy jihatlari ham muhimdir, chunki u aholining yashash sharoitlarini yaxshilash va barqaror



rivojlanishni ta'minlashga yordam beradi. Mintaqada yashil iqtisodiyotga sarmoya kiritish ekologik barqarorlikni saqlashda, shu bilan birga ijtimoiy farovonlikni oshirishda yordam beradi.

Misol: Skandinaviya mamlakatlari yashil iqtisodiyotga oid investitsiyalarni nafaqat ekologik muammolarni hal qilish, balki ijtimoiy farovonlikni oshirish uchun ham samarali qo'llamoqda. Masalan, qayta tiklanadigan energiya sohasidagi loyihalar ko'plab yangi ish o'rinlarini yaratgan va energiya samaradorligini oshirgan.

4. Mintaqaviy rivojlanish va davlatlar o'rtasidagi hamkorlik

Yashil iqtisodiyot mintaqaviy rivojlanishning muhim omili bo'lishi mumkin, chunki u hududlar orasidagi iqtisodiy farqni kamaytirishga yordam beradi. Yashil investitsiyalar mintaqada barqaror o'sishni ta'minlash va ijtimoiy adolatni ta'minlashga qaratilgan. Shu bilan birga, yashil iqtisodiyotning rivojlanishi davlatlar o'rtasidagi hamkorlikni kuchaytiradi, chunki global miqyosda ekologik masalalar faqat bir davlatning emas, balki barcha davlatlarning mas'uliyatidir.

Misol: Xitoy va Hindiston kabi rivojlanayotgan mamlakatlarda yashil iqtisodiyotga sarmoya kiritish, qayta tiklanadigan energiya va ekologik texnologiyalarni rivojlantirish orqali mintaqaviy barqarorlikni ta'minlashga qaratilgan. Bunday investitsiyalar faqat iqtisodiy o'sishni rag'batlantirmaydi, balki ijtimoiy va ekologik foydalarga ham olib keladi.

5. Investitsiyalarni jalb qilishda davlatlar va xususiy sektorning roli

Yashil iqtisodiyotga oid investitsiyalarni oshirishda davlat va xususiy sektorning hamkorligi muhim ahamiyatga ega. Davlatlar yashil iqtisodiyotga oid siyosatlar ishlab chiqish va ular uchun huquqiy va moliyaviy sharoitlarni yaratish orqali xususiy sektorni rag'batlantirishi mumkin. Xususiy sektor esa, o'z navbatida, innovatsion texnologiyalarni rivojlantirish va ularga sarmoya kiritishda faol bo'ladi.

Misol: Yashil obligatsiyalar (green bonds) kabi moliyaviy instrumentlar orqali davlatlar va xususiy sektorning hamkorligi kuchaymoqda. Masalan, Yevropa Ittifoqi o'z hududida qayta tiklanadigan energiya manbalariga investitsiyalarni jalb qilish uchun yashil obligatsiyalarni chiqarishni boshladi.

Xulosa

Yashil iqtisodiyot mintaqada investitsion faollikni oshirishda katta rol o'ynaydi, chunki u atrof-muhitni saqlash, iqtisodiy o'sish va ijtimoiy farovonlikni ta'minlashni birlashtiradi. Yashil iqtisodiyotga oid investitsiyalar mintaqaviy va



global darajada iqtisodiy va ekologik foydalar yaratadi. Davlatlar va xususiy sektorning birgalikdagi harakati yashil iqtisodiyotning muvaffaqiyatli rivojlanishiga olib keladi. Bunday investitsiyalar atrof-muhitni himoya qilish, yangi texnologiyalarni joriy etish va mintaqaviy barqarorlikni ta'minlash uchun zarurdir.

Xulosa va takliflar: Yashil iqtisodiyot mintaqada investitsion faollikni oshirishda muhim ahamiyatga ega, chunki u nafaqat ekologik muammolarni hal qilish, balki iqtisodiy o'sishni rag'batlantirish va ijtimoiy barqarorlikni ta'minlashga ham xizmat qiladi. Yashil iqtisodiyot, qayta tiklanadigan energiya manbalariga, ekologik toza texnologiyalar va yashil infratuzilmalarga sarmoya kiritishni rag'batlantiradi, bu esa yangi sanoatlarni rivojlantirish va yangi ish o'rinlarini yaratishga olib keladi. Yashil iqtisodiyotga oid investitsiyalar atrof-muhitni saqlash, iqtisodiy o'sishni kuchaytirish va barqaror rivojlanishni ta'minlashni birlashtiradi. Bunday investitsiyalar mintaqalarda ekologik barqarorlikni ta'minlash va mintaqaviy iqtisodiyotni diversifikatsiya qilishga yordam beradi. Mintaqaviy va global darajada yashil iqtisodiyotning ta'siri sezilarli bo'lib, mamlakatlar o'rtasida hamkorlikni kuchaytiradi va ijtimoiy adolatni ta'minlaydi.

Takliflar

1. **Davlatlar tomonidan yashil iqtisodiyotga oid siyosatlarni kuchaytirish:** Davlatlar yashil iqtisodiyotga oid strategiyalarni ishlab chiqish va amalga oshirishda faol bo'lishi kerak. Ular ekologik toza texnologiyalar va qayta tiklanadigan energiya manbalariga sarmoya kiritishni rag'batlantiruvchi siyosatlar ishlab chiqishi lozim. Shuningdek, yashil iqtisodiyotga oid huquqiy va moliyaviy mexanizmlar yaratilishi kerak.

2. **Xususiy sektorni rag'batlantirish va qo'llab-quvvatlash:** Xususiy sektorni yashil iqtisodiyotga oid investitsiyalarni amalga oshirishga jalb qilish zarur. Davlatlar xususiy sektor uchun soliq imtiyozlari, subsidiyalar va yashil obligatsiyalar kabi moliyaviy rag'batlar taqdim etishi mumkin. Shuningdek, davlat-xususiy hamkorliklarini rivojlantirish muhim ahamiyatga ega.

3. **Yashil iqtisodiyotga oid ta'lim va malaka oshirish dasturlarini joriy etish:** Yashil iqtisodiyotga oid bilim va ko'nikmalarni oshirish uchun ta'lim tizimida o'quv dasturlari va malaka oshirish kurslarini tashkil etish kerak. Bu nafaqat yangi avlodni tayyorlash, balki mavjud ish kuchini ham yangi texnologiyalar va uslublarga moslashtirish imkonini beradi.



4. **Innovatsion texnologiyalarni rivojlantirish va qo'llash:** Yashil iqtisodiyotda texnologik innovatsiyalarni qo'llash muhim ahamiyatga ega. Davlatlar va xususiy sektor ekologik toza texnologiyalarni rivojlantirishga sarmoya kiritish, shuningdek, energiya samaradorligini oshirish va chiqindilarni kamaytirish orqali ekologik muammolarni hal qilishga yordam berishi lozim.

5. **Mintaqaviy va xalqaro hamkorlikni kuchaytirish:** Yashil iqtisodiyotdagi muvaffaqiyatli tajribalarni mintaqaviy va xalqaro miqyosda tarqatish kerak. Mintaqaviy va xalqaro tashkilotlar o'rtasida hamkorlikni rivojlantirish, investitsiya oqimlarini boshqarish va ekologik barqarorlikni ta'minlash uchun zarurdir.

6. **Yashil infratuzilmani rivojlantirish:** Mintaqada yashil infratuzilmalarni rivojlantirish, ekologik transport tizimlarini yaratish va yashil shaharlar qurish bo'yicha loyihalar amalga oshirilishi kerak. Bu nafaqat ekologik muammolarni hal qilishga, balki iqtisodiy rivojlanishni qo'llab-quvvatlashga ham xizmat qiladi.

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Research Science and Innovation House



EMOTSIONAL INTELLEKT VA UNING KUNDALIK HAYOTDAGI AHAMIYATI

ISHMATOVA MAFTUNA NURMUHAMMEDOVNA
NIZOMIY NOMIDAGI O'ZBEKISTON MILLIY PEDAGOGIKA
UNIVERSITETI

Annotatsiya: Ushbu maqolada emotsional intellekt tushunchasi, uning asosiy tarkibiy qismlari va kundalik hayotdagi amaliy ahamiyati tahlil qilinadi. Emotsional intellektning shaxslararo munosabatlar, qaror qabul qilish, stressni boshqarish va professional rivojlanishdagi o'rni zamonaviy psixologik tadqiqotlar asosida yoritiladi. Shuningdek, emotsional intellektning shaxsiy hayot va ijtimoiy muhitdagi muvozanatga ta'siri ham tahlil qilinadi.

Kalit so'zlar: emotsional intellekt, hissiy boshqaruv, ijtimoiy ong, o'zini anglash, qaror qabul qilish, stress, empatiya, muloqot

Annotation: This article explores the concept of emotional intelligence, its main components, and its practical relevance in daily life. The role of emotional intelligence in interpersonal relationships, decision-making, stress regulation, and professional development is analyzed through contemporary psychological research. The paper also discusses its influence on personal well-being and social harmony.

Keywords: emotional intelligence, emotional regulation, social awareness, self-awareness, decision-making, stress, empathy, communication

Аннотация: В статье рассматривается понятие эмоционального интеллекта, его основные компоненты и практическое значение в повседневной жизни. Анализируется влияние эмоционального интеллекта на межличностные отношения, принятие решений, управление стрессом и профессиональное развитие на основе современных психологических исследований. Также рассматривается его влияние на личное благополучие и социальную гармонию.

Ключевые слова: эмоциональный интеллект, эмоциональная регуляция, социальная осведомлённость, самосознание, принятие решений, стресс, эмпатия, коммуникация

Inson intellekti haqida so'z borganda, ko'pincha faqat analitik va mantiqiy fikrlash, muammolarni hal qilish yoki umumiy aql darajasi (IQ) nazarda tutiladi.



Ammo so‘nggi o‘n yilliklar davomida psixologik fanlar taraqqiyoti shuni ko‘rsatmoqdaki, inson muvaffaqiyatining muhim omillaridan biri bu — emotsional intellekt (EI) hisoblanadi. Ushbu tushuncha ilk bor 1990-yilda Piter Salovey va Jon Mayer tomonidan ilmiy muomalaga kiritilgan bo‘lib, keyinchalik Daniel Goleman tomonidan ommaboplashtirilgan va keng tadqiq qilingan¹.

Emotsional intellekt insonning o‘z hissiyotlarini anglash, boshqarish, ularga nisbatan ongli munosabatda bo‘lish va boshqa odamlarning his-tuyg‘ularini to‘g‘ri idrok etish qobiliyatini bildiradi. Boshqacha aytganda, bu insonning o‘zini va boshqalarni hissiy jihatdan tushunish va bu tushunishga asoslangan xatti-harakat qilish qobiliyatidir². Goleman ta’kidlaganidek, emotsional intellekt nafaqat shaxsiy farovonlikni, balki professional muvaffaqiyatni ham belgilovchi asosiy psixologik ko‘rsatkichlardan biridir³. Zamonaviy jamiyatda inson faqat bilim va ko‘nikmalar asosida baholanmaydi. Shaxslararo munosabatlar, muloqot madaniyati, stressga bardoshlilik, qaror qabul qilishdagi muvozanat kabi jihatlar hayotda muvaffaqiyatga erishish uchun zarur bo‘lgan omillardir. Aynan emotsional intellekt ana shu omillarni shakllantiradi va ularni uyg‘unlashtirishda asosiy vosita sifatida xizmat qiladi.

Tadqiqotlar shuni ko‘rsatmoqdaki, emotsional intellekti yuqori bo‘lgan shaxslar stressni samarali boshqaradi, o‘zlarining va boshqalarning hissiyotlarini anglab, murosali va konstruktiv munosabatlarga erishadi⁴. Bunday shaxslar odatda kuchli ijtimoiy aloqalarga ega bo‘ladi, kasbiy faoliyatda muvaffaqiyat qozonadi va hayotdan yuqori darajada qoniqish hosil qiladi.

Shuningdek, emotsional intellekt bolalikdan boshlab shakllanadi va bu jarayonda oila, maktab, ijtimoiy muhit, ommaviy axborot vositalari va hatto madaniyat ham faol ishtirok etadi⁵. Bu esa uni rivojlantirish mumkin bo‘lgan psixologik qobiliyat sifatida ko‘rib chiqishga asos beradi. Ushbu maqolada emotsional intellektning nazariy asoslari, uning tarkibiy qismlari, kundalik hayotdagi amaliy funksiyalari hamda shaxsiy va kasbiy muvaffaqiyatdagi o‘rni

¹ Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.

² Mayer, J. D., Caruso, D. R., & Salovey, P. (2004). Emotional Intelligence: Theory, Findings, and Implications. *Psychological Inquiry*, 15(3), 197–215.

³ Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books.

⁴ Schutte, N. S., Malouff, J. M., & Bhullar, N. (2007). Emotional intelligence and interpersonal relations. *Journal of Social Psychology*, 147(1), 41–59.

⁵ Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18(Suppl.), 13–25.

atroflicha tahlil qilinadi. Shuningdek, emotsional intellekt darajasini oshirishga xizmat qiluvchi psixologik yondashuvlar va trening metodlari ham ko‘rib chiqiladi.

1. Emotsional intellektning ilmiy asoslari va asosiy komponentlari

Emotsional intellekt (EI) insonning hissiy jarayonlarini ongli tarzda anglash, ularni boshqarish va bu asosda o‘zini va boshqalarni samarali idrok qilish qobiliyatidir. Salovey va Mayer emotsional intellektni to‘rt asosiy qobiliyatga ajratganlar:

- O‘z emotsiyalarini anglash (emotional perception);
- Emotsiyalar orqali fikrlashni rag‘batlantirish;
- Hissiy bilimlarni tushunish va tahlil qilish;
- Emotsiyalarni boshqarish va ulardan foydalanish⁶.

Daniel Goleman esa EI’ni beshta asosiy komponentga ajratadi:

1. O‘zini anglash (self-awareness) – shaxs o‘z his-tuyg‘ularini tan oladi va ularning sababini tushunadi;
2. O‘zini boshqarish (self-regulation) – impulsiv his-tuyg‘ularni nazorat qilish, salbiy emotsiyalarni konstruktiv yo‘nalishga burish;
3. Ichki motivatsiya (intrinsic motivation) – o‘zini mukofotlashga emas, balki maqsad sari rag‘batlantirish;
4. Empatiya (empathy) – boshqalarning hissiy holatini idrok etish va ularni inobatga olish;
5. Ijtimoiy ko‘nikmalar (social skills) – muloqot qilish, jamoada ishlash, mojaroni hal qilish, yetakchilik qilish qobiliyatlari⁷.

Bu komponentlar insonning ijtimoiy hayotdagi muvaffaqiyatini belgilovchi eng muhim psixologik ko‘rsatkichlar sirasiga kiradi.

2. Emotsional intellektning kundalik hayotdagi roli

➤ Shaxslararo munosabatlar va empatiya

Emotsional intellektning eng muhim jihatlaridan biri bu — empatiya qobiliyatidir. Empatiyasi kuchli insonlar o‘z atrofida qilayotgan hissiyotlarini to‘g‘ri anglab, ularga zarur qo‘llab-quvvatlovni bera oladi. Tadqiqotlar shuni

⁶Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.

⁷Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books.



ko‘rsatmoqdaki, empatiya darajasi yuqori bo‘lgan shaxslar oilaviy hayotda, do‘stlik munosabatlarida va ish joyida ijobiy ijtimoiy aloqalarni shakllantira oladi⁸.

➤ Stressni boshqarish va ruhiy barqarorlik

Stress holatlari bugungi zamon kishisining doimiy hamrohiga aylangan. Emotsional intellekti rivojlangan insonlar o‘zlarining ruhiy holatini tezroq tiklay oladi, xavotir, tushkunlik va g‘azabni anglab, uni ijobiy energiyaga aylantira oladi. EI bu yerda emosional regulyatsiya vazifasini bajaradi⁹. Masalan, yuqori emotsional intellektga ega shaxs ishdagi qiyinchiliklarni shaxsiy muammo sifatida emas, balki rivojlanish imkoniyati sifatida qabul qiladi. Bu esa ruhiy bardoshlilik (resilience) darajasining yuqori bo‘lishiga olib keladi¹⁰.

➤ Qaror qabul qilishda emotsiyalarning o‘rni

An‘anaviy yondashuvlarda qaror qabul qilish faqat aql-zakovatga tayanadi deb hisoblangan. Ammo zamonaviy psixologiya buni rad etadi. Hissiyotlar ham insonga muhim axborot manbai bo‘lib xizmat qiladi. Emotsional intellekt orqali inson o‘z hissiyotlarini e‘tiborga olib, harakatini ongli yo‘naltiradi. Bu esa ko‘proq asosli va uzoq muddatda foydali qarorlar qabul qilinishiga olib keladi¹¹.

➤ Kasbiy faoliyatda emotsional intellektning o‘rni

Emotsional intellekt — bu nafaqat ruhiy salomatlik, balki kasbiy muvaffaqiyatning ham kalitidir. Goleman tomonidan olib borilgan tadqiqotlarda yuqori lavozimdagi mutaxassislarning 85–90 foizi yuqori emotsional intellektga ega bo‘lishi aniqlangan¹². Bunday shaxslar jamoa bilan ishlay oladi, liderlik ko‘nikmalarini namoyon etadi, mijozlar bilan ijobiy munosabat o‘rnatadi va mojarolarda diplomatik yondashuv ko‘rsatadi.

➤ Bolalarda va o‘smirlarda emotsional intellektning rivojlanishi

⁸ Schutte, N. S., Malouff, J. M., & Bhullar, N. (2007). Emotional intelligence and interpersonal relationships. *Journal of Social Psychology*, 147(1), 41–59.

⁹ Mikolajczak, M., Petrides, K. V., & Hurry, J. (2009). Adolescents choosing self-harm as an emotion regulation strategy: The protective role of emotional intelligence. *Journal of Research on Adolescence*, 19(3), 562–578.

¹⁰ Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320–333.

¹¹ Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology*, 53(3), 371–399.

¹² Goleman, D. (2000). Leadership that gets results. *Harvard Business Review*, 78(2), 78–90.

Bolalik davrida emotsional intellekt asoslari shakllanadi. Ota-ona, tarbiyachilar, maktab va ijtimoiy muhit ushbu jarayonda muhim rol o'ynaydi. Tadqiqotlar shuni ko'rsatmoqdaki, EI darajasi yuqori bo'lgan bolalar o'z tengdoshlari bilan yaxshi munosabatda bo'ladi, darsda faol, intizomli va stressga chidamli bo'ladi¹³.

XULOSA

Emotsional intellekt (EI) zamonaviy psixologiya va ijtimoiy fanlar doirasida insonning shaxsiy va kasbiy muvaffaqiyatini belgilovchi asosiy omillardan biri sifatida qaralmoqda. Tadqiqotlar ko'rsatadiki, faqat aqliy salohiyat (IQ) emas, balki emotsional qobiliyatlar — o'z his-tuyg'ularini anglash, boshqarish, boshqalarning emotsiyalariga empatiya bilan yondashish va sog'lom ijtimoiy aloqalarni qurish — hayot sifatini belgilashda hal qiluvchi ahamiyat kasb etadi.

Kundalik hayotda emotsional intellekt quyidagi jihatlarda muhim rol o'ynaydi:

- shaxslararo munosabatlarni uyg'unlashtirish;
- stressni kamaytirish va emotsional barqarorlikni ta'minlash;
- qaror qabul qilishni ongli va muvozanatli shakllantirish;
- kasbiy faoliyatda yetakchilik, jamoaviy ish va mijozlar bilan munosabatlarni yaxshilash;
- bolalarda ijtimoiy kompetensiyalarni rivojlantirish.

Emotsional intellekt insonning nafaqat psixologik salomatligi, balki umumiy farovonligi uchun ham muhim omil sanaladi. Uni o'rganish va rivojlantirishga yo'naltirilgan psixologik treninglar, ta'lim dasturlari va tarbiya uslublari orqali shaxsiy salohiyatni to'liq ro'yobga chiqarish mumkin. Shu bois, bugungi kunda EI nafaqat psixologlar va pedagoglar uchun, balki har bir inson uchun zarur bo'lgan asosiy psixologik ko'nikmalardan biri sifatida qaralishi lozim. Emotsional intellekt rivojlangan jamiyat — bu empatiyaga asoslangan, barqaror, madaniy va sog'lom ijtimoiy muhitli jamiyatdir.

¹³ Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? Early Education and Development, 17(1), 57–89.



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TIBBIYOT TALABALARINI O'QITISHDA VIRTUAL REALLIK TEXNOLOGIYALARIDAN FOYDALANISH

Egamov Sultonjon Malikovich

Toshkent davlat tibbiyot universiteti “Biotibbiyot muhandisligi, informatika
va biofizika” kafedrası assistenti

Xo'jamurodov Jaloliddin Eldor O'g'li

Toshkent davlat tibbiyot universiteti 2-son davolash fakulteti 1- kurs 123-
“B” guruh talabasi

Annotatsiya:

Mazkur maqolada tibbiyot sohasida ta'lim jarayonini takomillashtirish, talabalarni amaliy ko'nikmalar bilan qurollantirishda simulyatsiya texnologiyalari va virtual reallikdan foydalanishning o'рни va samaradorligi haqida fikr yuritiladi. Zamonaviy axborot texnologiyalarining tibbiy ta'limdagi ahamiyati, ularning o'qitish jarayoniga integratsiyalashuvi va real klinik vaziyatlarni modellashtirishdagi roli yoritiladi.

Kalit so'zlar: tibbiy ta'lim, simulyatsiya, virtual reallik (VR), interaktiv texnologiyalar, klinik ko'nikmalar, amaliy mashg'ulotlar.

Kirish (kengaytirilgan)

XXI asrda ta'lim tizimida yuz berayotgan tub o'zgarishlar, raqamli texnologiyalarning rivojlanishi, sun'iy intellekt, virtual reallik (VR), kengaytirilgan reallik (AR) va simulyatsiya kabi ilg'or texnologiyalarning kundalik hayotga jadal kirib kelishi — barcha sohalarda, jumladan, tibbiy ta'limda ham yangi yondashuvlarni talab qilmoqda. Ayniqsa, tibbiyot sohasi o'zining murakkabligi, inson hayoti va salomatligi bilan bevosita bog'liqligi bois, ushbu sohada professional kadrlarni tayyorlash jarayoni eng yuqori darajada samarali va zamonaviy bo'lishi lozim.

An'anaviy tibbiy ta'limda talabalar, asosan, nazariy bilimlarga urg'u berilgan holda o'qitilar edi. Biroq amaliyotda yuzaga keladigan turli xil klinik holatlar, favqulodda vaziyatlar, tezkor qarorlar qabul qilish zarurati, bemor bilan muloqot kabi jihatlar o'qitish jarayonida yetarli darajada modellashtirilmasdi. Bu esa talabalarni amaliy faoliyatga tayyorlashda yetarli darajada sifat ko'rsatkichlarini ta'minlab bera olmasdi. Shu bois, so'nggi yillarda tibbiy ta'limda yangi pedagogik



texnologiyalar, xususan, **simulyatsiya texnologiyalari** va **virtual reallik tizimlari** keng qo'llanilmoqda.

Simulyatsiya texnologiyalari orqali talabalar real hayotga yaqin bo'lgan muhitda, xavfsiz va boshqariladigan sharoitda turli klinik holatlarni amaliyotda mashq qilish imkoniyatiga ega bo'ladi. Bu esa ularning kasbiy malakasini shakllantirishda, mas'uliyat va mustaqil qaror qabul qilish ko'nikmalarini rivojlantirishda muhim ahamiyat kasb etadi. Ayniqsa, virtual reallik vositalari orqali talabalar turli jarrohlik operatsiyalarini, diagnostik tekshiruvlarni, hayot uchun xavfli holatlardagi harakat algoritmlarini takror-takror mashq qilishlari mumkin.

Tibbiy simulyatsiya markazlari va VR asosidagi o'quv dasturlarining joriy qilinishi, nafaqat tibbiy ta'lim sifatini oshirishga, balki bemor xavfsizligini ta'minlashga ham xizmat qiladi. Zero, zamonaviy tibbiyotda talaba yoki yosh shifokorning o'rganish jarayoni bemorlar salomatligiga xavf tug'dirmasligi kerak. Shu bois, real klinik faoliyatga tayyorlashning xavfsiz va samarali usuli sifatida simulyatsiya texnologiyalarining ahamiyati kundan-kunga ortib bormoqda.

Simulyatsiya texnologiyalarining mohiyati va afzalliklari.

Simulyatsiya — bu real hayotdagi klinik holatlarni sun'iy muhitda modellashtirish orqali tibbiy amaliyotga yaqin sharoitda mashg'ulot o'tkazish texnologiyasidir. Tibbiy simulyatsiya quyidagi turlarda amalga oshiriladi:

- **Manekin (simulyator) asosidagi mashg'ulotlar**
- **Kompyuterlashtirilgan simulyatsiyalar**
- **Standart bemorlar (aktyorlar) yordamida mashg'ulotlar**
- **VR (Virtual Reality) va AR (Augmented Reality)**

texnologiyalar

Simulyatsiya orqali talabalar quyidagilarga erishadi:

- Klinika amaliyotiga yaqin sharoitda mashq qilish;
- Takroriy amaliy mashg'ulotlar orqali tajriba to'plash;
- Xatolik qilish xavfini kamaytirgan holda o'rganish;
- Jamoada ishlash, tezkor qaror qabul qilish kabi yumshoq ko'nikmalarni shakllantirish.

Virtual reallik (VR) texnologiyasining tibbiy ta'limdagi roli.

VR texnologiyasi — bu sun'iy yaratilgan muhitda foydalanuvchini o'rganilayotgan muhit ichiga “botirish” orqali o'qitish usulidir. VR texnologiyalari quyidagilarni ta'minlaydi:

- 3D formatda aniq anatomik strukturalarni ko‘rish;
- Operatsiyalarni bosqichma-bosqich bajarish;
- Favqulodda holatlarga tezkor tayyorgarlik ko‘rish;
- Klinik muammolarni hal qilishda interaktiv yechimlar ishlab chiqish.

Masalan, **“Body Interact”**, **“Touch Surgery”**, **“Osso VR”** kabi ilovalar orqali talabalar murakkab operatsion amaliyotlarni real muhitga yaqin holda o‘rganish imkoniga ega bo‘lmoqda.

Pedagogik samaradorlik va o‘quv jarayoniga ta’siri.

Simulyatsiya va VR texnologiyalari orqali o‘qitilgan talabalar:

- An’anaviy usullarda o‘qitilganlarga nisbatan mustahkamroq ko‘nikmalarni egallaydi;
- Stressli klinik holatlarda tezkor va to‘g‘ri harakat qilishni o‘rganadi;
- Klinik qaror qabul qilish va muammolarni hal qilishda yuqori natijalarga erishadi.

Tadqiqotlar shuni ko‘rsatadiki, simulyatsion treninglardan o‘tgan talabalar klinik amaliyotda kamroq xatoga yo‘l qo‘yadi, bemorlar bilan muloqotda ishonchliroq bo‘ladi.

Tibbiy ta’limda integratsiyalashgan o‘qitish modeli.

Simulyatsiya va VR texnologiyalarini o‘quv dasturlariga integratsiyalash:

- An’anaviy darslarni to‘ldiruvchi vosita sifatida;
- Klinik amaliyot oldidan tayyorgarlik bosqichi sifatida;
- Baholash va diagnostika maqsadlarida (OSCE formatida) ishlatiladi.

Mazkur texnologiyalarni samarali qo‘llash uchun:

- Maxsus o‘quv laboratoriyalari tashkil etilishi;
- O‘qituvchilarni malakasini oshirish;
- O‘quv dasturini texnologik vositalarga moslashtirish zarur.

Xulosa

Tibbiy ta’limda simulyatsiya texnologiyalari va VR tizimlaridan foydalanish — bu zamonaviy, xavfsiz va samarali ta’lim usuli bo‘lib, tibbiyot talabalarining kasbiy ko‘nikmalarini mukammallashtirishda katta ahamiyatga ega. Ushbu texnologiyalar yordamida talabalar real klinik sharoitga yaqin muhitda o‘qitilib,

amaliyotga tayyor holatga keltiriladi. Kelgusida ushbu yo‘nalishni yanada rivojlantirish, texnologik bazani kengaytirish va pedagogik metodikani yangilash ta’lim sifatini sezilarli darajada oshirishga xizmat qiladi.

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Yurak ishemik kasalligi, surunkali buyrak yetishmovchiligi va 2 tip qandli diabet bilan og‘rigan bemorlarni hayot sifati xususiyatlarini o‘rganish

Shoymurodova Gulasal Baxtiyor qizi

Toshkent tibbiyot akademiyasi

Terapiya : xalq tabobati

1-bosqich magistranti

Nuritdinova Sevara Karimovna

Tulyaganova Dildora Karimovna

Annotatsiya: Yurak ishemik kasalligi, surunkali buyrak yetishmovchiligi va 2 tip qandli diabet bemorlarning hayot sifatiga jiddiy ta'sir ko'rsatadigan kasalliklar to'plamidir. Ushbu kasalliklar bir-biri bilan o'zaro bog'liq bo'lib, bemorlarning umumiy salomatligi, psixologik holati va hayot sifatini sezilarli darajada pasaytiradi. Ushbu maqolada ushbu kasalliklarning har biri va ularning birgalikdagi ta'siri, shuningdek, bemorlarning hayot sifatini o'rganish masalalari ko'rib chiqiladi.

Kalit so'zlar: Yurak ishemik kasalligi, surunkali buyrak yetishmovchiligi, qandli diabet, yurak, qon aylanish tizimi muammolar, hayot sifati xususiyatlari.

Yurak ishemik kasalligi yurak qon tomir tizimining muhim kasalliklaridan biridir. Bu kasallik yurak mushaklariga qon yetkazib beruvchi tomirlarning torayishi yoki to'silishi natijasida yuzaga keladi. Natijada, yurak mushaklari kislorod va oziq moddalardan mahrum bo'ladi, bu esa yurak faoliyatining pasayishiga olib keladi. Yurak ishemik kasalligi bemorlarning jismoniy faolligini cheklaydi, shuningdek, yurak xurujlari va boshqa asoratlar xavfini oshiradi. Bu esa bemorning hayot sifatini pasaytiradi, chunki bemorlar ko'pincha og'riq, charchoq va depressiya holatlarini boshdan kechirishadi. Surunkali buyrak yetishmovchiligi buyraklarning normal ishlashini ta'minlay olmaydigan holatdir. Bu kasallik natijasida organizmda toksinlar to'planadi, suyuqlik muvozanati buziladi va elektrolitlar darajasi o'zgaradi. Bemorlar ko'pincha dializga muhtoj bo'lishadi, bu esa ularning hayot sifatini yanada pasaytiradi. Surunkali buyrak yetishmovchiligi bo'lgan bemorlar jismoniy va ruhiy jihatdan qiyinchiliklarga duch kelishadi, chunki dializ jarayoni ularning kundalik hayotini sezilarli darajada cheklaydi. Bemorlar ko'pincha ovqatlanish, jismoniy faollik va ijtimoiy hayotda cheklovlarga duch kelishadi.[1]

2 tip qandli diabet esa insulinning yetarli darajada ishlab chiqarilmasligi yoki organizmning insulinga nisbatan to'g'ri javob bera olmasligi natijasida yuzaga keladi. Bu kasallik qon shakarining doimiy ravishda oshishiga olib keladi, bu esa ko'plab asoratlarda va sog'liq muammolariga sabab bo'lishi mumkin. Diabetdan azob chekayotgan bemorlar ko'pincha ko'rish qobiliyatining pasayishi, nerv tizimi muammolari va yurak-qon tomir kasalliklari kabi muammolarga duch kelishadi. Bu esa bemorlarning hayot sifatini pasaytiradi, chunki ular doimiy ravishda o'z sog'lig'iga e'tibor berishlari va turli xil cheklovlariga rioya qilishlari kerak. Ushbu uchta kasallikning birgalikdagi ta'siri bemorlarning hayot sifatini yanada murakkablashtiradi. Masalan, yurak ishemik kasalligi va 2 tip qandli diabet o'rtasida o'zaro bog'lanish mavjud. Diabet yurak kasalliklari xavfini oshiradi, chunki yuqori qon shakar darajasi qon tomirlarining shikastlanishiga olib keladi. Shuningdek, surunkali buyrak yetishmovchiligi ham yurak ishemik kasalligi va diabet bilan bog'liq muammolarni kuchaytirishi mumkin. Bemorlar ko'pincha bir vaqtning o'zida bir nechta dori-darmonlarni qabul qilishlari kerak, bu esa ularning hayot sifatini yanada murakkablashtiradi.[2]

Bemorlarning hayot sifatini o'rganish uchun bir qator metodologiyalar mavjud. Bular orasida anketalar, intervyular va klinik baholash usullari mavjud. Hayot sifatini baholashda bemorlarning jismoniy faoliyati, psixologik holati, ijtimoiy aloqalari va umumiy salomatligi ko'rib chiqiladi. Anketalar orqali bemorlarning hayot sifatini baholashda turli xil ko'rsatkichlar, masalan, og'riq darajasi, energiya darajasi, ruhiy holat va ijtimoiy faoliyat darajasi o'lchanadi. Bu ma'lumotlar bemorlarning hayot sifatini yaxshilash uchun zarur bo'lgan strategiyalarni ishlab chiqishda yordam beradi. Ushbu kasalliklar bilan og'riq bemorlarning hayot sifatini yaxshilash uchun bir nechta yondashuvlar mavjud. Birinchidan, sog'lom turmush tarzini olib borish muhimdir. Bu, to'g'ri ovqatlanish, muntazam jismoniy faoliyat, stressni boshqarish va zarur bo'lganda dori-darmonlarni qabul qilishni o'z ichiga oladi. Ikkinchidan, bemorlar o'z sog'lig'ini yaxshilash uchun tibbiy yordam va reabilitatsiya xizmatlaridan foydalanishlari kerak. Ushbu xizmatlar bemorlarning jismoniy va ruhiy holatini yaxshilashga yordam beradi.[3]

Shuningdek, psixologik yordam ko'rsatish ham muhimdir. Bemorlar ko'pincha o'z kasalliklari bilan bog'liq psixologik muammolarni boshdan kechirishadi, shuning uchun ularga psixologik qo'llab-quvvatlash kerak. Guruh terapiyasi, individual maslahat va stressni boshqarish dasturlari bemorlarning ruhiy holatini yaxshilashga



yordam beradi. Kasalliklarning o'zaro aloqalari va ta'siri murakkab bo'lishi mumkin. Ba'zi kasalliklar bir-biriga to'g'ridan-to'g'ri ta'sir ko'rsatadi, boshqalari esa bir-birini kuchaytirishi yoki yomonlashtirishi mumkin. Misol uchun, diabet va yurak-qon tomir kasalliklari o'rtasidagi aloqa juda muhimdir. Diabet, qon shakarining yuqori darajalari orqali qon tomirlarini zararlashga olib keladi, bu esa yurakni ishlashini yomonlashtiradi. Bunday holatlarda, yurak-qon tomir kasalliklari diabetni yanada yomonlashtirishi mumkin, bu esa sog'liqni yanada murakkablashtiradi. Obezite ham metabolik sindromning bir qismi sifatida ko'riladi. Obezite yuqori qon bosimi, yuqori qon shakar darajasi va dislipidemiya kabi muammolarni keltirib chiqaradi. Bu holatlar bir-birini kuchaytiradi va sog'liqni yomonlashtirishi mumkin.[4]

Ruhiy salomatlik muammolari ham jismoniy kasalliklar bilan bog'liq. Masalan, depressiya yoki tashvish kabi ruhiy holatlar jismoniy kasalliklar, jumladan, yurak kasalliklari va diabet xavfini oshirishi mumkin. Buning sababi, ruhiy holat jismoniy faoliyat va ovqatlanish odatlariga ta'sir ko'rsatishi bilan bog'liq. Osteoporoz va artrit ham o'zaro aloqada bo'lishi mumkin. Osteoporoz suyaklarning zaiflashishi bilan bog'liq bo'lib, bu artrit bilan birga kelganda suyaklarning yanada zaiflashishiga olib keladi. Artrit esa osteoporozni kuchaytirishi va suyaklarni tezroq zararlanishiga sabab bo'lishi mumkin. Infektsion kasalliklar va immun tizimi o'rtasida ham muhim aloqa mavjud. Ba'zi infektsion kasalliklar, masalan, OIV, immun tizimini zaiflashtiradi, bu esa boshqa kasalliklar, masalan, tuberkulyoz xavfini oshiradi. Immun tizimi zaif bo'lganda, organizm boshqa infektsiyalarga qarshi kurashishda qiyinchiliklarga duch keladi. Gipertoniya va buyrak kasalliklari o'rtasidagi aloqa ham e'tiborga molikdir. Yuqori qon bosimi buyraklarga zarar etkazishi mumkin, bu esa buyrak kasalliklarini rivojlantiradi. Shuningdek, buyrak kasalliklari gipertoniya rivojlanishiga yordam berishi mumkin. Yurak kasalliklari va nafas olish kasalliklari o'rtasida ham o'zaro ta'sir mavjud. Yurak kasalliklari nafas olish tizimiga ta'sir ko'rsatishi, masalan, yurak yetishmovchiligi nafas olish qiyinchiliklarini keltirib chiqarishi mumkin. Shu bilan birga, nafas olish kasalliklari, masalan, astma, yurak faoliyatini yomonlashtirishi mumkin. Kasalliklar o'rtasidagi o'zaro aloqalar har bir inson uchun individual bo'lishi mumkin. Bu aloqalar ko'plab omillar, jumladan, genetik predispozitsiya, turmush tarzi va muhit ta'siri bilan bog'liq. Shuning uchun, kasalliklar bilan bog'liq muammolarni bartaraf etishda shifokor bilan maslahatlashish va individual yondashuvni tanlash juda muhimdir. Sog'liqni



saqlashda profilaktika va zamonaviy tibbiy yondashuvlar ham muhim rol o'ynaydi.[5]

Xulosa:

Xulosa qilib aytganda, yurak ishemik kasalligi, surunkali buyrak yetishmovchiligi va 2 tip qandli diabet birgalikda bemorlarning hayot sifatiga jiddiy ta'sir ko'rsatadi. Ushbu kasalliklar bir-biri bilan o'zaro bog'liq bo'lib, bemorlarning jismoniy va ruhiy holatini pasaytiradi. Bemorlarning hayot sifatini yaxshilash uchun sog'lom turmush tarzini olib borish, tibbiy yordam va psixologik qo'llab-quvvatlash zarur. Bu yondashuvlar bemorlarning umumiy salomatligini yaxshilashga yordam beradi va ularning hayot sifatini oshiradi.

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BOLALAR ADABIYOTINING JAHON ADABIYOTIDAGI AHAMIYATI VA UNING RIVOJLANISHI

Mamarasulova Shoiraxon Maxammad qizi

*“Ipak yo‘li” turizm va madaniy meros xalqaro universiteti mustaqil tadqiqotchisi,
Samarqand.*

E-mail: Farrukh-uz@mail.ru

Annotatsiya. Ushbu maqolada jahon bolalar adabiyoti, uning bolalar adabiyotida bajaradigan vazifalari hamda ushbu jarayonga hissa qo‘shgan adiblarning hayoti, ijod yo‘li va asarlarining yaratilish tarixi haqida so‘z yuritilgan. Shu bilan birgalikda bugungi kunda bolalar adabiyotiga bo‘lgan e‘tiborni biroz sustlashayotganligini, aksariyat yozuvchilar bolalik obrazlarini bola tilida emas balki kattalar nigohida tasavvur etib yaratilayotganligini tahlil qilinganligini kuzatishimiz mumkin.

Kalit so‘zlar: xronologiya, adabiy an‘analar, didaktik adabiyot, tarbiyaviy xarakter, poetika, romantizm.

Аннотация. В данной статье обсуждено о мировой детской литературе, ее задачах в детской литературе, а также о жизни, творческом пути и истории творчества писателей, внесших свой вклад в этот процесс. В то же время мы можем наблюдать, что сегодня внимание к детской литературе несколько ослаблено, и проанализировано, что большинство писателей представляют образы детства не детским языком, а глазами взрослых.

Ключевые слова: хронология, литературные традиции, дидактическая литература, просветительский характер, поэтика, романтизм.

Abstract. This article discussed about world children's literature, its functions in children's literature, and the life, creative path, and creation history of writers who contributed to this process. At the same time, we can observe that today the attention to children's literature is somewhat weakened, and it has been analyzed that most writers imagine childhood images not in children's language, but from the eyes of adults.

Key words: chronology, literary traditions, didactic literature, educational character, poetics, romanticism.

Bolalar adabiyotining jahon adabiyotidagi o‘rni haqida so‘z yuritar ekanmiz, bolalar adabiyoti, asosan, bolalar uchun mo‘ljallangan asarlarni o‘z ichiga oladi. Bu adabiyotda bolalarga mos til, tasvirlar va qahramonlar orqali ularning dunyoqarashini kengaytirish, ularni qadriyatlar va madaniyat bilan tanishtirish ko‘zda tutilgan. Jahon adabiyotida bolalar adabiyoti quyidagi asosiy vazifalarni bajarishni o‘z oldiga maqsad qilib qo‘yadi:

1. Tarbiya berish: Bolalar adabiyoti yosh avlodni axloqiy jihatdan tarbiyalashda katta rol o‘ynaydi. Masalan, Mark Tvenning hikoyalari, Charlz Dikkensning asarlari bolalarga qiyinchiliklarga qarshi turish va ezgulik yo‘lida kurashish kerakligini o‘rgatadi.

2. Ta’lim berish: Bolalar adabiyotidagi ko‘plab asarlar yosh o‘quvchilarni ilmfanga, tarixga, madaniyatga qiziqtirish va o‘qitish maqsadida yaratilgan. Masalan, Yuliya Donaldsonning “The Gruffalo” asari o‘zining tasviriy va ma’noli mazmuni bilan bolalarning tasavvuri va tafakkurini boyitadi.

3. Ijodiy tafakkurni rivojlantirish: Bolalar adabiyoti o‘zining afsonalar, ertaklar, sarguzasht hikoyalari orqali bolalar tasavvurini va ijodiy tafakkurini rivojlantiradi. Masalan, H.K.Andersen va aka-uka Grimm ertaklari jahonda mashhur bo‘lib, bolalarni nafaqat yaxshi va yomonning farqini tushunishga, balki hayolot olamini kengaytirishga xizmat qiladi.

Jahon adabiyotidagi bolalar adabiyoti namunalarining ba’zi muhim aspektlari:
– **Madaniy xilma-xillik:** Jahon bolalar adabiyoti turli xalqlarning madaniyati va an’analarini aks ettiradi. Har bir xalqning o‘ziga xos qadriyatlari va urf-odatlarini bolalar adabiyotida o‘z aksini topgan.

– **Mavzularning universalligi:** Ko‘pgina bolalar adabiyotida uchraydigan mavzular (do‘stlik, sevgi, jasorat, to‘g‘rilik) umumiy bo‘lib, bolalarga nafaqat o‘z yurtining, balki butun dunyoning ahamiyatli qadriyatlarini o‘rgatadi.

Shunday qilib, jahon adabiyotidagi bolalar adabiyoti yosh avlodning har tomonlama rivojlanishida, ularning axloqiy va ma’naviy kamolotida katta o‘rin tutadi.

Jahon bolalar adabiyoti namunalari sifatida xalq og‘zaki ijodi, eng qadimgi adabiy yodgorliklari, mif va afsonalar, qo‘shiqlar bilan chambarchas bog‘liqligi, axloqiy-tarbiyaviy mohiyati, didaktik tamoyillari hamda jahon xalqlari bolalariga bag‘ishlangan asarlarning tasniflanishi, ularning taraqqiyot tamoyillari, janrlar rang-barangligi yuzasidan tushuncha berishni ko‘zda tutadi.

Jahon bolalar adabiyoti, dastlab, didaktik adabiyot namunasi sifatida XVII - XVIII asrlarda paydo bo'lgan. So'ngra, bu adabiyot o'zining betakror ko'rinishlari orqali dunyoga tanildi. Barcha xalqlar bolalar ijodkorlari, eng avvalo, o'z mamlakatlarining xalq og'zaki ijodiga murojaat qilgani umumiy hodisadir. Masalan, Sharl Perro kichik kitobxonlarga dastavval, folklordan oziqlangan va badiiy sayqal berilgan eng yaxshi adabiy ertaklarni taqdim etdi.

XIX asr romantiklarining faoliyati keng kitobxonlar ommasiga xalq og'zaki ijodi va har bir xalqning milliy-adabiy manbaalarini ochib berdi. Jumladan, bu bolalar adabiyotining rivojlanishiga ham o'z ta'sirini ko'rsatib, aka-uka Grimmilar, H.K.Andersen va boshqa ko'pgina ijodkorlarning adabiy hamda xalq ertaklari to'plamlari paydo bo'lishiga turtki bo'ldi. Natijada, kichik kitobxonlar endilikda ham kitob, ham o'z tengqurlari hayoti aks ettirilgan badiiy tasvirlarni qo'lga ola boshladi. Shunday ekan, bolalar adabiyoti “katta” adabiyotning mustaqil tarmog'iga aylanishida bu jarayon muhim omil hisoblanadi.

Romantizm insonning ruhiy rivojlanishdagi o'z-o'zini anglash davri – bolalikda kashf etilishini ochib berdi. Romantiklar asarlarida bolalik insonning o'zidagi bebaho ichki olam sifatida, shuningdek, teran mohiyati va ajoyibotlari bilan kattalarni ham o'ziga rom etuvchi davr tarzida talqin qilinadi. Kattalik esa xuddi eng samimiy va bolalarcha beg'uborlik tark etilgan davr sifatida yoritiladi. Shuni tan olish kerakki, romantizm nafaqat bolalikni kashf etdi, balki uni eng sof mukammallik namunasi hamda mehr-shafqat timsoli sifatida insonga meros qilib qoldirdi.

Realistik tamoyillarning rivojlanishi, ruhiyatshunoslik fanining chuqurlashishi bilan bolalar adabiyotida keng qamrovli, ko'p qirrali bolalik obrazi mustahkamlandi. Bunda yozuvchilar insoniyat rivojlanishi ibtidolari, yosh inson xarakterining tub-tubiga yetib, bola ichki dunyosining murakkabliklariga asta-sekinlik bilan kirib borib, uning mutanosiblikda va ziddiyatlarda, hayotning yorqin hamda qorong'u va qayg'uli onlarining kurashlarida shaxs sifatida shakllanishini ochib berishdi. Eng yaxshi yozuvchilar ijodini aniqlovchi asosiy vosita – bu bolalikka ishonch, ulg'ayib kelayotgan insonga hurmat, unda rivojlanishning bor imkoniyatlarini, sarchashmalarini hamda asosiy omillarini ko'ra olish qobiliyatining borligidir.

XX asr o'zining keskin ijtimoiy muammolari, o'tkir ziddiyatlari, siyosiy qarashlari bilan bolalar adabiyotini ham o'zgartirib yubordi. Dunyoning dahshatlari kichik kitobxon asari sahifalariga kirib bordi. Ularning qahramonlari – ijtimoiy



jonzotlar, ular o‘z hollaricha insonga nisbatan qilingan vahshiylikka qarshi borishadi, o‘zlarining do‘stlikka, muhabbatga bo‘lgan huquqlarini talab qilishadi hamda kattalarni ularni tushunishlariga chaqirishadi. Zamon muammolari nafaqat realistik asarlarga, balki ertaklarga ham kirib boradi. Ular janriy xususiyatlaridan ozgina chekingan bo‘lsalar-da, hamon yaxshilik yovuzlik ustidan g‘alaba qozonishiga umid bog‘lashadi va shu yo‘lda tinimsiz ma‘naviy kurashlar olib borishadi.

Jahon bolalar adabiyoti bugungi kunda o‘zining janriy va tematik xususiyatlari jihatidan turli-tuman, o‘ziga xos tarzda shakllanib ulgurdi. Unga dunyoning eng taniqli yozuvchilari o‘z iste‘dodlarini va faoliyatlarini bag‘ishlashgan. Chunki ular insoniyat kelajagi o‘zida borayotgan avlod qo‘lida ekanligini yaxshi anglashadi.

Eng asosiysi, yosh inson adabiyot yordamida, fransuz shoiri Pol Elyuara ta‘biri bilan aytganda, o‘zining dunyoqarashida “bir kishi ufqidan barcha kishilar ufqiga” ko‘tarila oldi.

Binobarin, hozirgi zamon chet el bolalar adabiyoti quyidagi omillar ta‘sirida maydonga keldi, deyish mumkin:

- Folklor asarlari hamda klassik yozuvchilarning avval kattalarga mo‘ljallangan, ammo vaqt o‘tishi bilan bolalar kitobxonligi doirasiga kirib, kichik kitobxonga so‘zlab berish uchun hikoya tarzida qayta ishlangan asarlari (qadimgi yunon afsonalari, D.Defo, J.Svift, M.Servantesning romanlari).

- Bolalar kitobxonligi doirasiga qisqartmalarsiz va qayta ishlanmasdan kirgan folklor hamda mumtoz asarlar (folklordagi erkalamalar, topishmoqlar, allalar, shuningdek, V.Skott, Ch.Dikens va boshqalarning asarlari).

- Bevosita bolalarga mo‘ljallangan asarlar.

Yuqorida keltirib o‘tilgan fikrlarni inobatga olgan xolda bugungi kunga qadar jahon bolalar adabiyotida o‘ziga xos o‘rin tutgan yozuvchilar hayoti va ijodiga qisqacha to‘xtalib o‘tsak.

Aka-uka Yakob (1785-1863), Vilgelm (1786-1859) Grimmilar ikki yuz yildan ko‘proq vaqt Xanau shaharchasida, Byurgerlar oilasida (bu oiladan ko‘pgina taniqli huquqshunoslar va ruhoniylar etishib chiqqan) Filipp Vilgelm Grimm va Doroteyalar oilasida katta o‘g‘illari Yakob, bir yildan so‘ng esa uning ukasi Vilgelm dunyoga keldi. Tez orada butun oila-o‘rmonli tog‘lar bilan o‘ralgan, tinch osuda shaharcha – Shtaynauga ko‘chib o‘tishdi.

Yoshlik chog‘laridanoq – aka-uka Grimmlar juftligi tug‘ilgan edi. Taqdir ularga uzoq hayotni o‘lchab bergan edi. Va ular o‘zlarining keksalik chog‘larigacha bu mustahkam bog‘liqlik hamda mehr-oqibatni tark etishmadi.

Yakob 11 yoshga to‘lganda ular otalaridan ajrab qolishdi. Bola oila boshlig‘i bo‘lib qoldi. Keyinroq Kasselda gimnaziya o‘qidi. Belgilangan sakkiz yil o‘rniga – tig‘izlashtirilgan to‘rt yil ichida aka-ukalar o‘qishni bitirib, Marburg universitetiga o‘qishga kirishadi. Universitetda ular qadimgi olmon she‘riyati, runalari bilan qiziqib, shu qiziqishlarini umrlarining oxirigacha olib borishdi.

Universitetni tugatgach, Grimmlar Kasselga qaytishadi. Bu vaqtga kelib Napoleon armiyasi Olmoniyaga bostirib kirdi. Fransuz hukmronligi – begona odamlar, begona urf-odatlar, shaharning har bir burchagidan eshitilib turgan begona so‘zlashuv Olmoniyaga, uning tiliga, urf-odatlariga, tabiatiga, adabiyotiga mehr qo‘ygan o‘spirinlarni qattiq iztirobga solardi. Aka-uka Grimmlar vaqtlarini kutubxonalarda noyob qadimgi olmon manuskriptlarini (qo‘lyozmalarni), masalan, nemis adabiyotining birinchi yodgorligi “Xildebran haqida qo‘shiq” asarini o‘rganib, qadimgi nemis she‘riyati to‘plamlarini chop etishdi. Bu bilan ular xalq yuragining tubida mudrab yotgan qadimgi hikmatlarni qayta tiklash maqsadlarini amalga oshirishdi.

Aka-uka Grimmlar o‘zlarining harakatdagi faoliyatlari folklorga bag‘ishladilar. Faoliyatlari davomida ertaklar to‘plash bilan mashg‘ul bo‘ldilar.

Birinchi mustaqil topilmalar 1807-yilga taalluqli bo‘lib, ular Kasseldagi ikki oila: Vildlar va Xassenpfluglar bilan bog‘liq. “Boshmaldoq – bola”, “Aqlli Gretel”, “Navqiron Pahlavon”, “Oq kabutar”, “Mushuk va sichqonning do‘stligi”, “It va chumchuq” kabi ertaklar Vildlar va Xassenpfluglar oilasi a‘zolaridan yozib olingan to‘plamlar sirasiga kiradi. To‘plamlarning jamlanishida o‘zining katta hissasini qo‘shgan dorifurush Vildning beshinchi qizi Ganriett Doroteya Vild, keyinchalik Vilgelmning turmush o‘rtog‘i (Yakob umrining oxirigacha ham uylanmagan) haqida albatta aytib o‘tish joiz. Doroteya aka-uka Grimmlarga “Ganzel va Gritel”, “Erto‘la bekasi”, “Kuylaydigan danakcha” kabi ertaklarni taqdim etdi.

“Bolalar va oilaviy ertaklar” kitobiga Grimmlar ukasi Lyudovik tomonidan illyustrasiyalar chizilgan. U 20-dekabrda – Rojdestvo bayrami arafasida kitobxonlar qo‘liga tegdi va eng katta sovg‘a bo‘ldi. To‘planning shon-shuhrati aka-uka Grimmlarga uning ikkinchi qismini ham to‘plab, chop ettirishga ruhlantirdi. Ikkinchi kitob nashrdan chiqqach, Grimmlar qo‘lida yana anchagina ertaklar yig‘ilib qoldi va

ular uchinchi kitobni bosmadan chiqarishni reja qilishdi, ammo keyinchalik fikrlaridan qaytib, ikkinchi qismning keyingi nashrida yig'ilib qolgan ertaklarni qo'shib chop etishni ma'qul topadilar. Nihoyat, 1812-yilda Grimmmlar tomonidan yaratilgan ertaklarning birinchi jildi, 1815-yilda ikkinchi jildi, 1822-yilda esa har ikkala jildni umumlashtiruvchi uchinchi jildi e'lon qilingan. Grimmmlar bisotida jami 200 dan ortiq ertak mavjud edi. Yakob ertaklar o'z aslicha, xalqchil bo'lib qolishining tarafdori bo'lgan. Shunga ko'ra, ularni qayta bayon etilishida tuzatish kiritmaslik, zamonaviy ko'rinishda tabdil etmaslik yoki ijodkor didi bilan yo'g'rilmagan bo'lsin, degan fikrida qat'iy turgan. Vilgelm esa olimdan ko'ra, ko'proq shoirtabiatligi uchun ertaklarga badiiy sayqal berish tarafdori bo'lgan. Shubhasiz, bunday ikki xilda fikr yuritish foydadan xoli bo'lmagan. Natijada, Grimmmlar ertaklari o'zlarining xalqchilligini yo'qotmagan holda muallif she'riy uslubining birligini saqlab qolgan. Shu tariqa, aka-uka Grimmmlar ertaklari hali-hanuz dunyo kezmoqda va jahon bolalarining maroq bilan o'qiydigan asarlari turkumiga kiradi. Jumladan, Grimmmlarning dunyoga mashhur bo'lgan “Zolushka”, “Qor qiz” ertaklari qahramonlari hammadan turki yeydigan, so'kish eshitadigan va eng past holda qiyin yumushlarni bajaradigan qizlar bo'lib, ertak davomida o'zlarining halol mehnatlari, oqko'ngilliklari tufayli baxtli bo'ladilar. Xususan, “Yalqov Geys”, “Gansning baxti”, “Botir tikuvchi”, “Yosh pahlavon”, “Bremen musiqachilari” kabi ertaklari o'zbek tiliga ham mahurat bilan o'girilib, bugungi kunda o'zbek bolalar kitobxonlarining mulkiga ham aylana oldi. Grimmmlar ertaklarining umumiy ahamiyati shundaki, ularning qahramonlari har qanday og'ir, qaltis vaziyatlarda ham o'zlariga chora topa oladi, tadbir izlaydi. “Tulki bilan g'ozlar” ertagi shu jihatdan ahamiyatli. Unda hiyla va makr ishlatishga usta tulki obraziga tadbirkor g'ozlar timsoli qarshi qo'yiladi.

Umrlarining so'nggida aka-uka Grimmmlar Berlin universitetida maruzalar o'qiydilar hamda nemis tili lug'atini tuzish ustida ishlaydilar. Ikki buyuk olim, tilshunos, adabiyotshunos, buyuk ertakchilar yashab o'tgan Kassel shahrida muzey tashkil qilinib, ularning shaxsiy buyumlari, dunyoda yuzdan ortiq tillarga tarjima qilingan kitoblarning nusxalari, ukalari Lyudvigning san'at asarlari ehtiyotkorona saqlanib kelinmoqda.

Sharl Perro (1625 – 1703). 1697-yilda Fransiyada “Mening onajonim Gusinaning ertaklari” deb nomlangan kitob nashrdan chiqdi. Aslida ertakni o'sha davrdagi mashhur shoir, fransuz akademiyasining a'zosi Sharl Perro yozgan bo'lsa-

da, uning muallifi P.Dermenkur deb hisoblanardi. Ko‘p kitoblar muallifi Sharl Perro ismi sharifini “jiddiy bo‘lmagan” ertaklar ostiga qo‘yishni o‘ziga lozim ko‘rmay, uni o‘g‘lining ismi sharifi bilan imzolagan edi. Lekin aynan shu sehrli ertaklar jahon adabiyotining oltin fondiga kirib, yozuvchiga shon-shuhrat keltirdi. Perroning ertaklari ko‘p marotaba boshqa tillarga tarjima qilingan va nashrdan chiqqan. Ertakning rus tilidagi tarjimasini I.S.Turgenev boshlab bergan bo‘lsa, rus tili vositasida o‘zbek tiliga kirib keldi.

Perro o‘z ertaklarining so‘zboshisida ertak janri asosida yotgan jiddiy hamda kulgili va g‘alati narsalar uyg‘unlashib ketishiga ishora qilib: “...bu umuman, bekorchilik emas, balki o‘zida foydali pand-nasihatni mujassamlashtirgan... hikoyaning sho‘x, o‘ynoqi tuzilishini esa faqatgina o‘quvchi aqliga ko‘proq yoqimli tarzda ta’sir qilish, shu bilan birga unga ham o‘rgatib, ham xushnud qilishi uchundir...” degan edi. Bolalikning ilk davridan boshlab bizga “Qizil shapkacha”, “Jimjimaloq bola”, “Zolushka”, “Etikli Mushukcha”, “Uyqudagi malika”, “Ko‘k Soqol” kabi ertaklar ma’lum. Ba’zi ertaklarning qahramonlari odamxo‘r maxluqdan yoki, zolim bo‘ridan o‘zlarini o‘zlari qutqargan bolalardir. Jimjimaloq bola shu kabidir; muallif ertakning oxirida yozishicha, o‘zining yaqinlariga yaxshilik qiladi va o‘zining butun oilasini – ham otasini, ham og‘alarini ta’minlaydi. Zolushka ham xuddi shundaylardan, u qanchalar go‘zal bo‘lsa, shunchalar oqko‘ngil hamdir; u o‘gay opalarini o‘zi bilan saroyga olib ketadi. Perro ertaklarida yaxshilik va haqiqat g‘alaba qozonadi hamda qahramonlarga sehrar personajlar, Zolushka yoki etikli mushukchada etikdo‘zning kichik o‘g‘lini cho‘qintirgan onasi – oqko‘ngil Feya yordam beradi. Bo‘ri, mushuk kabi hayvonlar inson tilida so‘zlashadi, bu folklorning bir ko‘rinishi bo‘lib, muallif xalq ijodining boy an‘analariga tayanadi hamda o‘ziga xos mualliflik janrini yaratadi. “Qizil shapkacha” ertagida tipik folklor asos namoyon bo‘ladi: bu qizil Shapkachaning buvisiga eltayotgan narsasi, savollaridagi hamda buvisining kiyimlarini kiyib olgan bo‘ri javoblaridagi takrorlash va parallelliklarda ko‘zga tashlanadi. Perroning boshqa ertaklarida birinchi o‘rinni romantik sevgi tarixi egallagan. Qahramon qator sinovlardan o‘tib, o‘zining mukofotini oladi: yaxshilik yomonlikni ustidan g‘alaba qozonadi, ya’ni xuddi “Uyqudagi malika” yoki “Ko‘k Soqol” ertaklaridagi kabi. Sharl Perro ertaklari qahramonlarining nomlari allaqachon turdosh otlarga aylanib ulgurgan. Zolushka yoki Ko‘k Soqol tarixlari har xil ko‘rinishlarda ko‘p marta jahon adabiyotida qayta-qayta ishlangan va sahnalashtirilgan.



XVII asr oxiri Sharl Perro ertaklarining yaratilishi bilan belgilanadi va uning ertaklari fransuz adabiy ertaklarining eng zo‘r hamda yorqin namunalari sifatida e‘tirof etiladi. Fransiyada XVIII asr esa ertaklarning oltin asri hisoblanadi. Ilgari bolalarga mo‘ljallangan maxsus adabiyot yo‘qligi uchun kichkintoylar kattalarning asarlarini o‘qishar edi. Keyingi asrlarda esa Sharl Perroning qisqartirilgan ertaklaridan aynan bolalar uchun namunalar tayyorlangan. Ulardan shafqatsizlik, erkinlik, badiiy o‘yinlar olib tashlanib, anchayin soddalashtirilgan.

Hans Kristian Andersen (1805-1875) o‘zining ajoyib va g‘aroyib ertaklari bilan jahonga tanilgan. U Daniyaning Odens shahrida tug‘ilgan. Bolaning yashash sharoiti va o‘qishi ancha-muncha yaxshi bo‘ladi. Bo‘lajak yozuvchi 1823-yilda Slagels maktabiga o‘qishga kiradi, undan keyin Xelsingyorda ta‘lim oladi. Bolaning otasi kavush tikuvchi, onasi esa kir yuvuvchi bo‘lib ishlar edi. Shuning uchun Hans kambag‘allar maktabiga o‘qishga kiradi. Oradan uncha ko‘p vaqt o‘tmay, ularning oilasi Kopengagenga ko‘chadi. 1828-yilda esa Kopengagen universitetiga o‘qishga kiradi. Andersen juda ko‘p mamlakatlarga sayohat qiladi. Fransiya, Shveysariya, Italiya, Gretsiya va Ispaniya singari mamlakatlarni borib ko‘radi. Andersenning ijodi 20-yillarning boshlaridan boshlanadi. U dastlab lirik she‘rlar, roman, drama, yo‘l ocherklari, biografik etyudlar yaratadi.

1828-yilda Kopengagen universitetini tamomlab, 30-yillarda Fransiya, Shveysariya, Italiya, Gretsiya va Ispaniya bo‘ylab yana sayohat uyushtiradi. Bo‘lajak adib xalq og‘zaki ijodi bilan chuqur tanishib, tarix-ertak asarlari bilan yosh kitobxonlar orasida tanildi. Yozuvchining “Bolalar uchun aytilgan ertaklar” (1835-1842), “Yangi ertaklar” (1843-1848), “Tarix” (1852-1855), “Yangi ertaklar va tarix” (1858-1872) kabi ertaklari uning nomini jahonga tanitdi.

Andersen ertaklarining qahramonlari o‘zlarining samarali mehnatlari, aql-idroklari, axloq-odoblari bilan kitobxon qiziqishiga sazovor bo‘ladi. “Daniyalik Xolger”, “Qor malikasi”, vatanparvarlik ruhi bilan yo‘g‘rilgan “Daniya – mening vatanim”, ozodlik g‘oyasi mujassamlangan “Soqchi”, “Shiron asiri” va boshqa she‘rlari poeziya janrida yaratgan eng sara asarlari jumlasiga kiradi. Andersen o‘z romanlarida (“Improvizator”) zamonasi uchun juda muhim bo‘lgan voqealarni qamrab olishga harakat qiladi. Uning ijodi ko‘p qirrali va rang-barangdir.

Andersen bu kitoblarni yaratishda xalq og‘zaki ijodidan unumli foydalandi, ularning orzu-umidlarini qog‘ozga tushirishga harakat qildi. Ertaklardagi xarakter va jonli nutqni yanada mukammallashtirishga erishdi. Shuning uchun Andersen

yaratgan ertaklar sodda, kitobxon uchun tushunarli bo‘lish bilan birga, o‘quvchilar xotirasida uzoq vaqt saqlanish xususiyatiga ham ega.

Andersen ertaklarida ko‘pincha bosh qahramon shahzoda ham, malika ham emas, balki oddiy mehnatkash xalq farzandi obrazlanadi. Ular o‘zlarining samarali mehnati, aql-idroki, axloq-odoblari bilan kitobxon tahsiniga sazovar bo‘ladilar. Uning “Qo‘ng‘iroqli girdob”, “Kumush tanga”, “Kolbasa sixidan sho‘rva”, “Go‘ng qo‘ng‘iz” va boshqa ertaklari fikrimizga yorqin misol bo‘la oladi. Ertakchining “Qo‘ng‘iroqli girdob” asarini olib ko‘raylik. Unda asrlar mobaynida ezilgan, og‘ir mehnat va zulmdan tinka-madori qurigan mehnatkash xalq vakili Blakenning o‘z xo‘jasiga qarshi turishi kitobxonni quvontiradi.

“Bolalar gurungi” asarida hech kim taqdirini, kichkintoy o‘tib ulg‘aygach kim bo‘lib yetishishini bilishi mumkin emasligini, bu ko‘proq o‘sha bolaning o‘ziga, intilishiga, kattalarning ibratomuz pand-nasihatlariga quloq solishiga bog‘liq ekanligini kuzatamiz.

Bolalar, odatda, hayvonlar, parrandalar, hasharotlar haqidagi ertaklarni sevib o‘qiydilar. Andersen yaratgan ertaklarning juda ko‘pchiligi ana shu mavzuni qamrab olishi bilan ham xarakterlidir.

“Dyumchaxon”, “Irkit o‘rdakcha”, “Botqoqlik shohining qizi”, “Baqa”, “Burga bilan professor” singari ertaklari o‘zbek kitobxonlarining ham sevimli asarlariga aylanib ulgurgan.

Xullas, Daniya ertakchisi Hans Kristian Andersenning ijodi uzoq yillardan beri yosh kitobxonlarga zavq-shavq bag‘ishlab kelmoqda.

Jonatan Svift 1667-yilda Angliyaning yaqin qo‘shnisi va oroldagi mustamlakasi bo‘lgan Irlandiyaning poytaxti Dublinda ingliz muhojiri oilasida tug‘ilgan. Otasi u tug‘ilmasdan sal avvalroq vafot etgan edi. Ziyрак Jonatan huquqshunos, advokat tog‘asi qo‘lida tarbiya topadi. Bola boshlang‘ich maktabda tahsil ko‘rgach, o‘n to‘rt yoshida tog‘asi Dublin universitetining dindorlik fakultetiga o‘qishga beradi. Jonatan universitetni tugatgan vaqtda Dublinda irland katoliklarining inglizlarga qarshi qo‘zg‘oloni yuz beradi. Shu paytda Irlandiyadan qutilgan ingliz oilalari qatori yosh dinshunos olim Svift ham Dublinni tark etadi va “katta yer” – Angliyaga yo‘l oladi. Svift bu erda otasining do‘sti Vilyam Templga kotib bo‘lish bilan birga uning asrandi qiziga murabbiylik qiladi. Shuningdek uning boy kutubxonasidan bilimini oshirib, gazetalarga maqola, pamflet, feletonlar, she‘rlar yozib turadi. Uning dastlabki asarlaridayoq ijtimoiy hayot masalalarini,

siyosiy voqealarni hajv ostiga oladi. Chunonchi, XVIII asrning oxirlarida Fransiyada, keyinroq Angliyada qadimgi adabiyot tarafdorlari bilan yangi adabiyot tarafdorlari o'rtasida qizg'in bahslar bo'lib o'tadi. Swift 1697-yili shu bahsga bag'ishlab (ustozlari Templarning topshirig'i bilan) "Kitoblar jangi" nomli mashhur hajviy pamfletni yozdi. Swiftning bu ilk asarida qadimiy va yangi kitoblar ramziy ma'noda bir-biriga qarshi qo'shin tortishar, qadimgi yunon shoiri Pindar yangi ingliz shoiri Kauliga qarshi ulug' "Iliada" ijodchisi Homer yangi qasidachi Draydenga qarshi jang qilishardi.

Qadimiy va yangi kitoblar o'rtasidagi jangda Swiftning o'zi ikkala tomonni himoya qildi. U hajviyasini o'rgimchak va asalari haqidagi hikoyat bilan tugatadi. Swiftning fikricha, "Haqiqiy adib o'rgimchak singari o'z ichidan chiqqan to'qima iplari bilan tanob tortaverishi yaxshi emas, asl ijodkor asalari day hamma erda hayot materialli sharbatini yig'ib, uni san'at asaliga aylantirishi kerak". Swiftning ana shundan keyingi hayoti siyosiy kurashlarda toblanadi, u bo'sh vaqtlarida tibbiyot ilmi bilan shug'ullanadi. Chunki u qachondir dengizchi bo'lishi va bunda ana shu kasb qo'l kelishini yaxshi bilardi. U bu orzusiga erishdi ham. Bir necha yil dengiz, okean kemalarida xirurg bo'lib ishlaydi. O'z qahramoni boshidan kechirgan ko'p voqealarning aynan guvohi bo'ladi. Muhimi, siyosiy kurashlardan toliqqan adib, asarlarida bu jarayonni badiiy-kinoyaviy talqin etadi. U Dublinda ekanligida, Angliyaning hukmparast, olchoq lordlari irland dehqonlarini xonavayron qilayotganligini, irland hukumatining barcha huquqlari tortib olinganligini, irland xalqining taqdiri Londonda hal etilayotganligini g'azab bilan fosh etuvchi asarlar yozdi. Bu singari muammolar "Gulliverning sayohatlari"da ayniqsa yorqin aks ettirilgan. Aslida Jonatan Swift bu asarini boshqa bir buyuk ingliz adibi Daniel Defoning "Robinzon Kruzo" romaniga hajv sifatida boshlagan edi. "Robinzon Kruzo"ning bir necha qismidan iborat davomi bo'lib, ularda qahramon mavjud qirollik tuzumida, adolatli qonunlar asosida oddiy mehnatkash odam o'z baxtini topadi, degan g'oyani ilgari surgan edi. Swift esa aksincha bir-biridan battar olchoq, ochko'z, molparast, mansabparast, tekinxo'r, takabbur qirollar va vazirlar hukmronlik qilgan jamiyatda inson hech qachon baxtini topolmasligini Gulliver sayohat qilgan o'lkalar timsolida ravshan ko'rsatadi.

Umuman, "Gulliverning sayohatlari"dagi juda ko'p voqealar ramziy ma'noda hayot voqeligini aks ettirishga qaratilgan. Aytaylik, liliputlar orolida tuxumni uch tarafidan sindiruvchilar bilan poynagidan sindiruvchilar guruhi o'rtasida ashaddiy



bahs boradi. Tuxumni uchidan sindirishdan bosh tortganligi uchun 11 ming kishi o'lim jazosiga hukm qilingan. Adib bu bilan o'z zamonasidagi katoliklar va protestant mazhabidagi dindorlarning ashaddiy ixtiloflari aslida arzimas poydevorga qurilganligi, ammo shu arzimas sabab tufayli juda katta qirg'inbarotlar yuz berayotganligini alamli qahqaha bilan tasvirlaydi.

Romanda Liliputiya'dagi ahmoqona tartiblardan yana biri – yuqori mansablarga qanday odamlar tanlanishi o'tkir hajviy bo'yoqlarda tasvirlanadi: “Birorta amaldor vafot etsa yoki imperatorning g'azabiga uchrasa, bo'shagan lavozimga da'vogar bo'lganlardan besh-olti kishi oliy hazratlari va butun saroy ahlini xushnud etib, dor o'ynab berish uchun imperatordan izn so'rashadi. Kimki arqondan qulamay, hammadan balandga sakrasa, bosh o'rin o'shaniki bo'ladi”. Mukofot olish tartiblari ham shunga o'xshash. Imperator tayoq o'ynatganida uning ostidan va ustidan chaqqonlik bilan likillab o'ta oluvchilarga oliy mukofotlar beriladi.

Svift o'z hayoti davomida Angliya hukumati rahbarlariga juda ko'p yaxshiliklar qilgan bo'lsa-da, ular adibga bergan va'dalarini tez unutishadi. Bundan insoniy g'ururi ozor topgan adib “Gulliverning sayohatlari”da shunday hazil qiladi: ...har bir odam birinchi vazir qabuliga kirib, arzini qisqa qilib aytganidan so'ng, esida qolishi uchun uni burnidan chimchilashi yoki qorniga bir tepishi kerak bo'ladi... “Gulliverning sayohatlari” muallifi “Robinson Kruzo” muallifi bilan bahslashar ekan, hayotning cheksiz rang-barangligini, murakkabligini, kulgili va fojiali voqealarga boyligini idrok etishda Daniel Defoga nisbatan mislsiz yuksaklikka ko'tariladi. Shu bilan birga u inson ruhiy holatlarini, qahramonni o'rab turgan tabiiy va ijtimoiy muhitni keng, batafsil tasvirlashni Defodan o'rganadi ham.

Asar qahramoni Gulliver turli afsonaviy joylarga borib, ajoyib va g'aroyib fantastik voqealarni boshdan kechirsa-da, uning xarakteri, fe'l-atvori, ichki dunyosi nihoyatda haqqoniy, realistik bo'yoqlarda chiziladi. U liliputlar o'lkasidagi ahmoqona tartib-qoidalarga norozilik bildirmaydi, ularga barcha fuqaro qatori bo'ysunadi. Liliputiyaning fani, qonunlari, urf-odatlarini, bola tarbiyalash jarayoni, ya'ni buni jamiyat va davlat zimmasiga yuklatilishi haqida ajoyib lavhalar keltiriladi.

Romanning 3-4-qismlarida, ayniqsa, Svift satirasi g'oyat kuchayib, umuminsoniy, falsafiy umumlashmalar darajasiga ko'tariladi. Adib Gulliverning Laputaga sayohati voqealarida o'zga xalqlarni asoratda saqlashga uringan Angliyaning mustamlakachilik siyosatini, davlat rahbarlarining xalqdan uzilib



qolganligini, ilm-fanda soxta, savodsiz, ahmoq odamlar ko‘payib ketganligini yorqin hajviy bo‘yoqlarda tasvirlaydi. Laputa hukumati Lapakka o‘xshash uchar orolda yashaydi. U faqat xalqdan soliq undiradigan vaqtda, yoki qo‘zg‘olonlarni bostirish uchun yerga yaqinlashadi. Boshqa vaqtlarda doimo osmonda yashaydi. Laputudagi “Lo‘ttibozlar akademiyasi”da ahmoqona “ilmiy” loyihalar ishlab chiqiladi. Masalan, lo‘ttiboz olimlar marmarni qumga aylantirish, uylarni tomidan boshlab eng so‘ngida poydevorini qurish haqida bosh qotirishadi. Yana bir o‘rinda Gulliver akademianing tilshunoslik maktabiga qilgan tashrifi bayon qilingan. U erda uch professor ona tilini takomillashtirishning turli loyihalarini muhokama qilishayotgan edi. Birinchi loyihada ko‘p bo‘g‘inli so‘zlarni bir bo‘g‘inlikka aylantirib, fe‘l va sifatdoshlarni chiqarib tashlab, so‘zlashuv tilini soddalashtirish taklif qilinardi. Muallif faqat otlargina mavjud predmetlarga mos keladi, deb ta’kidlaydi. Ikkinchi loyihada hamma so‘zlarni to‘liq yo‘qotish taklif qilinardi. Ushbu loyiha muallifi buning salomatlik va vaqtni tejash uchun nafi kattaligini asosiy dalil qilib ko‘rsatadi. Chunki so‘zlarni talaffuz qilish bo‘g‘iz va o‘pkani toliqtiradi, demak umrni ham qisqartiradi. Yoki muallifning matematika maktabiga tashrifi ham qiziqarli ma’lumotlarga boy. Bu erda shunday metodda o‘qitiladiki, buni Evropada qo‘llash amrimahol tuyuladi. Har bir teorema isboti bilan boshog‘riq dori o‘raladigan qog‘ozchaga siyohda yoziladi. O‘quvchi ana shu qog‘ozchani nahorda yutib yuboradi va uch kungacha suv hamda nondan boshqa hech narsa yemaydi. Qog‘oz hazm bo‘lgandan keyin uning ichidagi dori o‘zi bilan tioremani yetaklab, miyaga ko‘tariladi. Ammo bolalar dorining achchiqligi va qisman ular sho‘xligidan bo‘lsa kerak, ular sal chetroqqa borib tuflab tashlashad. Asarning falsafiy Utopiya darajasiga ko‘tarilgan oxirgi qismida otlar aqlli zotlarga, odamlar maymunsimon aqlsiz maxluqlarga – exularga aylanadi. Exularning eng xunugi va axmog‘i podsho bo‘ladi. Bosh vazirning vazifasi – qirolning boshdan oyog‘igacha yalab chiqish va unga yangidan-yangi urg‘ochilar topib kelishdan iborat. Exularning ishi – hamma yoqni vayron etish, bir-birini qirib yo‘qotish. Ular oltinga va boshqa yaltiroq toshlarga sajda qilishadi.

Romanda shu kabi g‘aroyib sarguzashtlar bir talay. Ularning aksariyatida muallif “men”i sezilib turadi.

Janni Rodari (1920-1980) o‘zining ijodiy faoliyatini jurnalistlikdan boshlab, butun dunyoga mashhur muallif – ertakchi nomini olgan, o‘zining adabiy faoliyati uchun H.K.Andersen nomidagi Oltin medalga sazovor bo‘lgan yozuvchi. U



nonvoyning o'g'li bo'lib mamlakatning shimolida Alp etaklarida joylashgan kichkinagina shaharda tug'ilgan. Janni bolaligidan o'zining aqlga sig'mas fantaziyalari bilan ajralib turardi. Bolaning boy tasavvuriga uni o'rab turgan barcha narsalar: ko'lining toza, tiniq suvi, oroldagi qasr va uning o'rtasida otasining nonvoyxonasi hamda unda po'rsillab, bijirlab, pufakchalar chiqarib turgan oshgan xamir ozuqa berardi. O'sha vaqtlarda u bir burda non uchun mehnatning og'ir mashaqqatlarini chekishiga to'g'ri keldi. U o'zi o'ylagandek musiqachi ham, rassom ham bo'lmay, u uchun juda zerikarli va diqqinafas bo'lgan seminariyada o'qishga tushib qoladi. Ammo Rodari o'zini hayoti ustidan hukm chiqara oladi; institutda ma'ruzalar tinglaydi, o'qituvchilik qiladi, ammo “quruq o'qituvchi” bo'lmaydi, bolalarga tushunarli, xushchaqchaq o'qituvchi bo'lib yetishadi. U bir narsaga amin edi: maktab yumorga muhtoj, chunki unda “kam kulishadi”, lekin Rodari o'qituvchi sifatida “o'rganilishi kerak bo'lgan ko'p narsani achchiq ko'z yoshlar bilan foydasiz o'rgatishadi, biroq shu narsani kulib o'rgansa ham bo'ladi” degan fikrda bo'ladi. Yozuvchi o'zining birinchi she'rlarini bosmadan chiqarishni “Unita” gazetasida, unga “Bolalar sahifasi”ni topshirishganda boshlagan edi. Gazeta kommunistik gazeta bo'lib, unda birinchi navbatda kambag'al bolalar hayoti aks ettirilishi kerak edi. “Hunarlardan nima keladi?”, “Hunarlar qaysi rangda?”, “Ovchi”, “Baliqchi”, “Farrosh” kabi she'rlarining nomiyoq, uning adabiy ijodi qaysi yo'nalishdaligini yorqin ko'rsatib turadi.

Yozuvchi o'z ijodining asosiy qismini ertaklarga bag'ishladi. “Men o'ylaymanki, ertaklarning ham yangisi, ham eskisi aqlni tarbiyalashda yordam bera oladi” – deb yozgan edi Rodari. Ertak bu turli xil gipotezalarning xazinasini. Ertak bolalarga atrof-muhitni anglashga, o'zining tasavvuri bilan unga tanqidiy yondoshishga, borliqqa yangi yo'llar bilan kirishga kalit bera olishi mumkin”. Ammo Rodarini katta ertak yozishga undagan narsa Kollodining “Pinokkio” asaridir. Faqat uning “Chippolino”sida qo'g'irchoqlar emas, odamlarga juda o'xshagan sabzavot va mevalar ishtirok etgan. Ular yaxshi va yomon his-tuyg'ular hamda yumor bilan yo'g'rilgan. Hikoya insoniylikni hamda bechora kambag'al odamlarning hayotiy muammolarini imkon qadar kengroq yoritishga qaratilgan. Muallifning bitmas-tuganmas fantaziyasi tufayli bechoralar obrazi Qovoqvoy, usta Uzumcha, professor Nok kabilarda o'z ifodasini topadi. Rodarining qahramonlari doimo ijtimoiy jihatdan aniq belgilangan, shuning uchun ertakning boshqa tomonida Limon shahzoda, ishyoqmas Apelsin, izquvar Sabzilar obrazi mavjud. Chippolino



butun piyoz oilasi bilan Limon qirolligida yashaydi. Ularda sodir bo‘layotgan barcha yomonliklar qahrli shahzodaning xohish-istagi bilan bo‘ladi, ammo “ular o‘zlari yaxshi odamlar bo‘lsalar-da, hamma narsaning to‘g‘risini aytish kerak, ularning omadlari hayotda chopmagan. Nima ham qila olardik, qaerda piyoz bo‘lsa, o‘sha erda ko‘z yosh ham bor”.

Jahon adabiyoti dunyoning turli burchaklaridan turli madaniyatlar, tillar, tarix va falsafalarni aks ettiruvchi keng va xilma-xil adabiy asarlarni o‘z ichiga oladi. Ushbu keng ko‘lamli sohada bolalar adabiyoti alohida va muhim o‘rin tutadi. Uning roli shunchaki o‘yin-kulgidan tashqari, yosh avlodning qadriyatlari, tasavvurlari va axloqiy tushunchalarini shakllantirishdan tashqarida.

Bolalar adabiyotida yosh kitobxonlarni jalb qilish, ularning rivojlanish bosqichiga mos keladigan hikoyalar, saboqlar va istiqbollarni taqdim etish uchun maxsus ishlab chiqilgan. Uning asosiy auditoriyasi bolalar bo‘lishiga qaramay, u bir nechta asosiy funktsiyalarni bajarish orqali jahon adabiyotining keng kontekstida hal qiluvchi rol o‘ynaydi

Fikrimiz so‘ngida xulosa sifatida shuni aytib o‘tish kerakki, bolalar adabiyoti jahon adabiyotida muhim o‘rin tutadi, chunki u yosh kitobxonlarni hikoyalar, madaniy qadriyatlar va hayotning muhim saboqlari bilan tanishtiradi. Hayoliy ertaklar, axloqiy ta’limotlar va umuminsoniy mavzular orqali u kelajak avlodning o‘qishga bo‘lgan muhabbatini va dunyoni tushunishini rivojlantirish uchun asos bo‘lib xizmat qiladi. Shunday qilib, bolalar adabiyoti hikoya qilish an‘analarining global madaniyatda davom etishini ta’minlaydi, chegaralar bo‘ylab umumiy insoniylik tuyg‘usini rivojlantiradi.

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YADRO ITQITUVCHILARDA SPORT NATIJALARINING JISMONIY SIFATLARGA BOG‘LIQLIGINI TADQIQ ETISH

Farg‘ona davlat universiteti Ko‘p kurash sport turlari nazariyasi va
uslubiyati kafedrası mudiri: E.A.Erkayev

Kalit so‘zlar: Yadro, tezlik-kuch, uzoqqa uchishini, sport, yugurish, shug‘ullantiruvchi, tahlil, itqitish, texnikasi, yetakchi, jismoniy, sifatleri.

Annotatsiya: Tezlik-kuch sifatlarining rivojlanish darajasi ko‘rsatkichlariga qaraganda, ta‘kidlash joizki, yadro itqituvchilarda sakrash mashqlarida natijalar ancha o‘sgan. Masalan, joyidan turib uzunlikka sakrash bo‘yicha tekshiriluvchilarning natijalaridagi o‘shish 9 dan 12 sm gacha bo‘lgan.

Ключевые слова: ядро, скоростно-силовые качества, бег на длинные дистанции, спорт, бег, тренировка, анализ, толчок, техника, лидер, физические, качества.

Аннотация По уровню развития скоростно-силовых качеств стоит отметить, что результаты толкателей ядра в прыжковых упражнениях существенно возросли. Так, например, прирост результатов испытуемых в прыжке в длину с места составил от 9 до 12 см.

Yadro itqituvchilarda, tadqiqotchilar fikricha, tezlik-kuch sifatlarining rivojlanishi sport natijasining o‘shishiga ta‘sir ko‘rsatadi, chunki itqitishda uloqtirish harakatlarini kuchi snaryadlarning uzoqqa uchishini ta‘minlovchi asosiy omillardan biri hisoblanadi, shunga ko‘ra jismoniy sifatlarni sport natijasiga ko‘rsatiladigan ta‘sirini o‘rganish dolzarb sanaladi.

Tadqiqot natijalari va ularning muhokamasi. Olingan ma‘lumotlarga ko‘ra tezlik-kuch, kuch yo‘nalishidagi testlarning hamda tanlangan tur bo‘yicha sport ko‘rsatkichlari keltirilgan (o‘rtacha) tahlili quyidagi xulosaga keltiradi.

Tezkorlikni o‘rganish asosida yadro itqituvchilar jismoniy tayyorgarligining dinamikasini tadqiq etsak: yugurib kelib 30 m yugurish natijalariga ko‘ra bu ko‘rsatkich ancha o‘sganligini isbotladi. Masalan, o‘smirlarda o‘rtacha 4,7 sek.dan 4,5 sek.gacha yaxshilandi (pasaydi). Mazkur fakt boshqa tadqiqotchilar tomonidan ham qayd etilgan (V.P.Filin). Faqat shug‘ullantiruvchi omillar emas, balki sportchilarning yoshi (12-16 yosh) bilan ham izohlanadiki, bu davrda tezkorlik sifati o‘z rivojining cho‘qqisiga yetadi.

Bizga ma'lumki, chidamlilik sifati yadro itqituvchilarning sport natijasi bilan o'zaro aloqador emas, biroq BO'SM dasturi talab etadigan har tomonlama tayyorgarlik uchun bu sifat zaruriy sanaladi. Olgan ma'lumotlarga ko'ra, sinaluvchilar – qizlar ham, yigitlar ham – 12 daq. (K.Kuper – chidamlilikni aniqlovchi test) davomida a'loga baholanadigan masofani yugurib o'tdilar. Yigitlarning ko'rsatkichlari 3400 m dan 4000 m gacha, qizlarda esa 2900 m dan 3200 m gacha.

Biz guruhda shug'ullanuvchilarni antropometrik, ya'ni bo'y, vazn o'lchovlarini va jismoniy tayyorgarlik holatini o'rganish uchun nazorat-sinov mashqlaridan o'tkazdik va olingan natijalarni 1-chi jadvalda ko'rishingiz mumkin. Ikki yil o'quv-trenirovka jarayonida qanchalik o'zgarganligini bilish uchun 2024 y. natijalarini 2025 y. ko'rsatkichlari bilan tahlil qildik.

Bo'y-vazn ko'rsatkichlariga qarab ishonch hosil qilish mumkinki, tajriba guruhiga mansub tarbiyalanuvchilarini yaxshi saralab olgan. Bunga ahamiyat berilishi bejiz emas, biz bilamizki, snaryadning gorizontga nisbatan uchib chiqish nuqtasi ham sport natijasiga katta ta'sir ko'rsatadi, demak, balandroq bo'yli sportchilar ustunroq hisoblanadilar. Negaki, itqitish texnikasi to'g'ri ijro etilsa, snaryadning qo'ldan uchib chiqish nuqtasi balandroq bo'ladi, demak, uchish trayektoriyasi ham uzoqroq bo'ladi. Bizning tekshiriluvchilarimizdan yigitlarning bo'yi o'rtacha hisobda 180 sm dan 2024 y. 188 sm gacha, qizlarda esa 170-171 sm atrofida, bu kishini xursand qiladi, chunki bunday bo'yga egalar kelajagi bor hisoblanadi, chunki yadroni chiqish nuqtasi yuqori bo'ladi, vaznlari esa – yigitlarda 73-90 kg oralig'ida, qizlarda 72-90 kg oralig'ida.

Tezlik-kuch sifatlarining rivojlanish darajasi ko'rsatkichlariga qaraganda, ta'kidlash joizki, yadro itqituvchilarda sakrash mashqlarida natijalar ancha o'sgan. Masalan, joyidan turib uzunlikka sakrash bo'yicha tekshiriluvchilarning natijalaridagi o'sish 9 dan 12 sm gacha bo'lgan. Yadroni (5 kg) ikki qo'llab pastdan oldinga va bosh ustidan orqaga tashlashda ham shunga o'xshash siljishlar yuz bergan. Ular muvofiq ravishda o'smirlarda yadroni oldinga tashlashda 13 m 96 sm dan 14 m 26 sm ga o'sgan, bosh ustidan orqaga tashlashda 15 m 91 sm dan 16 m 15 sm ga va qizlarda oldinga 9 m 96 sm dan 10 m 03 sm ga, orqaga esa 13 m 00 sm dan 13 m 20 sm ga ortgan. O'zgarishlarni 3-chi va 4-chi jadvalda ko'rishingiz mumkin.

Shunday qilib, o'tkazilgan tadqiqotlar yadro itqituvchilarning, bizning nazarimizda, nazariy ahamiyatga ega bo'lgan yetakchi jismoniy sifatlari dinamikasini aniqlashgagina imkon berib qolmay, mashg'ulotning vosita va



usullarini takomillashtirish yo‘llarini belgilab olish uchun sharoit yaratdi, chunki tekshiriluvchilarning musobaqa natijalarida ham ijobiy siljishlar yuz berdi. Demak, tajriba guruhining mashg‘ulot darslarida qo‘llanadigan usul hamda vositalar to‘g‘ri, bu esa amaliyotda jiddiy ahamiyatga ega.

Izlanishda ishtirok etgan yadro itqituvchilar o‘z yoshida yetuk ilg‘or yadro itqituvchilar deb hisoblanadi. Ularning erishgan yutuqlarini respublika miqyosida o‘tkazilgan musobaqa natijalari va ularga taqdim etilgan diplomlar orqali bilib olish mumkin (ilova qilinadi).

Yuqorida aytilganlarni tasdiqlash uchun respublika miqyosidagi musobaqalarning g‘olib va sovrindorlariga berilgan tegishli darajadagi diplomlarni qo‘lga kiritganligi tasdiqlaydi.

Agar mashg‘ulot darslarining oqilona rejalashtirish va samaradorligi mezon sifatida sport natijasini qabul qiladigan bo‘lsak, murabbiy-o‘qituvchi O.IIjkinaning ish tajribasini namuna qilib ko‘rsatish mumkin. Shu sababdan biz mashg‘ulot kundaliklarini tahlil etib ko‘rishga urindik va ustuvor yo‘nalishli haftalik sikllarni tashkil etish variantlarini, eng ko‘p qo‘llanadigan mashg‘ulot vositalarini aniqladik. Bularni mashqlardan misollar keltiramiz:

Yadroni oyoqlarni parallel joylashtirgan holatda joyidan turib hamda irg‘ib bajarish. Yadro yoki to‘ldirma to‘pni (har xil og‘irlik) bosh ustidan orqaga va pastdan oldinga tashlash. Imitasiyalar (shtanga grifi bilan): joyidan turib; grif bilan burilishlar.

Shtanga: yotgan holda shtangani siqib ko‘tarish, o‘tirib-turishlar, qadoqtosh bilan qo‘llarni bukib-yozish, shtanga lappaklari bilan burilishlari; qorin pressi va bel qismini rivojlantiruvchi mashqlar; gavda atrofida aylanish; dast ko‘tarish, joyda shtanga bilan qaychisimon qadam tashlash.

Joyidan turib uch qadamdan, zarb bilan yugurib kelishdan uzunlikka sakrash, bir oyoqdan ikkinchisiga sakrashlar – 5x20 marta. Baryerlar osha sakrashlar, bir oyoqda hakkalash.

Tezlanishlar: 3x60 m, 3x50 m, 3x100, toqqa qarab yugurish 50-70 m, kross yugurishlar.

3.2 va 3.2-jadvallarda biz antropometrik ma‘lumotlar ko‘rsatkichlarini ko‘rishimiz mumkin, sportchining chidamliligini aniqlovchi K.Kuper testi bo‘yicha (12 daq.) yugurish natijalari, itqituvchilarning tezkorligini aniqlashga yordam beradigan yugurib kelib 30 m yugurish testida tadqiqotlarga va undan keyingi

ko'rsatkichlar hamda itqituvchilar uchun unchalik muhim bo'lmagan egiluvchanlikni aniqlovchi testdagi natijalarni ko'rishimiz mumkin.

3.4-jadvalda tezlik-kuch, kuch yo'nalishidagi testlarning hamda tanlangan tur bo'yicha sport ko'rsatkichlari keltirilgan (o'rtacha) tahlili quyidagi xulosaga keltiradi.

Tezkorlikni o'rganish asosida yadro itqituvchilar jismoniy tayyorgarligining dinamikasini tadqiq etishga kelsak: yugurib kelib 30 m yugurish natijalariga ko'ra bu ko'rsatkich ancha o'sganligini isbotladi. Masalan, o'smirlarda o'rtacha 4,7 sek.dan 4,5 sek.gacha yaxshilandi (pasaydi – demak, yaxshilandi). Mazkur fakt boshqa tadqiqotchilar tomonidan ham qayd etilgan (V.P.Filin) va, ehtimol, faqat shug'ullantiruvchi omillar emas, balki sportchilarning yoshi (12-16 yosh) bilan ham izohlanadiki, bu davrda tezkorlik sifati o'z rivojining cho'qqisiga yetadi.

Bizga ma'lumki, chidamlilik sifati yadro itqituvchilarning sport natijasi bilan o'zaro aloqador emas, biroq BO'SM dasturi talab etadigan har tomonlama tayyorgarlik uchun bu sifat zaruriy sanaladi. 3.2 va 3.3-jadval ma'lumotlariga ko'ra, sinaluvchilar – qizlar ham, yigitlar ham – 12 daq. (K.Kuper testi – chidamlilikni aniqlovchi test) davomida a'loga baholanadigan masofani yugurib o'tdilar. Yigitlarning ko'rsatkichlari 3400 m dan 4000 m gacha, qizlarda esa 2900 m dan 3200 m gacha.

Bo'y-vazn ko'rsatkichlariga qarab ishonch hosil qilish mumkinki, tajriba guruhiga mansub tarbiyalanuvchilarini yaxshi saralab olgan. Bunga ahamiyat berilishi bejiz emas, biz bilamizki, snaryadning gorizontga nisbatan uchib chiqish nuqtasi ham sport natijasiga katta ta'sir ko'rsatadi, demak, balandroq bo'yli sportchilar ustunroq hisoblanadilar. Negaki, itqitish texnikasi to'g'ri ijro etilsa, snaryadning qo'ldan uchib chiqish nuqtasi balandroq bo'ladi, demak, uchish trayektoriyasi ham uzoqroq bo'ladi.

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Yengil atletika uloqtirish turlarida sport mashg‘uloti nazariyasi va metodikasining rivojlanishini tahlil qilish

Farg‘ona davlat universiteti Ko‘p kurash sport turlari nazariyasi va uslubiyati kafedrası mudiri: E.A.Erkayev

Kalit so‘zlar: zamonaviy, maqsad, vazifalar, vositalar, metodlar, pedagogik, mushak, fiziologik, psixologik, integral, standartlashtirilgan, rivojlantirish.

Annotatsiya Hozirgi paytda yengil atletikaning uloqtirish turlarida sport mashg‘uloti ma‘lum bir standartlashtirilgan harakat amalining shakllantirilishi, ya’ni avtomatlashtirilgan malakalarini hosil qilish bilan chegaralanadi. Shu sababli bu jarayon samaradorligini oshirish muammosini hal qilishda birinchi navbatda uloqtiruvchilarning harakat tayyorgarligini takomillashtirish masalalarini qamrab olishi zarur. U o‘z navbatida harakat qobiliyatlari va sport mahoratini hamda morfofunktsional ixtisoslashuvining shakllanishi jarayoniga xos bo‘lgan qonuniyatlar bo‘yicha ularni rivojlantirish orqali ochib beriladi.

Ключевые слова: современный, цель, задачи, средства, методы, педагогический, мышечный, физиологический, психологический, интегральный, стандартизированный, развитие.

Аннотация В настоящее время спортивная подготовка в метаниях в легкой атлетике ограничивается формированием определенного стандартизированного двигательного действия, то есть формированием автоматизированных навыков. Поэтому при решении проблемы повышения эффективности этого процесса необходимо в первую очередь освещать вопросы совершенствования двигательной подготовленности метателей. Она, в свою очередь, раскрывается через их развитие по закономерностям, присущим процессу формирования двигательных способностей и спортивных навыков, а также морфофункциональной специализации.

Hozida zamonaviy sportda zamonaviy sportchilar tayyorlash tizimi murakkab, ko‘p omilli hodisa bo‘lib, maqsad, vazifalar, vositalar, metodlar tashkiliy shakllar, moddiy texnik shart sharoitlarni va hakerolarni o‘z ichiga oladi. Sportchilar tayyorlashning tashkiliy – pedagogik jarayonini hamda eng yuqori sport natijalariga erishishni ta’minlaydi.

Sport mashg'ulotlarining eng muhim vazifasi va ajralib turuvchi xususiyati – bu insonning harakat qobiliyatlarini oshirish va takomillashtirishdan iborat.

Jismoniy mashqlar sportda takomillashning asosiy vositasi hisoblanadi. Sport mashg'ulotlarida jismoniy mashqning bajarilishi mushak faoliyati bilan bog'liq va shu tariqa fiziologik funksiyalarning qayta tuzilishiga, ishchi organda neorfoloqik va biokimyoviy o'zgarishlarga olib keladi. Bu o'zgarishlar turli xil va ko'p qamrovli bo'lib, biroq ularning ichida umumiy moslashish tamoyillari yotadi.

Sportchining maxsus harakat faoliyati jismoniy sifatlarining mos darajada rivojlanganligini, yaxshi harakat texnikasini va bu faoliyatni ta'minlovchi organizm tizimlarining zarur holatini munosib psixologik tayyorgarlikni talab qiladi. Bu komponentlar yig'indisi sportchining integral tayyorgarligini hamda uloqtirishlardagi real natijani aniqlab beradi [56; 25 b].

Shunga qaramay sport amaliyotning ko'rsatishicha tayyorgarlikning turli tomonlari umuman xilma – xil uyg'unlashtirilganda rekord natijaga erishish mumkin. Bitta maqsadning o'ziga har xil yo'llar bilan va turli xil vositalar yordamida erishish mumkin. Boshqacha aytganda sportchi individual xususiyatlari bilan aniqlanadi. Shu bilan birga tayyorgarlikning individual o'zgaruvchanligi sport takomillashuvi jarayonini tuzishning umumiy qonuniyatlari chegarasidan chiqishi mumkin emas.

Sportchilar tayyorlashning hamma vositalari jismoniy texnik, taktik funksional va psixologik tayyorgarlikni takomillashtirish vazifalariga muvofiq guruhlariga bo'linadi. Tabiiyki u yoki bu vositaning ma'lum bir guruhga tataluqliligini aniq chegaralab qo'yish har doim ham mumkin emas, biroq bunday tizimlashtirishni amalga oshirish mumkin.

Hozirgi paytda yengil atletikaning uloqtirish turlarida sport mashg'uloti ma'lum bir standartlashtirilgan harakat amalining shakllantirilishi, ya'ni avtomatlashtirilgan malakalarini hosil qilish bilan chegaralanadi. Shu sababli bu jarayon samaradorligini oshirish muammosini hal qilishda birinchi navbatda uloqtiruvchilarning harakat tayyorgarligini takomillashtirish masalalarini qamrab olishi zarur. U o'z navbatida harakat qobiliyatlari va sport mahoratini hamda morfofunktsional ixtisoslashuvining shakllanishi jarayoniga xos bo'lgan qonuniyatlar bo'yicha ularni rivojlantirish orqali ochib beriladi.

Bosqon uloqtiruvchilarni tayyorlashning shakllangan tizimi mashg'ulot ta'siri va nazorat ob'yekti sifatida bir qator psixofiziologik tizimlar va funksiyalarni



aniqlab beradi. Jismoniy tayyorgarlik jismoniy sifatlarning rivojlanish darajasi bilan aniqlanadi, ular orasida kuch, tezkorlik, chaqqonlik ustuvor ahamiyatga ega. Bu sifatlarning maxsus harakat malakasida ro'yobga chiqarilishi texnik tayyorgarlik bilan ta'minlanadi.

So'nggi yillarda e'lon qilingan ishlarda sport mashg'uloti natijasida jismoniy mashqlanganlik rivojlanishini fiziologik mohiyatini ochib berishga ko'p e'tibor qaratilmoqda. Bunda jismoniy yuklamalarga moslashish mexanizmlariga alohida urg'u berilmoqda. Zero sport mashg'uloti bu boshqariluvchi jarayondir, uni bilish uchun avtomatik boshqaruv nazariyasi qoidalarini jalb qilinadi.

Mashg'ulot jarayonini tuzish metodologiyasi asosida sport mashg'ulot tamoyillari va qonuniyatlari yotadi. Organizm hayotiy faoliyatining ob'yektiv umumbiologik qonuniyatlari va har xil bo'lgan bir qator vazifalarni oldiga qo'yish va hal etishni nazarda tutuvchi boshqaruv nazariyasining asosiy qoidalarini yotadi.

So'nggi yillarda sport fanida sport mashg'ulotlari asoslarini o'rganish asosiy nazariy qoidalarini paydo bo'lishiga olib keldi. Ularning aniq bayoni A.P.Matveev va Yu.V.Veroxshanskiy ishlarida aks etgan. Sport mashg'ulotining boshlang'ich qoidasi yoki tamoyillari sifatida uning asosiy ob'yektiv qonuniyatlarini umumlashtirgan holda aks ettiruvchi qoidalar ko'rsatiladi [42; 25 b].

Yu.V.Veroxshanskiy quyidagi qonuniyatlar guruhini ajratadi:

1. Moslashish rivojlanishining umumiy qonuniyatlari;
2. Sport mahoratini shakllanishi jarayonining o'ziga xos qonuniyatlari;
3. Morfofunktsional ixtisoslashish qonuniyatlari
4. Holat dinamikasi va mashg'ulot yuklamalarining bog'liqligi qonuniyatlari

Shunday qilib sport fanining va sport mashg'ulotlari metodikasining asosiy qoidalarini mashg'ulot ta'sirlari hamda keltirib chiqaradigan sportchi holatining o'zgarishlari, moslashuvdan qayta tuzishlar orasidagi sababi yaqin aloqlari va bog'liqliklari bilan bog'liq. Shuningdek, sport mashg'uloti mazmunining turli tomonlari uyg'unligi, sport mashg'uloti yagonaligi va sport faoliyatining boshqa shakllari bilan bog'liq.

Sportchilar tayyorlash metodikasi o'zgaruvchanligi bilan ifodalanadi. U sport mashg'uloti tamoyillariga muvofiq doimo takomillashib boradi. Uning asosiy rivojlanish yo'nalishlarini ajratish mumkin. Birinchi galda bu mashg'ulot ishi umumiy hajmlarini keskin o'sishi bilan ifodalanadi. Shu bilan birga mashg'ulot yuklamalarini hajmlarini oddiygina oshirib borish ularning mashqlantirish uchun

turli yo‘nalishdagi mashg‘ulot ishining samarali nisbatlarini izlab topish, shuningdek mashg‘ulotni tashkil qilishning yangi shakllarini o‘ylab topish zarur.

Sport mashg‘ulotining metodik qoidalari rivojlanishining asosiy tendensiyasi sifatida mashg‘ulotni jadallashtirish nisbatiga mashg‘ulot ta’sirlarini oshirish bilan ajratiladi.

Mashg‘ulot shiddatini oddiy oshirish bilan bir qatorda mashg‘ulot sharoitida musobaqa faoliyatini modellashtirish metodi keng tarqalgan.

Mashg‘ulotni jadallashtirishga yana yillik siklning aniq bosqichlarida tayyorgarlik vazifalari va maqsadlariga muvofiq bir tomonlama yo‘naltirilgan mashg‘ulot yuklamalari nisbatini oshirish ham yordam beradi.

Boshqa muhim tendensiya yuqori malakali sportchilar mashg‘ulot tizimini sport turining o‘ziga xos xususiyatlariga mosligi yoki tayyorgarlik tizimining chuqurlashtirilgan ixtisoslashuvi hisoblanadi. Sport takomillashuvini ta’minlaydigan asosiy mexanizmlardan biri, ma’lumki, tezkor va uzoq muddatli moslashish jarayonlari hisobiga mashqlanganlik darajasining o‘sishi hisoblanadi.

Mashg‘ulotning boshlang‘ich bosqichida moslashish samarasi katta miqiyosiga ega jismoniy sifatlardan birini maqsadli rivojlantirish boshqa sifatlarni takomillashtirishga olib keladi.

Sport tayyorgarlik bosqichlarining Oliy sport mahorati darajasida moslashish reaksiyalari yanada maxsus bo‘la boshladi. Qarshi moslashish ta’siri ancha kamayadi, ba’zan esa umuman namoyon bo‘lmaydi.

Shunday qilib mashg‘ulot ta’siri samaradorligini oshirish mikrosikllarda tayyorgarlik vositalarining ixtisoslashtirilganligi bilan bog‘liq bo‘lgan vositalarni jadallashtirishdan iborat. Ma’lum bir uyg‘unlikdagi vositalardan asoslangan holda tanlab olish mashg‘ulotning turli davrlarida turli xil vazifalarni hal etishga imkon beradi [25; 51-52].

Jismoniy tarbiya muammosiga tizimli tuzilmaviy yondashuv konsepsiyasining shakllantirilishi nazariy tasavvurlarni ancha kengaytirishda va sport takomillashuvi jarayonini amaliy bilishiga yordam beradi.

Ushbu konsepsiya asosida tayyorgarlikni boshqarish tizimiga kiruvchi barcha tarkiblarini yaqindan o‘zaro bog‘likligi va yakuniy natijaga ta’siri to‘g‘risidagi g‘oya yotadi. Ushbu konsepsiyaning qabul qilinishi sportchilar tayyorgarligini tashkil qilishga bo‘lgan yangi qarashlarining rivojlanishiga turtki bo‘ldi. Jismoniy

tarbiya nazariyasi va metodikasida mashqlar shartli ravishda umumtayyorgarlik, maxsus tayyorgarlik va musobaqa mashqlariga bo‘linadi.

Shunga qaramay sport amaliyotida u yoki bu mashqlarni tasniflash juda qiyin, chunki bir xil vaziyatda mashq umumiy tayyorgarlik mashqi, boshqa vaziyatda esa maxsus tayyorgarlik mashqi bo‘lishi mumkin.

Shu bilan birga maxsus tayyorgarlik mashqlari ma’lum bir asab mushak apparati guruhlariga ta’sir kuchi bo’yicha musobaqa mashqiga o‘xshash bo‘lishi yoki undan birmuncha kuchliroq bo‘lishi kerak. Faqat shu qoidaga rioya qilingandagina mashqlanganlikning ijobiy ko‘chishi mumkin bo‘ladi.

Sportchi malakasi ortib borishi bilan sportchi organizmi tizimlariga mashg‘ulot ta’sirchanligini nafaqat kattaliklarini balki ularning nisbatlari ham o‘zgaradi. Mashg‘ulot yuklamalari hajmi va shiddati ortadi. Teskari variant ham bo‘lishi mumkin. Hozirgi paytida yuqori malakali sportchilar katta hajmdagi mashg‘ulot yuklamalarini bajarishadi. Bu yerda albatta ular har xil shiddatdagi ish bajariladi.

Yengil atletikachining ko‘p yillik tayyorgarligini rejalashtirish jarayonida uning yosh bosqichlarini shartli ravishda bo‘linishini inobatga olish zarur. Chunki har doim ham shug‘ullanuvchilarning pasport yoshi biologik yoshga to‘g‘ri kelavermaydi. Individual xususiyatlar va asosiy jismoniy sifatlarning rivojlanish darajasini snaryadni uchish ko‘rsatkichlariga muvofiq har bir bosqich davomiyligini o‘zgarishi mumkin. Ixtisoslashtirilgan mashg‘ulotlar kechroq boshlangan hollarda ko‘p yillik tayyorgarlikning tegishli bosqichlarini yosh chegaralari suriladi.

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O'SMIR TAEKWANDOCHILARINING JISMONIY TAYYORGARLIGINI RIVOJLANTIRISH

Abdulfattoyev Abrorjon Abdurahmon o'g'li
FARG'ONA DAVALAT UNIVERSITETI UNIVERSITETI “YAKKA
KURASH SPORT TURLARI NAZARIYASI VA USLUBIYATI
KAFEDRASI” O'QITUVCHISI

Annotatsiya

Ushbu maqolada taekwondo bilan shug'ullanuvchi o'smirlarda jismoniy tayyorgarlikning rivojlanishi ko'rib chiqiladi. Tadqiqotda yoshga xos fiziologik xususiyatlar yoritilgan, turli o'qitish usullarining samaradorligi baholanadi va mashg'ulotlar natijalarini yaxshilash bo'yicha amaliy tavsiyalar berilgan. 13-15 yoshdagi 14 nafar sportchi bilan olib borilgan tadqiqotlarga asoslanib, topilmalar umumiy jismoniy tayyorgarlikni maxsus mashqlar bilan birlashtirgan moslashtirilgan dasturlarning muhimligini ta'kidlaydi.

Kalit so'zlar : jismoniy tayyorgarlik, taekwondo, o'smirlar, mashg'ulot usullari, sport ko'rsatkichlari.

Абстрактный

В статье рассматривается развитие физической подготовленности подростков, занимающихся тхэквондо. В исследовании рассматриваются возрастные физиологические особенности, оценивается эффективность различных методов тренировок и даются практические рекомендации по улучшению результатов тренировок. Результаты исследования, проведенного с участием 14 спортсменов в возрасте 13–15 лет, подчеркивают важность индивидуальных программ, сочетающих общую физическую подготовку со специальными упражнениями.

Ключевые слова: физическая подготовка, тхэквондо, подростки, методы тренировки, спортивная результативность.

Abstract

This article examines the development of physical fitness in adolescents engaged in taekwondo. The study highlights age-specific physiological characteristics, evaluates the effectiveness of various training methods, and provides practical recommendations for improving training results. Based on research

conducted with 14 athletes aged 13-15, the findings emphasize the importance of tailored programs that combine general physical fitness with specific exercises.

Key words: physical fitness, taekwondo, adolescents, training methods, sports performance.

Kirish

Jismoniy tayyorgarlik taekwondo bo'yicha muvaffaqiyatli ishlashning asosi hisoblanadi, ayniqsa o'smirlik davrida fiziologik va psixologik o'zgarishlar mashg'ulot natijalariga sezilarli ta'sir ko'rsatadi. Ushbu tadqiqot o'smir taekwondochilarning yoshga bog'liq ehtiyojlari va raqobatbardosh talablarini hisobga olgan holda jismoniy tayyorgarligini rivojlantirishga samarali yondashuvlarni aniqlashga qaratilgan.

Asosiy savollarga quyidagilar kiradi:

1. Taekwondo bilan shug'ullanuvchi o'smirlar uchun jismoniy tayyorgarlikning muhim tarkibiy qismlari nimalardan iborat?
2. Muvozanatli rivojlanishni ta'minlash uchun o'quv dasturlarini qanday optimallashtirish mumkin?

Usullari

12 haftalik o'quv dasturi davomida 14 nafar o'smir taekwondochilarning (13-15 yoshli) jismoniy tayyorgarligini baholash uchun miqdoriy yondashuv qo'llanildi. Metodologiya quyidagilarni o'z ichiga oladi:

- **Dastlabki sinov** : standartlashtirilgan testlar yordamida kuch, chidamlilik, moslashuvchanlik, tezlik va chaqqonlikni baholash (masalan, tik turgan holda uzunlikka sakrash, moki yugurish).

- **Trening dasturi** : umumiy jismoniy mashqlarni (yugurish, plyometrik) sportga oid mashqlarni (tepish, oyoq harakatlarini) birlashtirgan tuzilgan dastur.

- **Yakuniy test** : bir xil standartlashtirilgan testlar yordamida qayta baholash.

Ma'lumotlar o'quv dasturining samaradorligini aniqlash uchun juftlashtirilgan t-testlar yordamida tahlil qilindi.

Natijalar jismoniy tayyorgarlikning barcha tarkibiy qismlarida sezilarli yaxshilanishlarni ko'rsatdi:

- **Kuch** : tik turgan holda uzunlikka sakrashda 15% o'sish.
- **Chidamlilik** : 1000 metrga yugurishda 12% yaxshilanish.
- **Moslashuvchanlik** : o'tirish va erishish testida 10% yaxshilanish.

- **Tezlik va chaqqonlik** : qatnov vaqtlarida 18% yaxshilanish.
- Maqolaning ilmiy qismini asoslash uchun men asosiy tadqiqot natijalarini aks ettiruvchi jadvallarni kiritishni taklif qilaman. Quyida siz foydalanishingiz mumkin bo‘lgan uchta jadval misollari keltirilgan.

1-jadval. 12 hafta davomida taekwondo bo‘yicha o‘smirlar jismoniy tayyorgarligi ko‘rsatkichlarining dinamikasi

Ko‘rsatkich	O‘lchov birligi	Dastlabki natija (M ± SD)	Yakuniy natija (M ± SD)	O‘sinh (%)
Kuch (tik turib uzunlikka sakrash)	sm	175 ± 10	200±12	+14,3
Chidamlilik (1000 m yugurish)	sek	245 ± 15	215 ± 10	+12,2
Moslashuvchanlik (oldinga egilish)	sm	10 ± 2	16 ± 3	+60,0
Tezlik (shuttle 3x10 m)	sek	8,5 ± 0,4	7,8 ± 0,3	+8,2

2-jadval. O‘quv dasturining tuzilishi (12 hafta)

Dastur bosqichi	Vazifalar	Usul va vositalar	Davomiyligi	Darslarning chastotasi
Umumiy jismoniy tarbiya	Kuch va chidamlilikni rivojlantirish	Yugurish, sakrash mashqlari, surish, taxta	4 hafta	3 marta / hafta
Maxsus jismoniy tayyorgarlik	Tezlik va moslashuvchanlikni rivojlantirish	Tepish, moki yugurish, cho‘zish	4 hafta	3 marta / hafta
Birlashtirilgan bosqich	Koordinatsiyani kuchaytirish	Simulyatsiya janglari, kombinatsiyalangan zarbalar	4 hafta	3 marta / hafta



3-jadval. Mashg'ulotlarda ishtirok etish darajasi turlicha bo'lgan o'smirlarning jismoniy tayyorgarligi ko'rsatkichlarini taqqoslash

Sportchilar guruhi	Haftada darslar soni	Kuch (sm)	Chidamlilik (sek.)	Tezlik (sek)	Moslashuvchanlik (sm)
Asosiy (3 dars)	3	200	215	7.8	16
Test (1 dars)	1	185	230	8.2	12

Ushbu jadvallar tadqiqot natijalarini tasavvur qilishda yordam beradi va o'quvchilarga o'smir taekwondochilarning jismoniy tayyorgarligiga mashg'ulotlarning ta'siri haqida aniq tushuncha beradi.

Mashg'ulotlar dasturiga izchil rioya qilganliklarini ko'rsatgan sportchilar yanada yaxshilanishlarga erishdilar.

Munozara

Topilmalar shuni ko'rsatadiki, umumiy jismoniy tayyorgarlikni sportga oid mashqlar bilan birlashtirish o'smir taekwondochilarning umumiy ko'rsatkichlarini oshiradi. Kuzatilgan yaxshilanishlar yoshga mos ta'lim usullarining afzalliklari bo'yicha oldingi tadqiqotlar bilan mos keladi.

Asosiy tavsiyalarga quyidagilar kiradi:

1. **Muvozanatli mashg'ulot** : Chidamlilik va portlash qobiliyatini oshirish uchun aerob va anaerob mashqlarini qo'shing.
2. **Davrlash** : Haddan tashqari yuklanishning oldini olish uchun progressiv yuklash va tiklanish davrlaridan foydalaning.
3. **Moslashuvchanlik treningi** : Harakat oralig'ini yaxshilash uchun dinamik va statik cho'zishni o'z ichiga oladi.
4. **Individuallashtirish** : Har bir sportchining o'ziga xos ehtiyojlarini qondirish uchun moslashtirilgan dasturlar.

Xulosa

O'smir taekwondochilarda jismoniy tayyorgarlikni rivojlantirish tizimli va ko'p qirrali yondashuvni talab qiladi. Ushbu tadqiqot o'quv dasturlarini optimallashtirish, muvozanatli rivojlanish va ish faoliyatini yaxshilash uchun dalillarga asoslangan tavsiyalarni beradi. Kelajakdagi tadqiqotlar turli yosh guruhlarida uzoq muddatli ta'sir va o'zgarishlarni o'rganishi kerak.

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O‘ZBEKISTONDA MOLIYAVIY HISOBOTLARNING XALQARO STANDARTLARIGA O‘TISHNING AFZALLIKLARI VA BU BORADAGI ILK ISLOHOTLAR

G'ofurova Sadoqatxon G'ayratjon qizi

Farg‘ona davlat universiteti bitiruvchisi

Annotatsiya. Maskur maqola MHXS (moliyaviy hisobotning xalqaro standartlari)ni joriy etishning afzallik taraflari hamda ushbu sohadagi ilk islohatlarni ochiq lab beradi.

Kalit so‘zlar: Moliyaviy hisobot xalqaro standartlari (MHXS), iqtisodiyotning uyg‘unlashuvi, xorij investitsiyalar.

ПРЕИМУЩЕСТВА ПЕРЕХОДА НА МЕЖДУНАРОДНЫЕ СТАНДАРТЫ ФИНАНСОВОЙ ОТЧЕТНОСТИ В УЗБЕКИСТАНЕ И ПЕРВЫЕ РЕФОРМЫ В ЭТОМ НАПРАВЛЕНИИ

Садокатхон Гофурова, дочь Гайратжона

Выпускница Ферганского государственного университета

Аннотация. В данной статье описаны преимущества внедрения Международных стандартов финансовой отчетности (МСФО) и первых реформ в этой области.

Ключевые слова: Международные стандарты финансовой отчетности (МСФО), гармонизация экономики, иностранные инвестиции.

ADVANTAGES OF TRANSITION TO INTERNATIONAL FINANCIAL REPORTING STANDARDS IN UZBEKISTAN AND FIRST REFORMS IN THIS DIRECTION

Sadoqatkhon Gofurova, daughter of Ghayratjon

Graduate of Fergana State University

Annotation. The article discusses the advantages of implementing IFRS (International Financial Reporting Standards) and the first reforms in this area.

Keywords: International Financial Reporting Standards (IFRS), economic harmonization, foreign investments.

KIRISH

Jahon amaliyotida buxgalteriya hisobini hamkorlik tili, biznes va ishbilarmonlik kaliti deb bejiz tan olinmagan. Buxgalteriya hisobi ma'lumotlaridan ko'pchilik manfaatdor shaxslar bo'lib, undan, xususan: investorlar va kreditorlar (tashqi foydalanuvchilar), kompaniya menejerlari (ichki foydalanuvchilar), davlat organlari xizmatchilari, raqobatchilar va boshqalar tomonidan foydalaniladi. “Moliyaviy hisobotning xalqaro standartlari”– moliyaviy hisobotni taqdim etish, zahiralar, sug'urta shartnomalari, pul mablag'larini siljishi, hisob siyosati, hisob baholarini o'zgartirish va xatolar, muvozanat tuzilgandan keyingi hodisalar, qurilish shartnomalari, foyda solig'i, segment hisobot, asosiy vositalar, ijara, ishchilarga haqlar, davlat subsidiyalarining hisobi va davlat yordami haqida ma'lumot, valyuta kursi o'zgarishining ta'siri, biznesni birlashtirish, qarzlar bo'yicha xarajatlar, nafaqa ta'minoti dasturlari bo'yicha hisob va hisobot, bog'liq tomonlar haqida ma'lumotlarni yoritish, jamlama va alohida moliyaviy hisobotni tuzish, assotsiatsiyalangan korxonalarga investitsiyalar, qo'shma faoliyatda ishtirok etish, moliyaviy instrumentlar, bir aksiyaga to'g'ri keluvchi foyda, oraliq moliyaviy hisobot, sotishga mo'ljallangan uzoq muddatli aktivlar, aktivlarni qadrsizlanishi, baholangan majburiyatlar, shartli majburiyat va aktivlar, nomoddiy aktivlar, investitsiyaviy ko'chmas mulk kabilarni o'z ichiga oladi hamda shu asosida moliyaviy hisobotlarni tayyorlash zarurat aylanmoqda. Buxgalteriya hisobi xizmatining natijaviy ko'rsatkichi moliyaviy hisobotlar bo'lib, uning asosiy maqsadi va vazifalari investitsiyalar kiritish va kreditlar berish to'g'risida qarorlar qabul qilishda zarur, hal qiluvchi va foydali bo'lishi, undan foydalanuvchilarga pul mablag'larining kelgusidagi harakatini baholashga yordam berishi, mulkiy, moddiy, mehnat va moliyaviy resurslardagi o'zgarishlarni haqqoniy va ob'ektiv aks ettirilgan axborotni taqdim etishdan iborat. Xorijiy davlatlarda buxgalteriya hisobini tashkil etish, yuritish va hisobotni tuzish sohasidagi munosabatlarni tartibga solishdan tamoyillari sezilarli darajada farq qiladi. Ushbu farqlar xo'jalik faoliyatini tashkil etish va mavjud mulkchilik shakllarining xilma-xilligi hamda hisob amaliyotiga tashqi (siyosiy, iqtisodiy, ijtimoiy, jug'rofiy, texnologik va boshqa) omillarning ta'siri natijasida yuzaga keladi.

Moliyaviy hisobotning maqsadi korxonaning moliyaviy holati, faoliyati va moliyaviy holatidagi o'zgarishlar to'g'risidagi ma'lumotlarni taqdim etishdan iborat bo'lib, u iqtisodiy qarorlar qabul qilishda keng foydalanuvchilarga, ayniqsa butun



dunyo bo‘ylab diversifikatsiya va investitsiya imkoniyatlarini qidirayotgan investorlar uchun foydalidir. Asosiy sifat ko‘rsatkichlari va tegishli buxgalteriya standartlarini qo‘llash, odatda, adolatli taqdimotni ta‘minlaydigan moliyaviy hisobotlarga olib keladi. Biroq, buxgalteriya hisobi standartlari bir mamlakatdan boshqasiga farq qiladi, bu esa mamlakatlar bo‘ylab moliyaviy hisobot sifatining farqlanishiga olib keladi va moliyaviy ma‘lumotlarning solishtirish va shaffofligini qiyinlashtiradi.

Axborotni kamaytiradigan buxgalteriya standartlarini uyg‘unlashtirish zarurati manfaatdor tomonlar va kompaniyalar o‘rtasidagi nosimmetriklik MHXSni ishlab chiqishni talab qildi. Shu nuqtayi nazardan, bugungi kunda kompaniyalarning xalqaro bozorlarga chiqishi, shuningdek, salohiyatli investorlarni jalb qilishda MHXSga muvofiq moliyaviy hisobot tayyorlash muhim ahamiyat kasb etadi va u hayotiy zaruratga aylanib bormoqda.

Xalqaro amaliyotda buxgalteriya hisobining tamoyillari qilib quyidagilar hisoblanadi:

1. Amal qiluvchi korxona (davomiylik) tamoyili
2. Doimiylik(qiyoslanuvchanlik) tamoyili
3. Ehtiyotkorlik(konservatizm) tamoyili
4. Muvofiqlik(hisoblash) tamoyili

TADQIQOT VA NATIJALAR

Ayrim davlatlarda hukumat milliy resurslarni boshqarishda hal qiluvchi rol ni o‘ynaydi. Frantsiya va Shvetsiyada buxgalteriya hisobining rivoji bir muncha boshqa xususiyatga ega. Korxonalar makroiqtisodiy rejalashtirish doirasida hukumatning iqtisodiy siyosatiga amal qilishi shart. Bu davlatlarda hukumat nafaqat biznesning moliyaviy imkoniyatlarini nazorat qiladi, balki zarur hollarda investor yoki kreditor rovida ham ishtirok etadi. Pirovardida ta‘kidlash lozimki, buxgalteriya hisobi, avvalambor, davlat reja organlarining ehtiyojlariga yo‘naltirilgan, firma va kompaniyalar esa hisob va hisobotlar sohasidagi unifikatsiyalangan (yagonalashtirilgan) standartlarga amal qilishga majbur ekanligini e‘tirof etish lozim.

MHXSni tatbiq etish bo‘yicha Yevropa davlatlarining tajribasini o‘rganish va ushbu jarayondagi muammolar va istiqbollarni adolatli baholash O‘zbekistondagi

kompaniyalarning MHXSGa muvofiq buxgalteriya hisobini yuritish va moliyaviy hisobot tuzish jarayoniga o'tish davrida katta imkoniyat hisoblanadi.

O'zbekistonda bunday o'tish davri ancha yillardan beri davom etib kelayotganligini alohida aytib o'tish kerak. Ammo, bu davrda jahon tajribasini o'rganish va MHXSGa muvofiq buxgalteriya hisobini yuritish va moliyaviy hisobot tuzishga o'tishning muammolari va istiqbollarini baholash juda sekinlik bilan amalga oshirilmoqda.

Prezidentimiz Shavkat Miromonovich Mirziyoevning 2017–2021 yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishlari bo'yicha harakatlar strategiyasida “Lizing va boshqa moliyaviy xizmatlarning hajmini ularning yangi turlarini joriy qilish va sifatini oshirish hisobiga kengaytirish” masalasining qo'yilishi, shuningdek, mamlakatimizni 2016 yilda ijtimoiy-iqtisodiy rivojlantirishning asosiy yakunlari va 2017 yilga mo'ljallangan iqtisodiy dasturning eng muhim ustuvor yo'nalishlariga bag'ishlangan Vazirlar Mahkamasining kengaytirilgan majlisidagi ma'ruzalarida “Xalqaro standartlashtirish tashkilotning 21 ming standartidan atigi 13 foizi mamlakatimizda joriy etilgan”ligi xalqaro standartlar asosida buxgalteriya hisobi va auditni tashkil etish va uning ilmiy-nazariy hamda uslubiy asoslarini ishlab chiqish masalasini o'ta dolzarb ekanligini belgilab beradi.

R.Abdurahmonovning ta'kidlashicha: “Moliyaviy hisobotning xalqaro standartlari bilan bir qatorda AQShning milliy standartlari asosida tuziladigan moliyaviy hisobotlar ham amal qiladi (US GAAP). Bu standartlar ma'lum ma'noda xalqaro standartlar sifatida qaralishi mumkin. Biroq, oxirgi to'rt yillik kuzatuvlar AQSh birjalarida MHXS bo'yicha hisobot tuzuvchi kompaniya va firmalar sonining ortganligini ko'rsatmoqda. Bundan avvallari US GAAP bo'yicha moliyaviy hisobot tayyorlagan MDH davlatlaridagi xo'jalik sub'ektlari ham mustasno emas”.

O'zbekiston Respublikasi mustaqillika erishgan yillaridan boshlab, barcha sohada yangi uyg'onish davri boshlandi. Istiqbolli yuksalish yo'li sifatida xalqari iqtisodiy integratsiyani rivojlantirish asosiy omillardan biri bo'lib hizmat qildi. Buxgalteriya hisobi sohasida ham bosqichma-bosqich uchunchi renesans davriga yetib keldi.

1-qadam: O'zbekiston Respublikasining 09.12.1992 yildagi 734-XII-son “Auditorlik faoliyati to'g'risida”gi Qonuni (yangi tahriri) va O'zbekiston



Respublikasining 30.08.1996-yildagi 279-I-son “Buxgalteriya hisobi to‘g‘risida”gi Qonuni (yangi tahriri) qabul qilindi.

2-qadam: 1993-yildan boshlab schyotlar rejasi 21-son Buxgalteriya hisobi milliy standartlari va barcha BHMSlar 2009-yilgacha shakillandi.

3-qadam: 13.04.2016-yildagi O‘RQ-404-son Qonuni bilan “Buxgalteriya hisobi to‘g‘risida”gi O‘zbekiston Respublikasining Qonuni (yangi tahriri) va 25.02.2021-yilda O‘RQ-677-son “Auditorlik faoliyati to‘g‘risida”gi O‘zbekiston Respublikasining Qonuni (yangi tahriri) qayta ishlab chiqildi va tasdiqlandi.

4-qadam: O‘zbekiston Respublikasi Prezidentining 2022-yil 28-yanvardagi PF-60-son “2022-2026-yillarga mo‘ljallangan Yangi O‘zbekistonning Taraqqiyot strategiyasi to‘g‘risida”gi Farmoni, O‘zbekiston Respublikasi Prezidentining 11.09.2023-yildagi PF-158-son “O‘zbekiston – 2030” strategiyasi to‘g‘risidagi Farmoni, 2019-yil 19-sentyabrdagi PQ-3946-son “O‘zbekiston Respublikasida auditorlik faoliyatini rivojlantirish chora-tadbirlari to‘g‘risida”gi, 2020-yil 24-fevraldagi PQ-4611-son “Moliyaviy hisobotning xalqaro standartlariga o‘tish bo‘yicha qo‘shimcha chora-tadbirlar to‘g‘risida”gi, 2021-yil 4-avgustdagi PQ-5210-son “Auditorlarni sertifikatlashtirish tizimini takomillashtirish bo‘yicha qo‘shimcha chora-tadbirlar to‘g‘risida”gi O‘zbekiston Respublikasi Prezidentining Qarorlari qabul qilindi. Hususan, O‘zbekiston Respublikasi Prezidentning “O‘zbekiston – 2030” satrategiyasi to‘g‘risi”dagi Farmonida iqtisodiyotimizni yanada rivojlantirishga qaratilgan islohatlarda iqtisodiy o‘shish orqali daromadi o‘rtachadan yuqori bo‘lgan davlatlar qatoridan o‘rin olish, aholi talablariga va xalqaro standartlarga to‘liq javob beradigan ta’lim, tibbiyot va ijtimoiy himoya tizimini tashkil qilish kabi vazifalar keng o‘rtaga tashlandi.

Strategiyada belgilangan vazifalarga erishishda, aholi daromadlarini oshirish, iqtisodiy sub’ektlarni oshirish, ushbu sub’ektlarda aholi talablariga va xalqaro standartlarga to‘liq javob beradigan daromadlar hisobi xalqaro standartlar asosida yuritish, bugungi kunda dolzarb masalalardan biri bo‘lib hisoblanadi. Mazkur strategiya ijrosini ta’minlash yuzasidan qabul qilingan qator farmon va qarorlar, shuningdek davlat dasturlarida moliyaviy hisobotning xalqaro standartlariga o‘tish ustuvor vazifalar hamda aniq chora-tadbirlar belgilangan.

Yuqorida keltirib o‘tilganidek O‘zbekiston Respublikasi Prezidentining 2020-yil 24-fevraldagi “Moliyaviy hisobotning xalqaro standartlariga o‘tish bo‘yicha qo‘shimcha chora tadbirlar to‘g‘risida”gi PQ-4611-son qaroriga asosida Moliyaviy



hisobotning xalqaro standartlariga o'tish dastlabki huquqiy asos yaratildi. 2021-yil 1-yanvardan boshlab, aksiyadorlik jamiyatlari, tijorat banklari, sug'urta tashkilotlari va yirik soliq to'lovchilar toifasiga kiritilgan yuridik shaxslar moliyaviy hisobotlarning xalqaro standartlari asosida buxgalteriya hisobi yuritilishiga o'tish belgilab berildi. Bundan tashqari O'zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 24-avgustdagi 507-son "Moliyaviy hisobotning xalqaro standartlari va unga tushuntirishlar matnini tan olish tartibi to'g'risidagi Nizomni tasdiqlash haqida"gi qarori ham mazkur tizimga o'tishni jadallashtirishga asos bo'ldi.

O'zbekiston iqtisodiy o'sish va taraqqiyotga intilayotgan davlat sifatida moliya sohasida buxgalteriya hisobi va hisoboti mexanizmlarini standartlashtirish va takomillashtirish jadal suratlarda o'smoqda. So'nggi yillarda mamlakatimizda moliyaviy hisob standartlarini xalqaro standartlarga yaqinlashtirish bo'yicha faol ishlar olib borilmoqda. MHXS (moliyaviy hisobotning xalqaro standartlari) ga o'tishning bir qancha potensial afzalliklari mavjud;

- ✓ moliyaviy tahlilchilar va investorlar uchun moliyaviy hisobotlarning aniqligi, taqqoslanish, ma'lumotlarning oshkorligi, kam tahlil xarajatlari;

- ✓ aktivlarni baholashning bozor mexanizmlari – amalda aktivlar va majburiyatlarning dastlabki qiymati va uning joriy bozor qiymatidan foydalanish investor uchun ham tashkilotning o'zi uchun ham samarali qarorlar qabul qilishga yordam beradi; moliyaviy instrumentlarni qo'llash qulayligi – MHXS hujjatlari zamonaviy biznes yo'nalishlari va operatsiyalarni aks ettirish usullarini yetarli darajada tez-tez qayta ko'rib chiqilishi mamlakatda moliyaviy instrumentlardan foydalanish imkoniyatlarini oshiradi;

- ✓ aktivlar qadrsizlanishini o'z vaqtida aks ettirish – amaldagi hisob standartlari aktivlar qadrsizlanishi riski bo'yicha choralar ko'rishni talab etmaydi. Natijada yirik kompaniyalarda aktivlar summasining oshirib ko'rsatilish riskini yuzaga keltiradi.

MHXS standartlari bunday risklarning oldi olinishi uchun zaruriy talablarni qo'yadi:

- ✓ shartli aktiv va baholangan majburiyatlar bo'yicha aniq ko'rsatmalar – foydalanuvchilar to'g'ri qaror qabul qilishlari uchun nafaqat hujjatlarga asoslangan operatsiyalar to'g'risidagi axborot, balki kelajakda sodir bo'lishi mumkin bo'lgan hodisalar oqibatini joriy hisobotlarda aks ettirish ham muhim ahamiyat kasb etadi;

✓ konsolidatsiyalashgan moliyaviy hisobotlar tuzish – ko‘pchilik yirik kompaniyalar o‘zining tarkibiga kiruvchi korxonalarni hisobga olgan holda jamlama hisobotlarni tuzmoqda, lekin ularni tuzishda zamonaviy konsolidatsiyalash mexanizmlarini hisobga olmasligi, ushbu kompaniyalar guruhining haqiqiy ahvoli ko‘rinmay qolishiga sabab bo‘lmoqda. MHXS bo‘yicha konsolidatsiyalashgan hisobot moliyaviy hisobotning alohida maxsus tarkibiy qismi hisoblanadi va unga nisbatan maxsus talablar mavjud.

Yuqorida keltirilgan malumotlarga asoslanib, O‘zbekiston buxgalteriya hisobini xalqaro moliyaviy hisob standartlariga moslashtirish tartib qoidalarini ishlab chiqish hozirgi kunda O‘zbekistonda ayniqsa dolzarb ekanligini ta’kidlash mumkin.

XULOSA

Moliyaviy hisobning xalqaro standartlarini joriy etish O‘zbekiston moliya tizimini modernizatsiya qilishning muhim bosqichidir. Moliyaviy hisobotning taqqoslanuvchanligi, shaffofligi va ishonchliligini ta’minlash sarmoyalarni jalb etish, ishbilarmonlik muhitining raqobatbardoshligini oshirish va mamlakat moliyaviy barqarorligini mustahkamlashning asosiy elementiga aylanmoqda.

Moliyaviy hisobotning xalqaro standartlariga o‘tishning dolzarbligi, ijobiy jihatlari va afzalliklarini hamda oqibatlarini tahlil qilish hamda nazariy-uslubiy jihatlarni tadqiq qilish natijasida quyidagi xulosalarni berish mumkin:

birinchi, korxonalarda moliyaviy hisobotlarni tayyorlashda moliyaviy hisobotning xalqaro standartlarini qo‘llash, uning ahamiyati va zarurati o‘rganish, nazariy-uslubiy jihatlarni tadqiq qilish orqali ushbu moliyaviy hisobotlardan foydalanuvchilar, asosan, investorlarni jalb qilishda ustuvorlikka ega ekanligi hamda shaffof va to‘liq ochib berilgan ma’lumotlar to‘plamini taqdim etilishi va ishonchli manba bo‘lib xizmat qilishini alohida ta’kidlab aytish zarur;

ikkinchi, mamlakat miqyosida moliyaviy hisobotning xalqaro standartlarini joriy etishda eng kerakli resurs bu kadrlar hisoblanadi. Shu sababdan, kadrlar tayyorlash tizimini tezkor ravishda ishlab chiqish va dasturiy ta’minotga o‘zgartirish kiritish uchun mavjud va qo‘shimcha resurlardan keng foydalanish maqsadga muvofiqdir;

uchinchi, milliy buxgalteriya hisobini MHXSning prinsip va talablariga mos holda keltirish bo‘yicha islohotlarni davom ettirish jarayonida amaldagi me’yoriy



huquqiy hujjatlarga, buxgalteriya hisobining milliy standartlariga zaruriy o'zgartirish va qo'shimchalar kiritish, xususan, nizomlar, yo'riqnomalar va qoidalarni ham standartlarga aylantirishimiz kerak;

to'rtinchidan, MHXSni qabul qilish va uni qo'llashda hisob tizimidan tashqari, moliya, pul-kredit, soliq va mehnat qonunchiligini hamda kapital bozorini o'zaro uyg'unlikda ta'minlash zarur.

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Nishotiyning “Husn-u Dil” dostonida tasavvufiy va ma’rifiy terminlar

**Abu Rayhon Beruniy nomidagi Urganch davlat universiteti “O’zbek
tilshunosligi” kafedrasida mustaqil izlanuvchisi
Shernazarova Gulshan Abdullayevna**

Annotatsiya: Ushbu maqola o‘zbek adabiyotining yirik namoyandalaridan biri Nishotiyning "Husn va Dil" dostonidagi tasavvufiy va ma’rifiy terminlarni tahlil qilishga bag‘ishlangan. Dostonda ishlatilgan ushbu terminlar orqali shoirning falsafiy qarashlari, inson kamoloti yo‘lidagi izlanishlari va axloqiy mezonlarni qanday talqin qilgani yoritiladi. Tadqiqotda dostonidagi asosiy tasavvufiy tushunchalar, ularning ma’nosi va dostonning umumiy g‘oyaviy mazmunidagi o‘rni atroflicha ko‘rib chiqiladi.

Kalit so‘zlar: Nishotiy, Husn va Dil, doston, tasavvuf, ma’rifat, terminlar, falsafa, axloq, ilohiy ishq, komil inson, tariqat.

Аннотация: Статья посвящена анализу мистических и просветительских терминов в эпической поэме «Хусн ва Дил» одного из великих деятелей узбекской литературы Нишати. Эти термины, используемые в эпосе, проливают свет на философские взгляды поэта, его поиски человеческого совершенства, трактовку им нравственных критериев. В исследовании подробно рассматриваются основные мистические понятия в эпосе, их значение и место в общем идейном содержании эпоса.

Ключевые слова: Нишати, Хусн ва Дил, эпос, мистицизм, просветление, термины, философия, этика, божественная любовь, совершенный человек, порядок.

Abstract: This article is devoted to the analysis of mystical and enlightening terms in the epic poem "Husn va Dil" by one of the great figures of Uzbek literature, Nishati. These terms used in the epic shed light on the poet's philosophical views, his search for human perfection, and how he interpreted moral criteria. The study examines in detail the main mystical concepts in the epic, their meaning, and their place in the overall ideological content of the epic.

Keywords: Nishati, Husn va Dil, epic, mysticism, enlightenment, terms, philosophy, ethics, divine love, perfect human being, order.

Asosiy qism: Nishotiyning "Husn va Dil" dostoni o'zbek mumtoz adabiyotida o'ziga xos o'rin tutuvchi asarlardan biridir. Bu doston nafaqat badiiy jihatdan yuksak saviyada yozilgan, balki unda chuqur falsafiy va ma'rifiy g'oyalar ham mujassam. Nishotiy ushbu asarida tasavvufiy va ma'rifiy terminlardan mohirona foydalanib, inson ruhiyati, uning olam bilan munosabati va ma'naviy kamoloti masalalarini teran tahlil qilgan.

Dostonning asosiy syujeti Husn (Go'zallik) va Dil (Qalb) o'rtasidagi munosabatlar orqali shakllanadi. Bu ikki tushuncha shunchaki allegorik obrazlar emas, balki tasavvufiy falsafaning asosiy kategoriyalari hisoblanadi. **Husn** ilohiy go'zallik, mutlaq jamolning timsoli bo'lib, u orqali Haqni anglashga intilish g'oyasi ilgari suriladi. **Dil** esa inson qalbini, uning ma'naviy olamini aks ettiradi. Tasavvufda qalb Allohning nazargohi hisoblanib, uni poklash, ilohiy ishq bilan to'ldirish komillikning asosiy shartidir.

Dostonda tez-tez uchraydigan terminlardan biri bu **ishq** tushunchasidir. Nishotiy tasvirida ishq faqatgina insoniy muhabbatni anglatmaydi, balki u ilohiy ishq, Haqqa bo'lgan cheksiz muhabbatdir. Bu ishq insonga Haqiqatni anglashda, nafs balolaridan xalos bo'lishda va ma'rifatga yetishishda asosiy vosita bo'lib xizmat qiladi. Ishq tariqat yo'lida yurgan solik uchun harakatlantiruvchi kuchdir.

Dostonda **ma'rifat** tushunchasi ham markaziy o'rin egallaydi. Ma'rifat tasavvufda bilish, anglash, Haqni tanish demakdir. Nishotiy asarida ma'rifatga erishishning turli bosqichlari, bu yo'ldagi qiyinchiliklar va ma'rifat hosilasi bo'lgan ruhiy poklanish jarayonlari tasvirlanadi. Shoirning fikricha, inson ma'rifat orqali o'zini va olamni chuqurroq anglaydi, hayotning ma'nosini tushunadi va komillikka intiladi.

Shuningdek, dostonda **nafs**, **ruh**, **aql**, **vahdatul vujud** kabi tasavvufiy terminlar ham faol qo'llanilgan. **Nafs** insonning jismoniy ehtiyojlari va dunyoviy istaklari timsoli bo'lib, u bilan kurashish, uni jilovlash tariqatning muhim shartlaridandir. **Ruh** ilohiy zarracha sifatida taqdim etiladi va uning poklanishi orqali inson Haqqa yaqinlashadi. **Aql** esa Haqni bilish yo'lidagi asosiy vositalardan biri bo'lib, u qalb bilan birga harakat qilgandagina to'g'ri yo'l ko'rsata oladi. **Vahdatul vujud** falsafasi dostonda bilvosita namoyon bo'ladi, ya'ni borliqning yagona manbadan ekanligi, hamma narsada Haqning tajallisi mavjudligi g'oyasi asar mazmunida seziladi.



Nishotiy "Husn va Dil" dostonida tasavvufiy va ma'rifiy terminlarni shunchaki qo'llash bilan cheklanmaydi, balki ularga chuqur ma'no yuklaydi va badiiy obrazlar orqali ularni yorqin ifodalaydi. Ushbu terminlar dostonning g'oyaviy-badiiy yaxlitligini ta'minlab, asarning teran falsafiy qatlamini ochib beradi. Natijada, doston o'quvchiga nafaqat estetik zavq bag'ishlaydi, balki uni ma'naviy kamolotga, o'z-o'zini anglashga va hayotning asl ma'nosini izlashga chorlaydi. Nishotiy bu asari orqali o'z davrining ilg'or falsafiy va ma'rifiy g'oyalarini adabiy shaklda umumlashtira olgan muhim ijodkorlardan biri sifatida namoyon bo'ladi.

Muhokama

Nishotiyning "Husn va Dil" dostonida tasavvufiy va ma'rifiy terminlarning qo'llanilishi asarning falsafiy teranligini oshirib, uni oddiy bir qissadan yuqori darajaga ko'taradi. Doston allegorik tarzda yozilgan bo'lib, har bir obraz va voqea ortida chuqur ma'no yotadi. Jumladan, **Husn**ni ilohiy jamolning timsoli, **Dil**ni esa ilohiy ishqni qabul qiluvchi va ma'rifatga intiluvchi inson qalbining ramzi sifatida talqin qilish asarning tasavvufiy negizini ochib beradi.

Dostondagi **ishq** tushunchasi ham muhim ahamiyat kasb etadi. Bu shunchaki insoniy ehtiros emas, balki Haqiqatga eltuvchi, ruhni poklovchi va insonni komillikka yetaklovchi ilohiy kuchdir. Shoir bu orqali ishqning tasavvufdagi markaziy o'rnini, uning solikning ma'naviy yo'lidagi asosiy harakatlantiruvchi kuchi ekanligini ta'kidlaydi.

Ma'rifat tushunchasining dostondagi o'rni ham alohida e'tiborga loyiq. Nishotiy ma'rifatni insonning o'zini va olamni anglashidagi eng yuqori daraja sifatida ko'rsatadi. Bu esa dunyoviy ilmlardan tashqari, botiniy bilimlarga erishish orqali sodir bo'ladi. Doston ushbu bilimlarning inson hayotidagi ahamiyatini ko'rsatib beradi.

Shuningdek, dostonda **nafs**, **ruh**, **aql** kabi tasavvufiy-axloqiy kategoriyalarning o'zaro munosabati ham mahorat bilan yoritilgan. Nafsnings yomonlikka moyilligi, ruhning ilohiyligi va aqlning to'g'ri yo'l ko'rsatuvchi roli orqali insonning ichki kurashlari va uning ma'naviy rivojlanish jarayoni aks etadi. Bu esa asarning tarbiyaviy va axloqiy jihatdan qimmatini oshiradi.

Dostonning til boyligi va badiiy vositalarning xilma-xilligi ham muhokama qilinishi lozim bo'lgan jihatlardandir. Nishotiy qofiya, radif, tashbeh, istiora kabi badiiy san'atlardan ustalik bilan foydalanib, tasavvufiy va ma'rifiy g'oyalarni badiiy obrazlar orqali yanada ta'sirchan qilib bergan. Bu uning shoirlik mahoratini yaqqol

namoyon etadi. Nishotiyning "Husn va Dil" dostonidagi tasavvufiy va ma'rifiy terminlarni o'rganish bugungi kunda bir qator sabablarga ko'ra g'oyatda dolzarb va ahamiyatlidir:

1. Ma'naviy-axloqiy qadriyatlarni tiklash va targ'ib qilish: Hozirgi globallashtirish davrida milliy o'zlikni anglash, ma'naviy-axloqiy qadriyatlarni asrab-avaylash muhim ahamiyat kasb etmoqda. Nishotiyning dostoni ana shunday boy ma'naviy merosimizning ajralmas qismidir. Undagi komil inson g'oyasi, ishq, ma'rifat, nafsni jilovlash kabi tushunchalar yosh avlodni to'g'ri tarbiyalashda, ularda yuksak insoniy fazilatlarni shakllantirishda beqiyos ahamiyatga ega. Asarni o'rganish orqali ajdodlarimizning falsafiy tafakkuri, hayotga va borliqqa bo'lgan chuqur qarashlari bilan tanishish mumkin.

2. Adabiy-nazariy tadqiqotlarni chuqurlashtirish: "Husn va Dil" dostoni o'zbek adabiyoti tarixida muhim o'rin tutadi. Undagi tasavvufiy va ma'rifiy terminlarni ilmiy asosda tahlil qilish mumtoz adabiyotimizning falsafiy ildizlarini chuqurroq o'rganishga, asarning g'oyaviy-badiiy xususiyatlarini to'liqroq ochib berishga xizmat qiladi. Bu esa adabiyotshunoslikning nazariy bazasini boyitadi va yangi tadqiqot yo'nalishlarini ochib beradi.

3. Shaxsiy kamolot va o'z-o'zini anglashga undash: Doston insonning ichki dunyosiga, uning ruhiy izlanishlariga e'tibor qaratadi. Undagi dil, ruh, aql va nafs orasidagi munosabatlarning tasviri o'quvchini o'z-o'zini tahlil qilishga, ichki ziddiyatlarini bartaraf etishga va ma'naviy yuksalishga intilishga undaydi. Bu, ayniqsa, bugungi kunda, shaxslarning ichki dunyosi ko'pincha tashqi omillar ta'sirida qolib ketayotgan bir sharoitda juda muhimdir.

4. Madaniyatlararo muloqotni rivojlantirish: Tasavvuf falsafasi Sharq va G'arb madaniyatlari o'rtasidagi ko'prik vazifasini o'taydi. Nishotiyning "Husn va Dil" dostonini o'rganish orqali o'zbek tasavvuf adabiyotining jahon adabiyoti xazinasidagi o'rnini belgilash, boshqa madaniyatlar bilan o'zaro bog'liqliklarni topish va madaniyatlararo muloqotni rivojlantirish mumkin.

5. Terminologik baza va ma'lumotlar bazasini boyitish: Dostondagi tasavvufiy va ma'rifiy terminlarning chuqur tahlili o'zbek tili va adabiyotining lug'at boyligini aniqlashga, eski o'zbek tili lug'atlariga yangi ma'lumotlar kiritishga yordam beradi. Bu, o'z navbatida, tilshunoslik va adabiyotshunoslik sohalaridagi keyingi tadqiqotlar uchun mustahkam poydevor yaratadi.

Umumiy qilib aytganda, Nishotiyning "Husn va Dil" dostonidagi tasavvufiy va ma'rifiy terminlarni o'rganish nafaqat adabiy-ilmiy ahamiyatga ega, balki u ma'naviy-axloqiy tarbiya, shaxsiy kamolot va milliy o'zlikni anglash jarayonlarida ham muhim rol o'ynaydi. Bu mavzu bo'yicha tadqiqotlarni davom ettirish va ularning natijalarini keng jamoatchilikka yetkazish bugungi kunning dolzarb vazifalaridandir.

Xulosa va takliflar

Xulosa: Nishotiyning "Husn va Dil" dostoni o'zbek adabiyotidagi tasavvufiy-ma'rifiy dostonchilikning yorqin namunasi hisoblanadi. Unda qo'llanilgan tasavvufiy va ma'rifiy terminlar asarning falsafiy chuqurligini ta'minlab, insonning ma'naviy kamoloti, ilohiy ishqqa intilishi va Haqiqatni anglash yo'lidagi izlanishlarini teran aks ettirgan. Doston bugungi kunda ham o'zining dolzarbligini yo'qotmagan bo'lib, ma'naviy-axloqiy tarbiyada muhim manba bo'lib xizmat qilishi mumkin.

Takliflar:

1. **"Husn va Dil" dostonining maktab va oliy ta'lim dasturlariga chuqurroq kiritilishi:** Asarning falsafiy va ma'rifiy qimmatini hisobga olgan holda, uni o'quv-tarbiya jarayoniga yanada faolroq joriy etish lozim. Bu yosh avlodni milliy qadriyatlar, tasavvufiy falsafa va komil inson g'oyalari bilan tanishtirishga yordam beradi.

2. **Dostondagi terminlarning chuqur lug'at-izohli tahlilini yaratish:** Asardagi tasavvufiy va ma'rifiy terminlarning ilmiy asoslangan, batafsil izohli lug'atini yaratish tadqiqotchilar va keng o'quvchilar ommasi uchun katta ahamiyatga ega bo'ladi. Bu ularning ma'nosini to'liq anglashga yordam beradi.

3. **Dostonning bugungi kun kontekstida yangi talqinlarini yaratish:** Zamonaviy ilmiy-falsafiy yondashuvlar asosida "Husn va Dil" dostonini yangicha talqin qilish, undagi g'oyalarning hozirgi jamiyat muammolariga qanday yechimlar bera olishini o'rganish dolzarbdir.

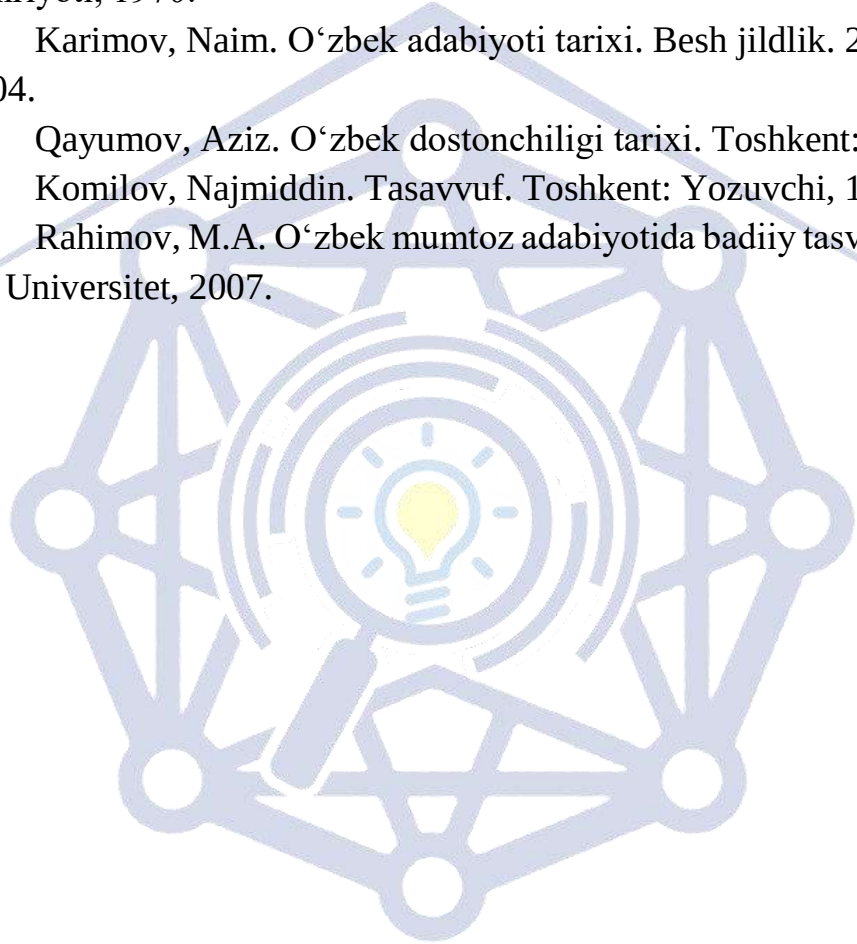
4. **Doston asosida ilmiy-ommabop nashrlar va videodarslar yaratish:** Keng jamoatchilikka dostonidagi g'oyalarni yetkazish maqsadida sodda va tushunarli tilda ilmiy-ommabop kitoblar, maqalalar, shuningdek, interaktiv videodarslar yaratish mumkin. Bu asarning ommalashuviga xizmat qiladi.

5. **Nishotiy ijodiy merosini xalqaro miqyosda targ'ib qilish:** "Husn va Dil" dostonini turli tillarga tarjima qilish va xalqaro konferensiyalar,

simpoziumlarda muhokama qilish orqali Nishotiy ijodini jahon miqyosida tanitish lozim.

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Naive Bayes klassifikatori: ehtimollar nazariyasi asosida C# tilida modellashtirish

Ismonjanova Sumbula Sherzod qizi

Namangan Davlat Universiteti,

Fizika-matematika fakulteti,

Amaliy matematika yo‘nalishi,

2- bosqich talabasi

Email: sumbula.sherzatovna@gmail.com

ANNOTATSIYA: Ushbu maqolada ehtimollar nazariyasining amaliy yo‘nalishlaridan biri — Naive Bayes klassifikatori tahlil qilinadi. Klassifikatsiya masalalarida keng qo‘llaniluvchi ushbu usul Bayes teoremasi asosida ishlaydi va hodisalarning o‘zaro bog‘liqligini soddalashtirgan holda, ularni statistik asosda toifalash imkonini beradi. Maqola davomida Naive Bayes algoritmining nazariy asoslari bayon etildi, shuningdek, matnli ma’lumotlarni (masalan, e-mail xabarlarini) “spam” yoki “haqiqiy” deb ajratuvchi model C# dasturlash tilida ishlab chiqildi. Dasturiy modellashtirish orqali ushbu algoritmnining ishlash prinsipi yoritildi va natijalari tahlil qilindi. Ilmiy yondashuv orqali ushbu usulning algoritmik strukturasi va amaliy samaradorligi ko‘rsatildi.

Kalit so‘zlar: Naive Bayes klassifikatori, ehtimollar nazariyasi, Bayes teoremasi, C# dasturlash tili, klassifikatsiya, ma’lumotlar tahlili, toifalash, spam filtrlash, statistik modellashtirish, sun’iy intellekt.

Наивный байесовский классификатор: моделирование на языке программирования C# на основе теории вероятностей

Исмонжанова Сумбула Шерзод кизи

Наманганский государственный
университет, Физико-математический

факультет, 2-й курс, направление

“Прикладная математика”

Email: sumbula.sherzatovna@gmail.com

АННОТАЦИЯ: В данной статье рассматривается один из прикладных методов теории вероятностей — наивный байесовский классификатор. Этот

широко используемый алгоритм классификации основан на формуле Байеса и позволяет определять принадлежность объектов к категориям, предполагая независимость признаков между собой. В рамках работы были рассмотрены теоретические основы наивного байесовского подхода, а также разработана программная модель на языке C#, классифицирующая текстовые данные (например, электронные письма) как «спам» или «нормальные». Программное моделирование позволило наглядно продемонстрировать принцип работы алгоритма и проанализировать его эффективность. Исследование подчеркивает важность алгоритмического мышления и применение вероятностных методов в современных задачах анализа данных.

Ключевые слова: наивный байесовский классификатор, теория вероятностей, формула Байеса, язык программирования C#, классификация, анализ данных, фильтрация спама, статистическое моделирование, искусственный интеллект, вероятностные алгоритмы.

Naive Bayes Classifier: Modeling with C# Programming Language Based on Probability Theory

Ismonjanova Sumbula Sherzod qizi
Namangan State University,
Faculty of Physics and Mathematics,
2nd-year student, Applied
Mathematics department

Email: sumbula.sherzatovna@gmail.com

ABSTRACT: This article explores one of the practical applications of probability theory — the Naive Bayes classifier. This widely used classification algorithm is based on Bayes' theorem and assumes independence among features, which allows for efficient categorization of data. The paper outlines the theoretical foundation of the Naive Bayes approach and presents a program model implemented in the C# programming language to classify text data (e.g., emails) as either “spam” or “legitimate.” The modeling process illustrates the algorithm's logic and enables evaluation of its classification accuracy. The research highlights the importance of

algorithmic thinking and the application of probabilistic methods in modern data analysis tasks.

Keywords: Naive Bayes classifier, probability theory, Bayes' theorem, C# programming language, classification, data analysis, spam filtering, statistical modeling, artificial intelligence, probabilistic algorithms.

Zamonaviy davrda axborot oqimining keskin ortib borishi sababli, katta hajmdagi ma'lumotlarni avtomatik tarzda tahlil qilish va ular asosida tez va aniq qarorlar qabul qilish zarurati kundan-kunga oshib bormoqda. Ayniqsa, matnli ma'lumotlarni toifalash — masalan, elektron pochta xabarlarini “spam” yoki “normal” deb ajratish — informatsion xavfsizlik, marketing va sun'iy intellekt sohalarida muhim o'rin tutadi.

Ehtimollar nazariyasining amaliy natijalaridan biri bo'lgan Naive Bayes klassifikatori — shunday masalalarni yechishda eng samarali va soddalaritmlardan biri hisoblanadi. Ushbu usul Bayes teoremasi asosida tuziladi va har bir xususiyatning tasnif natijasiga ta'sirini mustaqil deb hisoblashga asoslangan. Garchi bu “soddalashtirilgan” taxmin bo'lsa-da, u ko'plab real vaziyatlarda yuqori aniqlikdagi natijalarni beradi.

Naive Bayes klassifikatori — bu Bayes teoremasiga asoslangan va xususiyatlarning (features) o'zaro mustaqilligiga tayanuvchi ehtimollik asosidagi klassifikatsiya algoritmidir. U “Naive” deb ataladi, chunki barcha kiruvchi belgilarning (atributlarning) mustaqil ekanligi taxmin qilinadi, bu esa real hayotda kamdan-kam hollarda to'liq haqiqat bo'ladi. Shunga qaramasdan, bu algoritim ko'plab klassifikatsion muammolarda juda samarali ishlaydi.

Bayes teoremasi quyidagicha yoziladi:

$$P(A|B) = \frac{P(B|A) \cdot P(A)}{P(B)}$$

Bu yerda:

$P(A|B)$ — B hodisasi sodir bo'lgandan keyin A hodisasining ehtimoli

$P(B|A)$ — A hodisasi sodir bo'lganda B hodisasining ehtimoli

$P(A)$ — A hodisasining boshlang‘ich ehtimoli

$P(B)$ — B hodisasining umumiy ehtimoli

Agar bizda quyidagicha tasniflanadigan xususiyatlar bo‘lsa:

$$x = (x_1, x_2, \dots, x_n)$$

va biz bu x to‘plam qaysi sinfga tegishli — C_k — ekanini aniqlamoqchi bo‘lsak, Naive Bayes formulasi:

$$P(C_k | x_1, x_2, \dots, x_n) = \frac{P(C_k) \cdot \prod_{i=1}^n P(x_i | C_k)}{P(x)}$$

Ammo $P(x)$ barcha sinflar uchun bir xil bo‘lgani uchun, biz faqat yuqori qiymatni topamiz:

$$\text{Classify}(x) = \arg \max [P(C_k) \cdot \prod_{i=1}^n P(x_i | C_k)]$$

Bu yerda:

- $P(C_k)$ — har bir sinfnining prior ehtimoli
- $P(x_i | C_k)$ — har bir atributning sinfga bog‘liq ehtimoli

Naive Bayes klassifikatori ko‘pincha matnni toifalash (text classification) kabi masalalarda qo‘llaniladi. Quyida biz C# dasturlash tilida matnli ma’lumotlar asosida xabarni “Spam” yoki “Normal” turiga ajratuvchi soddalashtirilgan model yaratamiz. Biz quyidagi bosqichlarni bajarishimiz kerak:

1. O‘quv ma’lumotlari — “spam” va “normal” xabarlardan iborat matnlar to‘plami
2. Har bir sinf (spam/normal) uchun so‘zlar soni va ehtimollarini hisoblash
3. Kiruvchi yangi xabar uchun har bir sinfga Naive Bayes formulasi asosida ehtimol hisoblash

4. Ehtimollari eng katta sinfni natija sifatida chiqarish
using System;

using System.Collections.Generic;

using System.Linq;

class NaiveBayesClassifier

{

private Dictionary<string, int> spamWords = new Dictionary<string, int>();

private Dictionary<string, int> normalWords = new Dictionary<string,

int>();

private int spamCount = 0, normalCount = 0;



```
private int totalSpamWords = 0, totalNormalWords = 0;
```

```
public void Train(string text, string label)
```

```
{
```

```
    var words = text.ToLower().Split(' ');
```

```
    if (label == "spam")
```

```
    {
```

```
        spamCount++;
```

```
        foreach (var word in words)
```

```
        {
```

```
            if (!spamWords.ContainsKey(word))
```

```
                spamWords[word] = 0;
```

```
            spamWords[word]++;
```

```
            totalSpamWords++;
```

```
        }
```

```
    }
```

```
    else
```

```
    {
```

```
        normalCount++;
```

```
        foreach (var word in words)
```

```
        {
```

```
            if (!normalWords.ContainsKey(word))
```

```
                normalWords[word] = 0;
```

```
            normalWords[word]++;
```

```
            totalNormalWords++;
```

```
        }
```

```
    }
```

```
}
```

```
public string Predict(string text)
```

```
{
```

```
    var words = text.ToLower().Split(' ');
```

```
    double pSpam = Math.Log(((double)spamCount / (spamCount +  
normalCount));
```




```

double pNormal = Math.Log((double)normalCount / (spamCount +
normalCount));

foreach (var word in words)
{
    // Laplace smoothing
    double spamWordProb = Math.Log((spamWords.ContainsKey(word) ?
spamWords[word] + 1 : 1) / (double)(totalSpamWords + spamWords.Count));
    double normalWordProb =
Math.Log((normalWords.ContainsKey(word) ? normalWords[word] + 1 : 1) /
(double)(totalNormalWords + normalWords.Count));

    pSpam += spamWordProb;
    pNormal += normalWordProb;
}

return pSpam > pNormal ? "Spam" : "Normal";
}
}

```

Misoldan foydalanish:

```

class Program
{
    static void Main()
    {
        var classifier = new NaiveBayesClassifier();

        // Trening ma'lumotlari
        classifier.Train("pulingiz yutib oldingiz", "spam");
        classifier.Train("sizni bank kutmoqda", "spam");
        classifier.Train("dars jadvali o'zgardi", "normal");
        classifier.Train("bugun yig'ilish soat 9 da", "normal");

        // Sinov

```



```
string testText = "siz pulingizni yutib oldingiz";  
string result = classifier.Predict(testText);  
Console.WriteLine($"Xabar: \"{testText}\" → Natija: {result}");  
}  
}
```

Ushbu model real spam filtrlash tizimlarining asosiy g‘oyasini tushuntiradi va Naive Bayes formulasi orqali qaror qabul qilishni dasturiy tarzda ifodalaydi.

Yuqoridagi dasturiy modellashtirish orqali Naive Bayes klassifikatori qanday ishlashi aniq ko‘rsatildi. Dastlabki o‘quv ma’lumotlari asosida har bir so‘zning har bir sinfga tegishli ehtimoli hisoblab chiqildi. Kiritilgan test xabari asosida algoritm ushbu ehtimollarni jamlab, qaysi sinfga ko‘proq mos tushishini aniqladi.

Muhim jihatlar:

Soddalashtirish: Naive Bayes barcha atributlarni mustaqil deb hisoblaydi. Bu real hayotda unchalik to‘g‘ri bo‘lmasa-da, natijalar ko‘pincha juda aniqlik bilan chiqadi.

Laplace smoothing: Ba’zi so‘zlar mashq to‘plamda uchramagan bo‘lishi mumkin. Bu holatda nolga teng ehtimollarni oldini olish uchun Laplace usuli ishlatildi.

Model tezligi: Naive Bayes algoritmi oson va tez ishlaydi. Katta hajmdagi matnlar bilan ham samarali natijalar beradi.

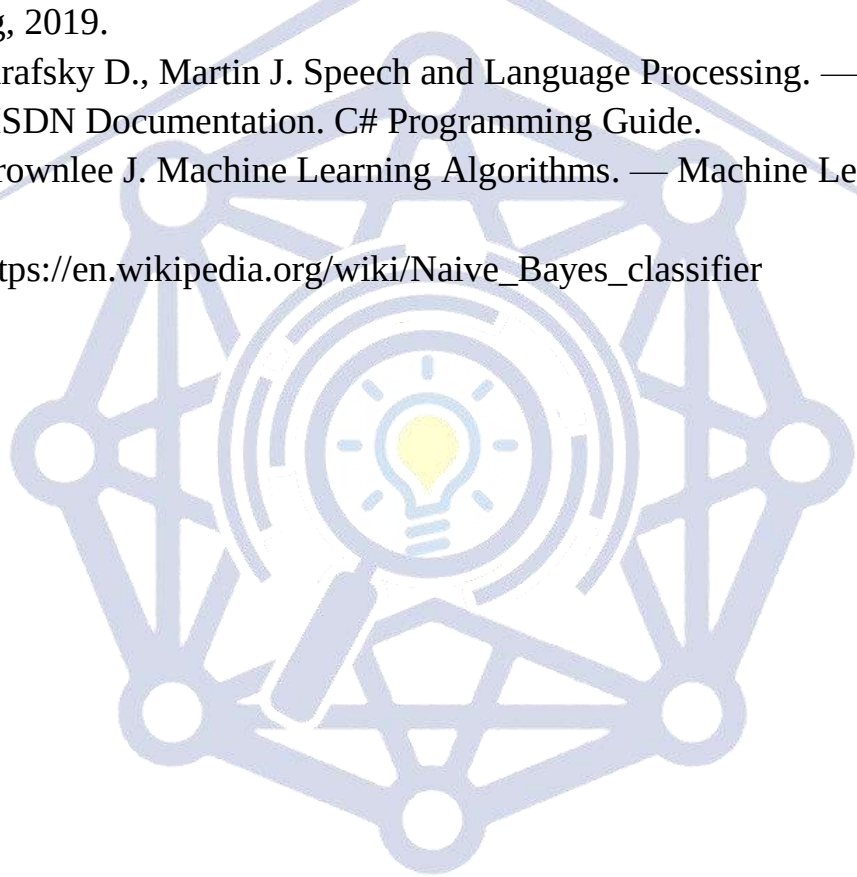
Ushbu maqolada ehtimollar nazariyasining amaliy ko‘rinishi bo‘lgan Naive Bayes klassifikatori nazariy va amaliy jihatdan tahlil qilindi. Bayes teoremasi asosida ishlovchi ushbu usul C# dasturlash tilida modellashtirildi va matnli xabarlarni “spam” yoki “normal” sinflarga ajratish uchun soddalashtirilgan dastur yaratildi.

Tadqiqot natijalari shuni ko‘rsatdiki, Naive Bayes klassifikatori:
samarali,
tez ishlovchi,
va haqiqiy ilovalarda qo‘llash uchun qulay vositadir.

Mazkur yondashuv ehtimollar nazariyasini chuqurroq o‘zlashtirish, dasturiy modellashtirish ko‘nikmalarini rivojlantirish va real hayotdagi axborot oqimlarini avtomatlashtirish imkonini beradi.

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H-2274 pomidor navi urug'ining unuvchanligi

Ismayilova I. dotsent, Kenjayeva D., magistrant,
Urganch davlat universiteti

Annotatsiya : Ushbu tadqiqotda H-2274 pomidor navining urug' unuvchanligi o'rganildi. Turli ekish muddatlarida unuvchanlik darajasi taqqoslandi. Erta ekilgan urug'lar yuqori natijani ko'rsatdi.

Kalit so'zlar: Pomidor, H-2274 navi, unuvchanlik, urug' sifati, saqlash sharoiti, ekish muddati.

Abstract : This study examined the germination ability of the H-2274 tomato variety. Seed germination was compared at different sowing times. Seeds sown earlier showed better results.

Keywords: Tomato, H-2274 variety, germination, seed quality, storage conditions, sowing time.

Аннотация : В данном исследовании изучена всхожесть семян томата сорта H-2274. Сравнены показатели всхожести при различных сроках посева. Более ранний посев показал лучшие результаты.

Ключевые слова: Томат, сорт H-2274, всхожесть, качество семян, условия хранения, срок посева.

Pomidor respublikamizda asosiy sabzavot ekini bo'lib, unga bo'lgan talab shu kungacha yetarlicha qondirilmadan kelmoqda. Buning asosiy sababi har bir muayyan hudud tuproq va iqlim sharoitlarini hisobga olgan holda ekin navduragaylari baholanib, ulardan yuqori hosilli moslashganlari ajratib olinmaganligi, yuqori sifatli unuvchan urug'lari yetishmasligi hisoblanadi.

Urug'larning unuvchanligi - urug'larning qulay sharoitda unib chiqish qobiliyati, ya'ni unuvchan nihollar berishidir. Bu ko'rsatkich urug'lik material sifatining muhim mezon bo'lib, bo'lajak o'simliklarning hosildorligiga bevosita ta'sir ko'rsatadi. Pomidorning unuvchanligi ko'p omillarga, jumladan, urug'larni saqlash sharoitiga, ularning saqlanish muddatiga, shuningdek, unib chiqish sharoitiga bog'liq.

Pomidor urug'ining unuvchanligi to'g'ri saqlanganda o'rtacha 80-95% ni tashkil etadi. Pomidor urug'lari unish qobiliyatini 5-8-yilgacha saqlaydi, ammo eng



yaxshi natijalar 2-3-yildan oshmagan urug'larda kuzatiladi. Vaqt o'tishi bilan unuvchanlik asta-sekin pasayadi.

Pomidor urug'larining muvaffaqiyatli unib chiqishi uchun maqbul sharoitlar zarur: havo harorati 22 dan 28 °C gacha, yetarli namlik va kislorod mavjudligi. Urug'larni ekishdan oldin tayyorlash ham muhimdir - masalan, ularni iliq suvda ivitish yoki unib chiqishini tezlashtirish va kasalliklarning oldini olish uchun margansovkaning kuchsiz eritmasida zararsizlantirish.

Urug'larning unuvchanligini tekshirish uchun oddiy usuldan foydalanish mumkin: urug'larni nam salftkaga solib, issiq joyga qo'yiladi va 5-7 kun davomida kuzatiladi. 10 ta urug'dan 8 tasi unib chiqqan bo'lsa, unuvchanlik 80% ni tashkil etadi, bu yaxshi natija hisoblanadi. Sabzavot ekinlari uchun belgilangan me'yorlar bo'yicha birinchi kategoriyali pomidor urug'larining unuvchanligi 80% dan kam bo'lmasligi kerak.

Pomidor urug'lari 5-8 yil davomida unuvchanligini saqlab qoladi, ammo eng yuqori unuvchanlik optimal sharoitlarga rioya qilinganda - 10-15 °C harorat va past havo namligi (50-60% dan yuqori bo'lmagan) bo'lganda saqlashning dastlabki 2-3 yilida kuzatiladi. Namlik va haroratning ortishi urug'larning eskirish jarayonlarini tezlashtiradi va shunga mos ravishda ularning unuvchanligini pasaytiradi.

Unuvchanlik laboratoriya va ishlab chiqarish sharoitida aniqlanadi. Laboratoriyada ko'pincha filtr qog'ozida yoki nam muhitda 25 ± 2 °C haroratda undirish usuli qo'llaniladi. 5-7 kundan so'ng unib chiqqan urug'larni hisoblash amalga oshiriladi.

Tadqiqotda H-2274 pomidor navi urug'lari 2 xil ekish muddatida – 1-mart, 12-mart ekildi. Urug'lar teng sharoitlarda (20–25 °C, bir xil tuproq aralashmasi, sug'orish va yorug'lik) parvarish qilindi. 14-martga kelib, ikkala navda ham unib chiqish boshlandi, ammo har xil intensivlikda.

H-2274 navida:

- 1-martda ekilgan urug'lar 14-martgacha 25% unib chiqdi, bu 12-martda ekilganlarga qaraganda 2.5 baravar ko'p.
- Unib chiqishning umumiy tezligi yuqoriroq bo'lib, 20-martga kelib 96% ga yetdi.
- Bu nav sovuqqa chidamli, erta ekishda yaxshi natija beradi. Tuproq harorati nisbatan past bo'lsa ham, unib chiqish faolligi yuqori bo'ladi.



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SWOT va PEST tahlillari asosida loyiha xavflarini baholash

Husanova Dilnura Mamarajab qizi

O'zbekiston Respublikasi Bank-moliya akademiyasi

kunduzgi Loyiha boshqaruvi yo'nalishi talabasi

Anotatsiya

Ushbu maqolada loyiha boshqaruvida risklarni baholashning ahamiyati, SWOT va PEST tahlil usullarining nazariy asoslari va amaliy qo'llanilishi o'rganilgan. SWOT va PEST tahlillarini integratsiyalashgan holda qo'llash orqali ichki va tashqi xavflarni kompleks baholash hamda samarali risk boshqaruv strategiyalarini ishlab chiqish imkoniyatlari tahlil qilingan. Qurilish va sanoat loyihalarida ushbu usullar asosida misollar keltirilgan. Tadqiqot natijalari loyiha boshqaruvida risklarni boshqarishni takomillashtirishga qaratilgan tavsiyalarni o'z ichiga oladi.

Kalit so'zlar: loyiha boshqaruvi, risklarni baholash, SWOT tahlili, PEST tahlili, integratsiyalashgan tahlil, strategik boshqaruv, xavflarni boshqarish.

Аннотация

В данной статье рассматривается важность оценки рисков в управлении проектами, теоретические основы и практическое применение методов SWOT и PEST анализа. Анализируется возможность комплексной оценки внутренних и внешних рисков через интегрированное применение SWOT и PEST, а также разработка эффективных стратегий управления рисками. Приведены примеры применения данных методов в строительных и промышленных проектах. Результаты исследования включают рекомендации по совершенствованию управления рисками в проектном менеджменте.

Ключевые слова: управление проектами, оценка рисков, SWOT-анализ, PEST-анализ, интегрированный анализ, стратегическое управление, управление рисками.

Abstract

This article examines the importance of risk assessment in project management, focusing on the theoretical foundations and practical applications of SWOT and PEST analysis methods. It analyzes the possibilities of comprehensive evaluation of internal and external risks through the integrated use of SWOT and PEST, as well as the development of effective risk management strategies. Examples of these

methods applied to construction and industrial projects are provided. The research results include recommendations for improving risk management in project management.

Keywords: project management, risk assessment, SWOT analysis, PEST analysis, integrated analysis, strategic management, risk management.

Kirish

Zamonaviy menejment amaliyotida loyiha boshqaruvi har qanday tashkilotning muvaffaqiyatli faoliyat yuritishi va raqobatbardoshligini ta'minlashda muhim rol o'ynaydi. Loyiha samaradorligiga ta'sir etuvchi asosiy omillardan biri bu — risklarni oldindan aniqlash, tahlil qilish va ularni boshqarishdir. Har qanday loyiha doirasida risklar mavjud bo'lib, ularning vujudga kelishi loyiha jarayonining uzilishiga, vaqt va moliyaviy yo'qotishlarga, hatto butun loyihaning muvaffaqiyatsiz yakunlanishiga olib kelishi mumkin. Risklarni aniqlash va baholashda zamonaviy tahlil usullaridan, xususan **SWOT** (kuchli va zaif tomonlar, imkoniyatlar va tahdidlar) hamda **PEST** (siyosiy, iqtisodiy, ijtimoiy va texnologik omillar) tahlil usullari keng qo'llanilmoqda. Ushbu usullar loyiha ichki va tashqi muhitini har tomonlama tahlil qilishga, risklarni oldindan ko'rishga va ularni minimallashtirish bo'yicha strategik qarorlar qabul qilishga yordam beradi.

Maqolaning maqsadi — loyiha boshqaruvida risklarni baholashning ahamiyatini ochib berish hamda SWOT va PEST tahlil usullarining nazariy va amaliy jihatlarini umumiy tarzda ko'rib chiqishdan iborat. Mavzuning dolzarbligi shundaki, bugungi kunda turli sohalarda amalga oshirilayotgan loyihalarning muvaffaqiyati ko'p jihatdan risklarni to'g'ri baholash va ularni boshqarish mexanizmlariga bog'liqdir. Shunday ekan, ushbu maqola hozirgi muhim jarayonda SWOT va PEST tahlil usullarining tutgan o'rnini va imkoniyatlarini yoritishga qaratilgan.

SWOT tahlili: nazariy asoslar va amaliy qo'llanilishi

SWOT tahlilining tarkibiy qismlari (S, W, O, T)

SWOT tahlili — bu tashkilot yoki loyiha holatini strategik baholash usuli bo'lib, uning nomi to'rt asosiy komponentdan tashkil topgan:

- **S (Strengths – Kuchli tomonlar)** – Loyiha yoki tashkilotning ichki afzalliklari, raqobatbardosh jihatlari, mavjud resurslar yoki tajriba.

- **W (Weaknesses – Zaif tomonlar)** – Tashkilot ichidagi cheklovlar, resurs yetishmovchiligi, tajriba yo'qligi yoki boshqaruvdagi kamchiliklar.

• **O (Opportunities – Imkoniyatlar)** – Tashqi muhitda mavjud bo‘lgan rivojlanish imkoniyatlari, yangi bozorlar, texnologik yutuqlar yoki siyosiy-ijtimoiy o‘zgarishlar.

• **T (Threats – Tahdidlar)** – Loyiha tashqarisida mavjud bo‘lgan xavf-xatarlar, raqobatchilar, iqtisodiy beqarorlik, qonunchilikdagi o‘zgarishlar.

Ushbu to‘rtta element tahlil qilinib, loyiha strategiyasini shakllantirishda muhim asos bo‘lib xizmat qiladi.

SWOT orqali ichki va tashqi xavflarni aniqlash usullari

SWOT tahlilining afzalliklaridan biri — ichki (S va W) hamda tashqi (O va T) omillarni **aniq ajratib ko‘rsatish**idir. Risklarni baholash jarayonida:

• **Ichki xavflar (W)** – Masalan, tajribasiz loyiha rahbariyati, muddatlarga rioya qilmaslik ehtimoli, moliyaviy resurslarning yetishmasligi.

• **Tashqi xavflar (T)** – Masalan, iqtisodiy inqiroz, raqobatchilar tomonidan bosim, hukumat regulyatsiyalaridagi o‘zgarishlar.

Ushbu omillarni aniqlash uchun intervyular, ekspert baholari, statistik ma’lumotlar tahlili va ilgari amalga oshirilgan loyihalar tajribasidan foydalaniladi. SWOT tahlili — loyiha risklarini tizimli baholashda foydalaniladigan muhim vositadir.

SWOT tahlili asosida tavakkalchilikni kamaytirish strategiyalari

SWOT tahlili natijalari asosida quyidagi strategik yondashuvlar ishlab chiqiladi:

• **Kuchli tomonlardan foydalanish ($S \rightarrow O$):** Imkoniyatlardan samarali foydalanish uchun mavjud kuchli jihatlarni ishga solish (masalan, malakali kadrlar yordamida yangi texnologiyalarni joriy qilish).

• **Zaif tomonlarni bartaraf etish ($W \rightarrow O$):** Imkoniyatlardan foydalanishga to‘sqinlik qilayotgan zaif jihatlarni kuchaytirish (masalan, qo‘shimcha moliyalashtirish manbalarini izlash).

• **Tahdidlarga qarshi kurash ($S \rightarrow T$):** Tashqi xavflarga kuchli jihatlar bilan javob berish (masalan, narx o‘zgarishiga qarshi uzoq muddatli shartnomalar tuzish).

• **Zaiflik va tahdidni birga boshqarish ($W \rightarrow T$):** Loyiha muvaffaqiyatsizligiga olib keluvchi xavfli kombinatsiyalardan qochish, ya’ni ichki zaiflik va tashqi xavflarni birgalikda minimallashtirish.

Bunday strategiyalar loyiha davomida yuzaga keladigan xavf-xatarlarni kamaytiradi va boshqaruv qarorlarini asoslashda katta yordam beradi.

PEST tahlili: tashqi omillar va xavflarni baholash

PEST tahlilining asosiy komponentlari (P, E, S, T)

PEST tahlili — bu tashqi muhit omillarini tizimli tarzda o‘rganishga qaratilgan strategik tahlil usuli bo‘lib, uning nomi quyidagi to‘rtta asosiy komponentdan tashkil topgan:

- **P (Political – Siyosiy omillar):** Hukumat siyosati, qonunchilik, soliqlar, siyosiy barqarorlik va tartibga solish choralarini o‘z ichiga oladi.

- **E (Economic – Iqtisodiy omillar):** Inflyatsiya darajasi, foiz stavkalari, valyuta kursi, iqtisodiy o‘sish sur‘atlari kabi ko‘rsatkichlar.

- **S (Social – Ijtimoiy omillar):** Aholi demografiyasi, madaniyat, ta‘lim darajasi, iste‘molchilar xatti-harakati, jamiyatdagi qadriyatlar.

- **T (Technological – Texnologik omillar):** Innovatsiyalar, yangi texnologiyalar, raqamli transformatsiya, ilm-fan yutuqlari.

PEST tahlili orqali loyiha tashqi muhitda qanday omillar ta‘sirida bo‘lishi mumkinligini aniqlash va strategik qarorlarni asoslash mumkin bo‘ladi.

Siyosiy, iqtisodiy, ijtimoiy va texnologik omillarning ta‘siri

Har bir komponent alohida tarzda loyiha xavfsizligi va barqarorligiga bevosita ta‘sir ko‘rsatadi:

- **Siyosiy omillar:** Litsenziya olish jarayonlari, davlat siyosati va normativ hujjatlar loyihaning amalga oshirilishiga to‘g‘ridan-to‘g‘ri ta‘sir etadi. Siyosiy barqarorlik mavjud bo‘lmasa, loyihaning to‘xtab qolish xavfi oshadi.

- **Iqtisodiy omillar:** Foiz stavkalari oshsa, investitsiyalar kamayadi. Valyuta kursining o‘zgarishi import qilinadigan texnika va resurslar narxiga ta‘sir qiladi.

- **Ijtimoiy omillar:** Aholi ehtiyojlari va qadriyatlari o‘zgarayotgan bo‘lsa, loyiha natijalariga bo‘lgan talab ham o‘zgaradi. Mehnat bozori va ishchi kuchi sifati ham muhim omillardandir.

- **Texnologik omillar:** Yangi texnologiyalar joriy etilmasa, loyiha eskirgan usullarda qoladi va raqobatbardoshligini yo‘qotadi. Aksincha, innovatsiyalar qo‘llanilsa, samaradorlik oshadi.

Bu omillarni chuqur o‘rganmasdan loyiha barqarorligi va xavfsizligini ta‘minlash mushkul bo‘ladi.

Tashqi xavflarga mos strategik choralar ishlab chiqish

PEST tahlili natijasida aniqlangan xavf-xatarlar asosida quyidagi strategik yondashuvlar tavsiya etiladi:



• **Siyosiy xavflarga qarshi strategiyalar:** Tashqi siyosiy muhitga mos ravishda huquqiy maslahatchilar bilan ishlash, hujjatlarni doimiy yangilab borish, davlat bilan hamkorlik qilish.

• **Iqtisodiy xavflarni kamaytirish:** Valyuta risklarini boshqarish uchun oldindan valyuta konversiyasi, banklar bilan uzoq muddatli kelishuvlar tuzish.

• **Ijtimoiy xavflarni yumshatish:** Mahalliy ishchi kuchini o'qitish, jamoatchilik bilan kommunikatsiyani kuchaytirish.

• **Texnologik tahdidlarga qarshi choralar:** Yangi texnologiyalarni joriy etish bo'yicha sarmoya kiritish, IT infratuzilmani rivojlantirish.

Mazkur strategiyalar orqali tashqi omillarning salbiy ta'sirini minimallashtirish va loyihaning muvaffaqiyatli amalga oshirilishiga erishish mumkin bo'ladi.

SWOT va PEST tahlillarining integratsiyasi loyiha boshqaruvida risklarni baholashni yanada samaraliroq qilishga xizmat qiladi. SWOT tahlili ichki imkoniyat va zaif tomonlarni aniqlashga yordam beradigan bo'lsa, PEST tahlili esa tashqi siyosiy, iqtisodiy, ijtimoiy va texnologik omillarni chuqur o'rganishga qaratilgan. Ularni birgalikda qo'llash orqali loyiha uchun barcha xavf va imkoniyatlarni kompleks tarzda ko'rish mumkin bo'ladi. Bu esa strategik qarorlarni qabul qilishda aniq va asosli sabab yaratadi hamda resurslarni maqsadli taqsimlashga yordam beradi.

Shunday integratsiyalashgan yondashuvni yaratishda avvalo tashkilotning ichki kuchli va zaif tomonlari aniqlanadi. Keyinchalik tashqi muhitdagi siyosiy, iqtisodiy, ijtimoiy va texnologik omillar tahlil qilinadi. Ushbu tashqi omillar SWOT tahlilining tahdid va imkoniyatlar qismiga qo'shiladi, natijada loyiha yuzaga kelishi mumkin bo'lgan barcha xavflar va imkoniyatlar yagona tizimda ko'riladi. Bu asosda har bir xavf va imkoniyatning ta'siri va ehtimoli baholanib, ustuvorliklarga ko'ra tartibga solinadi. Masalan, bir qurilish loyihasida ichki jihatdan malakali ishchi kuchi kuchli tomon sifatida ko'rilsa, tashqi muhitda iqtisodiy beqarorlik yoki qonunchilikdagi o'zgarishlar tahdid sifatida baholanadi. Shu omillarni birlashtirib, loyihaning har bir bosqichida yuzaga kelishi mumkin bo'lgan xavflarni oldindan aniqlash va ularga qarshi strategiyalar ishlab chiqish mumkin bo'ladi.

Qaror qabul qilish jarayonida integratsiyalashgan tahlil natijalari asosida loyiha rahbarlari va mutaxassislar optimal chora-tadbirlarni tanlaydilar. Bu esa loyihaning muvaffaqiyatli amalga oshirilishiga, resurslarning samarali ishlatilishiga hamda kutilmagan xavflarning oldini olishga yordam beradi. Shu tariqa, SWOT va PEST



tahlillarining uyg'un qo'llanilishi loyiha boshqaruvida risklarni boshqarish sifatini sezilarli darajada oshiradi.

Ilmiy tadqiqotlar natijasida ushbu tahlil usullarining samaradorligi tasdiqlangan bo'lib, ular loyiha boshqaruvi sohasida keng qo'llanilmoqda. SWOT va PEST tahlillarining kombinatsiyasi loyihalarning ichki va tashqi muhitdagi murakkab omillarni hisobga olgan holda risklarni aniq va to'liq baholash imkonini beradi. Shu sababli, ushbu yondashuvni qo'llash loyiha boshqaruvchilari uchun muhim va zarur vositaga aylangan. Loyihalarda risklarni boshqarish bo'yicha asosiy tavsiyalar quyidagilarni o'z ichiga oladi: birinchi navbatda, loyiha boshlanishidan oldin ichki va tashqi muhitni chuqur tahlil qilish; aniqlangan xavflarga qarshi oldini olish va kamaytirish strategiyalarini ishlab chiqish; hamda tahlil natijalariga asoslangan qarorlarni doimiy ravishda yangilab borish. Shu bilan birga, jamoaviy ish va ekspert baholari orqali tahlilning sifatini oshirish muhimdir. Kelgusida tadqiqotlarda ushbu tahlil usullarining yanada takomillashgan modellari, sun'iy intellekt va katta ma'lumotlar tahlili bilan integratsiyasi, shuningdek, soha va loyiha turiga moslashtirilgan maxsus yondashuvlarni ishlab chiqish yo'nalishlariga e'tibor qaratish zarur. Bu loyiha boshqaruvida risklarni boshqarish tizimini yanada samarali qilishga xizmat qiladi va ilmiy hamda amaliy ahamiyatga ega bo'ladi.

Xulosa

Loyiha boshqaruvida risklarni baholashning ahamiyati, shuningdek, SWOT va PEST tahlil usullarining nazariy va amaliy jihatlarini ko'rib chiqildi. SWOT tahlili tashkilotning ichki kuchli va zaif tomonlarini aniqlash hamda tashqi imkoniyat va tahdidlarni baholashda muhim vosita ekanligi, PEST tahlili esa tashqi siyosiy, iqtisodiy, ijtimoiy va texnologik omillarni tizimli tarzda o'rganish orqali risklarni aniqlashda samarali ekanligi yaqqol ko'rsatildi. Ikki tahlil usulining integratsiyalashgan qo'llanilishi esa risklarni kompleks baholash va boshqarishda yuqori samaradorlikka erishish imkonini beradi. Ushbu yondashuv loyiha boshqaruvchilarga ichki va tashqi muhit omillarini birgalikda hisobga olib, optimal strategiyalar ishlab chiqish va qarorlarni asoslashda muhim yordam beradi.

Kelgusida ushbu tahlil metodlarini sun'iy intellekt va katta ma'lumotlar texnologiyalari bilan integratsiyalash, shuningdek, soha va loyiha turiga moslashtirilgan yangi modellarning yaratish yo'nalishlari ilmiy tadqiqotlar uchun istiqbolli bo'lishi mumkin.



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FARZAND YO‘QOTGAN OTA-ONALARNING PSIXOLOGIK TIKLANISH BOSQICHLARI VA ULARNI QO‘LLAB-QUVVATLASH MEXANIZMLARI

Ravshanova Gavharoy Xolmurodovna

Buxoro viloyati Osiyo Xalqaro Universiteti Iqtisodiyot-pedagogika fakulteti
Psixologiya yo‘nalishi 1-kurs magistranti

Annotatsiya: Mazkur maqolada farzandini yo‘qotgan ota-onalarning psixologik tiklanish jarayoni, ularning individual va oilaviy darajadagi reaksiya shakllari, ruhiy zarbani yengib o‘tish bosqichlari va bu bosqichlarda qo‘llab-quvvatlashning psixologik, ijtimoiy hamda diniy mexanizmlari yoritilgan. Shuningdek, O‘zbekiston sharoitida mavjud bo‘lgan an‘anaviy va zamonaviy psixologik yordam shakllari, ijtimoiy xizmatlarning ahamiyati tahlil qilinib, samarali reabilitatsiya yo‘llari bo‘yicha tavsiyalar berilgan.

Kalit so‘zlar: yo‘qotish, ruhiy travma, psixologik tiklanish, ota-ona, qo‘llab-quvvatlash, oila, moslashuv.

Farzand — har qanday ota-ona hayotining mazmuni, kelajakka bo‘lgan ishonch, quvonch va baxt manbai hisoblanadi. Ammo ba‘zan hayot shafqatsiz sinovlar bilan odamni yuzlashtiradi — farzandining o‘limi kabi og‘ir zarbalar ota-onani chuqur ruhiy iztirobga soladi. Ushbu yo‘qotish ularning butun ruhiy holati, jismoniy sog‘lig‘i, oilaviy munosabatlari, hattoki jamiyatdagi ijtimoiy rolga salbiy ta‘sir ko‘rsatadi.

Mazkur maqolada farzandini yo‘qotgan ota-onalarning psixologik tiklanish bosqichlari — inkor, g‘am, murosasizlik, depressiya va qabul qilish — hamda har bir bosqichda samarali bo‘ladigan qo‘llab-quvvatlash usullari tahlil qilinadi. O‘zbekiston sharoitidagi diniy-ma‘naviy, oilaviy va ijtimoiy an‘analar asosida reabilitatsiya mexanizmlari tavsiflanadi.

Farzandni yo‘qotish psixologik travmalar ichida eng og‘iri hisoblanadi. Psixologlar buni "hayotdagi eng yuqori darajadagi qayg‘u holati" deb ataydilar. Bu jarayon ota-onalarda turli shakldagi reaktiv holatlarni keltirib chiqaradi:

- hissiy iztirob (yig‘lash, g‘am, bo‘shashish);
- psixosomatik alomatlar (bosh og‘rigi, uyqusizlik, ishtahasizlik);



- depressiv sindromlar (umidsizlik, o‘zini ayblash, o‘z joniga qasd qilish fikrlari);

- ijtimoiy izolyatsiya (yakkalanish, suhbatdan qochish);

- hayotga bo‘lgan qiziqishning pasayishi.

Bu holatlarda yordam ko‘rsatish, hissiy qo‘llab-quvvatlash va ruhiy muvozanatni tiklash uchun kompleks yondashuv zarur bo‘ladi.

Psixologik tiklanishning bosqichlari

Ruhiy zarbani yengib o‘tish bosqichlarini ilk bor Elizabet Kübler-Ross o‘zining klassik “On Death and Dying” asarida tasvirlab bergan. Unga ko‘ra, insonlar yo‘qotishni besh bosqich orqali qabul qiladi:

Inkor (Denial)

Bu bosqichda ota-onalar haqiqatni inkor etadi: “Bu rost bo‘lishi mumkin emas”, “Xato qilishgan”, “Bu tush bo‘lsa kerak”. Inson psixikasi o‘zini himoya qilishga urinadi. Bu bosqich vaqtincha bo‘lsa-da, o‘ziga xos davolovchi ahamiyatga ega.

G‘azab (Anger)

Haqiqat anglanganidan so‘ng g‘azab kuchayadi: “Nega aynan biz?”, “Xudo meni jazoladimi?”, “Shifokorlar aybdor”. Bu bosqichda aybdor izlash kuchli bo‘ladi.

Muroza (Bargaining)

Ota-onalar ichki kelishuvga kirishishga harakat qiladi: “Men ibodat qilaman, lekin u qaytsin”, “Men xayriya qilaman, faqat qaytarib bering”. Bu bosqichda umid qolmagan bo‘lsa-da, inson yana nazorat hissini tiklashga intiladi.

Depressiya

Bu bosqichda hissiy tushkunlik chuqurlashadi. Harakatsizlik, hayotdan zavq olmaslik, o‘zini ayblash, o‘z joniga qasd qilish fikrlari paydo bo‘ladi. Bu bosqichda psixologik yoki psixiatrik aralashuv muhimdir.

Qabul qilish (Acceptance)

Inson yo‘qotishni anglaydi va undan keyingi hayotga asta-sekin moslasha boshlaydi. Bu bosqichda o‘tmish bilan xotirjam xayrlashish va kelajakka qarab yashash hissi paydo bo‘ladi.

Qo‘llab-quvvatlash mexanizmlari

Emotsional qo‘llab-quvvatlash

Bu yordam turi yaqinlarning mehr-muhabbati, tinglashga tayyorligi, do'stona yondashuv orqali amalga oshiriladi. Ota-onalar his-tuyg'ularini erkin ifoda etishlari uchun xavfsiz muhit zarur.

Ijtimoiy qo'llab-quvvatlash

Oila, qarindoshlar, mahalla, diniy jamoalar tomonidan beriladigan yordamlar:

- ovqat, moliyaviy yordam;
- marosimlarni o'tkazishda ko'mak;
- bolalarning parvarishi va ehtiyojlarini qoplash.

Diniy-ruhiy qo'llab-quvvatlash

Islom dini nuqtai nazaridan sabr, duo, tavakkal qilish, xayriya qilish — farzandini yo'qotgan ota-onaga sabr va baraka olib keladi, bu esa ruhiy tiklanishda katta yordam beradi.

Psixologik yordam

Malakali psixolog yordamida:

- hissiy bo'shatish (katarsis);
- Kognitiv-behavioral terapiya (KBT);
- oilaviy terapiya;
- guruhli terapiya.

O'zbekiston sharoitida tiklanishning an'anaviy va zamonaviy mexanizmlari

Milliy qadriyatlar asosidagi yordam

Mahalla tizimi, Qur'on xatmi, hayr-ehson qilish kabi an'anaviy amaliyotlar ota-onani yolg'izlikdan xalos etadi, jamoaviy qo'llab-quvvatlash orqali ruhiy barqarorlikni saqlashga yordam beradi.

Ijtimoiy xizmatlar

Oila va xotin-qizlar qo'mitasi, maktablar, ijtimoiy himoya bo'limlari tomonidan ko'rsatiladigan maslahat, moliyaviy yordam, shuningdek, davlat tomonidan ajratiladigan nafaqalar ham katta rol o'ynaydi.

Ruhiy salomatlik markazlari

Toshkent va viloyatlarda faoliyat yuritayotgan ruhiy salomatlik markazlari orqali psixologik maslahatlar, terapiyalar, treninglar tashkil etilmoqda. Biroq, bu xizmatlardan foydalanish ko'lami keng emas.

Tavsiyalar

1. Mahallalarda bepul psixologik yordam markazlari tashkil etish;



2. Farzandini yo‘qotgan ota-onalarga mo‘ljallangan qo‘llab-quvvatlovchi guruhlar tuzish;
3. Imom-xatiblar, mahalla faollari va shifokorlar uchun ruhiy tiklanish bo‘yicha o‘quvlar;
4. OAV orqali odamlarning psixologik salomatlikka e‘tiborini kuchaytirish;
5. Aholiga doimiy maslahat xizmati beruvchi “Ishonch liniyalari”ni faol ishlatish.

Farzandini yo‘qotgan ota-onaning ruhiy salomatligini tiklash — murakkab va bosqichma-bosqich davom etadigan jarayon. Bu yo‘lda ularning holatini tushunish, qabul qilish va har bir bosqichga mos ravishda emotsional, ijtimoiy, diniy va professional yordam ko‘rsatish zarur. O‘zbekiston sharoitida bu borada milliy qadriyatlar, diniy e‘tiqod va jamiyatda mavjud bo‘lgan birdamlik ruhidan samarali foydalanish mumkin. Shu bilan birga, zamonaviy psixologik yondashuvlar va ijtimoiy xizmatlar ham rivojlantirilishi kerak.

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ВЫРАЖЕНИЕ ВРЕМЕНИ ГЛАГОЛОВ В РУССКОМ ЯЗЫКЕ В УСТНОЙ РЕЧИ И ЕГО ДИФФЕРЕНЦИАЛЬНЫЕ ОСОБЕННОСТИ

Салимова Камила Бахриддиновна

Преподаватель кафедры Языков Самаркандского университета Зармед

Аннотация. В данной статье рассматриваются особенности выражения времён глаголов в русском языке, преимущественно в устной речи. Анализируются различия между нормативным употреблением временных форм и их реализацией в разговорной практике. Особое внимание уделяется коммуникативной функции времени и влиянию контекста на выбор глагольной формы.

Ключевые слова: глагол, время, устная речь, разговорная речь, грамматические особенности, настоящее, прошедшее, будущее время.

Abstract. This article examines the features of expressing verb tenses in Russian, primarily in oral speech. The differences between the normative use of tenses and their implementation in conversational practice are analyzed. Particular attention is paid to the communicative function of time and the influence of context on the choice of verb form.

Key words: verb, time, oral speech, colloquial speech, grammatical features, present, past, future tense.

Введение. Категория времени является одной из ключевых в системе глагольной морфологии русского языка. Она служит для обозначения временной соотнесённости действия с моментом речи и отражает хронологические отношения между событиями. В традиционной грамматике различают три основных времени – настоящее, прошедшее и будущее, каждое из которых играет важную роль в структурировании речевого высказывания.

Тем не менее, в устной (разговорной) речи выражение времён глаголов зачастую отличается от книжных и нормативных форм. В живом общении грамматические нормы могут варьироваться под влиянием речевой ситуации, коммуникативной задачи, экспрессивности, а также интонационных и просодических факторов. Это приводит к появлению различных дифференциальных особенностей, проявляющихся в смещении временных

форм, их функциональной перегрузке или даже частичном нивелировании временных различий.

Настоящее исследование направлено на анализ способов выражения времён глаголов в устной речи, выявление характерных отклонений от литературной нормы, а также изучение факторов, влияющих на выбор той или иной временной формы в процессе живого речевого взаимодействия. В центре внимания – не только формально-грамматическая сторона вопроса, но и прагматический аспект употребления временных форм в повседневной коммуникации.

Обзор литературы и методология. Проблема выражения временных форм глагола в русском языке активно изучалась в рамках различных направлений лингвистики: грамматики, функциональной стилистики, социолингвистики и прагмалингвистики.

Классические грамматические описания (А.М.Пешковский, В.В.Виноградов, Н.Ю.Шведова) уделяли основное внимание синтаксическим и морфологическим аспектам категории времени. В их работах подчёркивается, что в русском языке глагольное время тесно связано с категорией вида, а также с коммуникативной установкой говорящего.

В современных исследованиях всё большее внимание уделяется устной (разговорной) речи как особому функциональному стилю. Работы Т.В.Булыгиной, А.Д.Шмелёва, И.А.Стернина акцентируют внимание на речевых практиках, в которых временные формы могут использоваться не в соответствии с нормативными правилами, а с учётом контекста и коммуникативной целесообразности.

Особый интерес представляют исследования в области прагматики и дискурсивного анализа (Е.А.Земская, И.П.Коваль, А.Вежицкая), где рассматриваются случаи употребления настоящего времени для передачи прошедших событий (настоящее историческое), использование будущего для усиления категоричности, а также временные сдвиги в диалогической речи. Кроме того, в ряде трудов по сопоставительной лингвистике и методике преподавания РКИ (русского как иностранного) подчёркивается важность понимания функционального использования времён именно в живой речи – для успешной коммуникации.

Таким образом, существующая литература предоставляет богатый теоретический и эмпирический материал, однако требует систематизации и более глубокого анализа дифференциальных черт устной реализации времён глагола. Настоящее исследование опирается на методы качественного и количественного анализа речевых данных, собранных из следующих источников:

- транскрипции диалогов и монологов в бытовой и медийной устной речи;
- аудио- и видеозаписи неформального общения;
- корпусные данные из Национального корпуса русского языка (раздел «Устная речь»);
- примеры из художественной и публицистической литературы, отражающие разговорную речь.

Сопоставительный анализ, использовавшийся для выявления расхождений между нормами литературного языка и реалиями разговорной речи. Дискурсивный анализ, направленный на изучение прагматических функций временных форм в конкретных речевых ситуациях. Контекстуальный анализ, позволивший установить влияние речевого окружения на выбор глагольного времени.

В выборку вошли более 100 речевых фрагментов, охватывающих разные коммуникативные ситуации – от бытового диалога до интервью и устных рассказов. Это обеспечило репрезентативность материала и возможность сделать обобщения о характерных тенденциях в использовании временных форм.

Результаты. Категория времени в русском языке. В русском языке традиционно выделяют три временных формы глагола:

- Прошедшее время (делал, написал, говорил),
- Настоящее время (делает, пишет, говорит),
- Будущее время (будет делать, напишет, будет говорить).

Каждое из времён может быть выражено как в форме несовершенного, так и совершенного вида, что влияет на восприятие действия – его завершенность, длительность или повторяемость.

Устная речь как особый тип коммуникации. Устная речь характеризуется спонтанностью, краткостью, эмоциональностью и зависимостью от невербальных средств общения. Это влияет и на реализацию

временных форм. В разговорной речи носители языка нередко опираются на общий контекст и текущую ситуацию, что позволяет использовать временные формы более гибко. Примеры: Настоящее историческое время: «И вот он подходит ко мне и говорит...» – форма настоящего времени используется для описания прошедших событий, чтобы сделать рассказ живее.

Перенос временных форм: «Я завтра иду в магазин» – настоящее время используется для обозначения будущего действия.

Дифференциальные особенности выражения времён в устной речи. Смещение временных границ. В устной речи часто наблюдается смещение временных форм. Например, настоящее время может использоваться вместо будущего (особенно с глаголами движения), прошедшее время – вместо условного: «Если бы знал – пришёл» вместо нормативного «пришёл бы».

Редукция форм и эллипсис. «Вчера с ним встречаюсь...» – вместо «встретился», подчёркивая эмоциональную вовлечённость.

Упрощение синтаксических конструкций. В устной речи предпочтение отдается простым формам и конструкциям, часто с игнорированием строгих временных согласований.

Интонационные и просодические средства: – В устной речи интонация может компенсировать временные несоответствия, помогая слушателю правильно интерпретировать смысл.

Анализ собранного материала позволил выявить ряд характерных особенностей употребления временных форм глаголов в устной речи, отличающихся от нормативных грамматических структур. Ниже представлены основные результаты исследования:

Широкое использование настоящего времени для описания прошедших событий (настоящее историческое). В бытовой речи часто наблюдается замена прошедшего времени настоящим, особенно в повествовательных и эмоционально окрашенных высказываниях. Пример: «Я, значит, выхожу на улицу – а он стоит!» Такая форма используется для создания эффекта присутствия и усиления выразительности речи.

Использование настоящего времени для обозначения будущих действий. Настоящее время в разговорной речи активно замещает будущее, особенно в случае планируемых или ожидаемых событий. Пример: «Завтра

иду к врачу» вместо «пойду к врачу». Это связано с экономией речевых средств и ситуативной очевидностью смысла.

Смещение временной перспективы под влиянием контекста. В диалогах участники часто интерпретируют временные формы на основе общего контекста, что позволяет использовать грамматически неоднозначные или формально «неправильные» конструкции. Пример: «А он тебе говорил?» – «Говорит, типа, не может прийти». Прошедшее и настоящее время используются параллельно, не нарушая понимания.

Редукция вспомогательных слов и изменение структуры будущего времени. Вместо аналитической формы будущего времени («буду делать») часто используется простая форма настоящего: Пример: «После работы сразу еду домой» (в значении будущего).

Отсутствие строгой временной согласованности в диалогах. В устной речи носители часто не соблюдают последовательность времён, особенно при эмоциональном или быстром говорении. Пример: «Я тогда пришёл, а она мне говорит...» – смешение прошедшего и настоящего времён в одной ситуации.

Влияние региональных и социолингвистических факторов. Выявлены различия в употреблении временных форм в зависимости от социального статуса, возраста, уровня образования и регионального происхождения носителей. Молодёжь, как правило, демонстрирует большую гибкость в употреблении времён.

Эти результаты подтверждают, что в устной речи грамматическая категория времени функционирует более свободно и подвержена влиянию контекста, интонации, коммуникативных целей и социальных факторов. Временные формы в разговорной речи выполняют не только временную, но и стилистическую, эмоционально-прагматическую функцию.

Обсуждение. Полученные данные подтверждают, что в устной речи грамматическая категория времени претерпевает функциональные и структурные преобразования, обусловленные живой природой разговорной коммуникации. Ниже приведено обсуждение основных наблюдений, их интерпретация и связь с существующими теоретическими положениями.

Как показал анализ, носители языка активно используют временные формы не только для выражения хронологии событий, но и для создания выразительного, динамичного рассказа. Это согласуется с наблюдениями

Т.В.Булыгиной и А.Д.Шмелёва, которые подчёркивают, что в разговорной речи грамматика часто отходит на второй план, уступая место прагматике.

Пример употребления настоящего вместо прошедшего времени (настоящее историческое) подтверждает стремление говорящего вовлечь собеседника в рассказ и создать эффект «присутствия». Это средство активно используется как в быту, так и в публичной речи (интервью, устные рассказы).

Наблюдается явная зависимость формы времени от речевой ситуации. Говорящие часто опускают вспомогательные элементы будущего времени, заменяя их формами настоящего. Это свидетельствует о высокой прагматической нагрузке контекста: собеседники интерпретируют смысл высказывания, исходя не из грамматической точности, а из общего понимания ситуации.

Такая практика указывает на то, что в устной речи не всегда требуется чёткое грамматическое оформление будущего или прошедшего действия – достаточно контекста и интонации.

Использование настоящего времени в разных временных плоскостях может быть также результатом стремления к языковой экономии. Это особенно характерно для быстрых диалогов, где важнее сохранить темп разговора и интонационную выразительность, чем строго соблюдать временные нормы.

Таким образом, можно говорить о своеобразной «экономике выражения», когда формы подбираются с учётом коммуникативной эффективности, а не формальной правильности. Результаты анализа также показали, что степень гибкости в употреблении времён зависит от возрастной и социальной принадлежности говорящего. Молодёжь чаще использует упрощённые или «сдвинутые» формы времени, в то время как носители старшего возраста тяготеют к более нормативным формам. Это говорит о динамике языковых норм и их изменчивости в зависимости от социокультурного контекста.

В разговорной речи допускается смешение времён в пределах одного высказывания, что в письменной речи расценивалось бы как ошибка. Однако в устной коммуникации такое смешение воспринимается как естественное и не мешает пониманию. Это свидетельствует о различии между нормами кодифицированного языка и живой разговорной практикой. Таким образом,

можно утверждать, что в устной речи временные формы глагола приобретают дополн

Заключение. Выражение времён в устной речи русского языка отличается гибкостью и зависит от множества факторов: контекста, коммуникативной ситуации, интонации и цели высказывания. Эти особенности делают устную речь живой и динамичной, но в то же время требуют от участников коммуникации высокой степени языковой компетентности и контекстуального восприятия. Понимание этих дифференциальных особенностей важно как для лингвистов, так и для преподавателей русского языка как иностранного.

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THE WORK OF OYBEK “NAVAI” AND EXPLANATION OF NATIONAL COLOR

Jumayeva Shahlo Shokirovna - teacher of the department "Uzbek and foreign languages", Bukhara State Technical University

Abstract: The lexicon of a literary work is closely related to the era and the people depicted in it, because the work is a source of information about the history, culture, and customs of the people. In this, the author attaches special importance to the words that express things, concepts and events related to the period he is describing. This is a style that ensures the naturalness of the artistic work and shows the national color.

Key words: literary work, information about the history, culture, and customs of the people, national color.

The lexicon of a literary work is closely related to the era and the people depicted in it, because the work is a source of information about the history, culture, and customs of the people. In this, the author attaches special importance to the words that express things, concepts and events related to the period he is describing. This is a style that ensures the naturalness of the artistic work and shows the national color. The author conveys the national color through the character, customs, and way of life, thoughts, attitudes, external appearance, inner world, spiritual experiences and realities of the people he describes. If he describes the period in which he lives and creates, the problems of revealing the national color may be alien to him, but if he writes about the period before or after his time, or if he describes a completely different world, to convey the national color to the reader as it really is, to create a clear image requires strong writing skills, broad outlook, and sharp knowledge.

The theme and problems of giving a national color to a work of art have been analyzed in the researches of many foreign and Uzbek scientists. Before studying these analyses, let's consider the concepts of color and national color.

Colorit (ital. colorito < lat. color - color, hue) 1. Painting, engraving, etc. k. the harmonious, mutual proportionality and harmony of colors. 2. (portable) A set of unique aspects and characteristics of something (appearance, artistic work, era, region, people, etc.) rather, it is a collection of lexemes collected within a certain topic.¹ In the "Dictionary of Linguistic Terms" by O.S. Akhmapovain, color is

defined as a characteristic feature of an artistic work, a characteristic of the speech of characters, characteristic signs of a language taken from the language or dialects of a certain period in their speech, characteristic of a country or place. It is shown that it consists of a set of concepts (realities)².

The topic of national color has been discussed in the works of many major scientists. In particular, in the studies of E. Konovalova, Ye. Grigoryan, L. Bondarenko, N. Chepel, G. Karipjanova, the issues of expression of national color in fiction were studied in world literary studies. G. Salomov, Sh. Ibrahimova, N. Dosbaeva, M. Umarova's dissertations, books and articles reveal the methodological researches in the literature of a certain period and the specific features of a particular creative style in Uzbek literary studies.

Oybek's work, especially his prose works, has not been studied enough. His research work on the analysis of Navoi's novel cannot be said to be enough.

If we analyze the presentation of the national color on the example of excerpts from the work: “-Sizlarga manzur bo’lgudek g’azallar yozilmadi, - dedi shoir oq tusha boshlagan soqolini silab. – Ba’zi xomroq narsalar borki, ularni o’qimoq bilan bahramand bo’lmasizlar, deb o’ylaymen. Shirin suhbatlaringizga tashna bo’lganimdan chorlagan edim.” In this example, another expression of the Uzbek national color is the character of humility. Despite the popularity and importance of the great poet's work, it is shown that he is not arrogant, behaves politely and modestly in any circle. In this passage, we can see another expression of a good habit, which is known in most works as “majlis”, “anjuman” “mashvarat”, “kengash” and in modern interpretation as “davra suhbat” (“round discussion”). People with the same profession and the same goal gathered in one place and shared the news in their fields and the products of their creativity. In addition to ensuring the development of the industry at that time, it was a prelude to the training and development of new talents and representatives.

Or, “Eshik «g’irch etib ochildi-da, ruxsat so’rab ukasi Darvishali kirdi.... Navoyi uning nim mast ko’zlariga qaradi” misolida ham milliy koloritning namunasini ko’rishimiz mumkin.” The passage depicts the scene of Darvishali, the brother of Navoi, entering Navoi's room asking for permission. In the Uzbek mentality, a strong emphasis is placed on education in the family. In addition to respecting parents and elders, they were also careful in their relations with their relatives and blood relatives, even if they were younger than themselves. Even in the



situation in the passage, despite the fact that the brother was drunk, he entered the room where his brother was sitting, not forgetting his respect for him.

At this point, it should be said that mentality is the fundamental characteristic of every nation. When a description of a nation is given, the authors emphasize the characteristics and stability of that particular nation.

Proverbs are also a special type of national color, and according to the definition given in Internet sources, they are a genre of folk art; short and concise, figurative and non-figurative, grammatical and logical wise expressions. Life experiences, attitude to society, history, mental state, ethical and aesthetic feelings, and positive qualities of ancestors are embodied in proverbs. Over the centuries, it has been refined among the people, and has become a concise and simple poetic form. So, proverbs belong to a certain people and describe the national and social life of that people: -Bizning elda bir yaxshi maqol bor, -dedi Navoiy tabassum bilan. -It hurar, karvon o'tar! This proverb was spoken against the immorality of that time, and the proverbs of every nation with this meaning are given in different ways. For example, the same proverb is given in Russian as Собака лает, ветер носит. In this case, caravan in Uzbek is represented by ветер in Russian and is literally translated as dog barks, wind blows. Proverbs have a realistic feature, that is, a certain proverb is specific to only one language, and when it is translated word for word, it may not express the original meaning. In this respect, they are similar to realities, and if in translation they are often represented by their equivalent in a foreign language, the goal of conveying the meaning to the foreign reader while preserving the original is fulfilled. We will discuss this in detail in our next seasons.

So, while creating his work, the writer uses a special language to express the total actions of people in the period and society, in the way of life. This language belongs only to the life of that time and society, and it aims to convey the same spirit and mentality to the reader. In this process, the writer certainly refers to lexemes, lexical units, sentences that express the national color. Because they are the means of faster cultivation of the above goal of the writer.

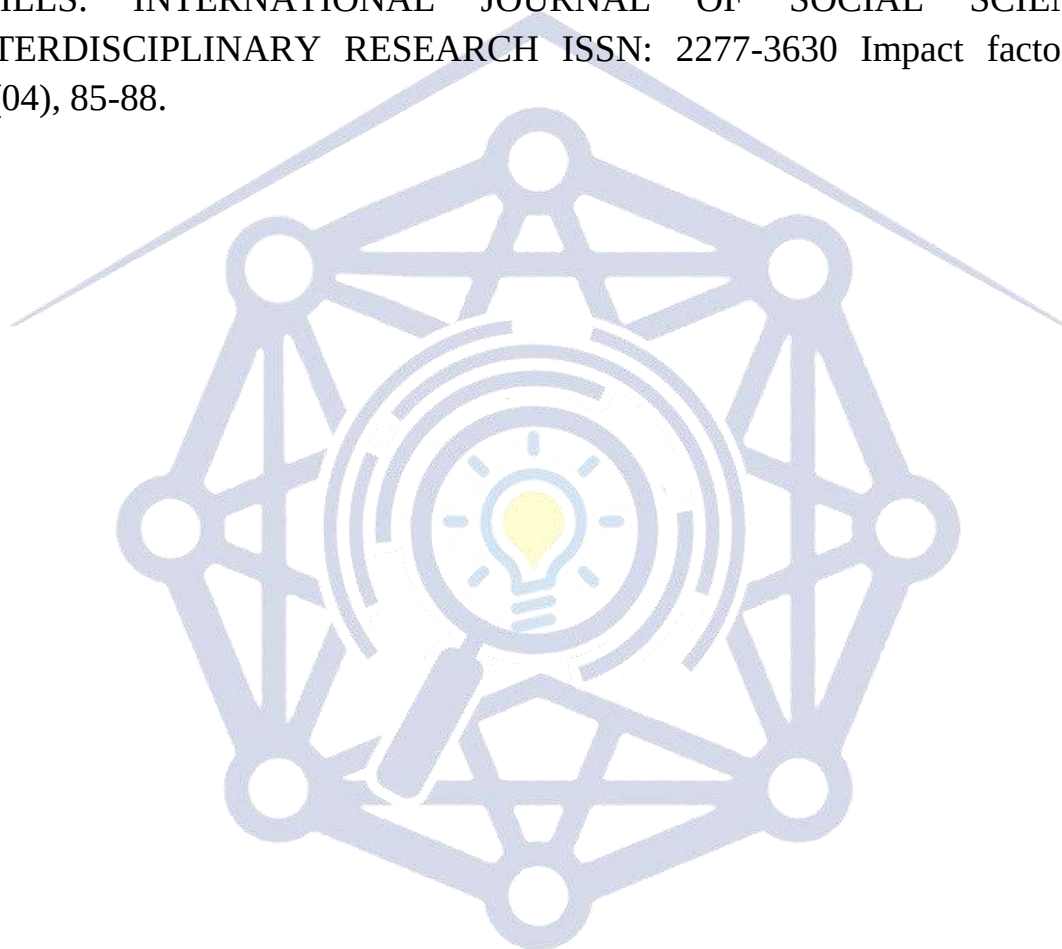
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The Importance of Didactic Games in Developing Reading Skills of Primary School Students

Yusupbayeva Lobar Alisherovna

Student of the Faculty of Primary Education,
Nukus Pedagogical Institute named after Ajiniyoz

Abstract: In education, using didactic games helps to develop students' reading skills and facilitates the process of acquiring new knowledge in an engaging and effective manner. This article discusses the significance of didactic games in developing reading skills of primary school students and the approaches that should be used to conduct reading lessons with them.

Keywords: Didactic games, primary school, reading skills, pedagogical technologies, motivation, educational process.

Currently, in our country, various pedagogical technologies are being used in the educational process with the aim of improving the quality of education and promoting it widely. This means approaching the teaching process with new innovations. This approach aims to make the lesson process more comprehensive and meaningful while increasing students' interest. In teaching primary school students, the use of information and communication technologies and pedagogical technologies is intended to enhance students' knowledge, expand their worldview, and enable them to learn the lesson quickly and easily. In primary education, developing students' reading skills is crucial not only for imparting knowledge but also for broadening their worldview and preparing them for social activities.

Reading is not just a process of understanding a text; it is a process that develops the student's ability to think, analyze, communicate, and express their thoughts freely. However, acquiring reading skills can sometimes be complex and boring for primary school students. Therefore, various methods are used in the educational process to increase students' interest in reading and effectively develop their reading skills. One of these methods is didactic games.

Didactic games help students not only to learn reading but also to engage with it joyfully. These games encourage students to actively participate in the reading process and test their knowledge in practice. Furthermore, they help to spark

students' interest in reading and can become an effective tool in strengthening their reading skills.

Didactic Games are specially designed games used in the educational process to enhance students' knowledge, develop their skills, and increase their motivation for learning. The main purpose of these games is to encourage students to actively participate, assist them in applying the learned material in practice, and create conditions for students to feel free and comfortable. In the process of playing, students not only acquire new knowledge but also complete their educational activities in an interesting and meaningful way. Didactic games play an important role not only in increasing knowledge but also in developing students' social and emotional skills. They teach students to work in groups, exchange ideas, as well as to foster mutual respect and understanding. Such games increase students' interest in the learning process and actively engage them in reading.

Types of Didactic Games:

1. **Cognitive (Knowledge-based) Games** These types of games help students acquire new knowledge and understand the topic more deeply. Through cognitive games, students develop not only reading skills but also analytical thinking, making logical conclusions, and decision-making skills. For example, games such as text analysis, answering questions correctly, and exchanging ideas about the topic can serve as examples of cognitive games.

2. **Motor (Activity-oriented) Games** These games focus on developing students' physical activity, helping them form skills such as movement, making quick decisions, and managing motion and time. Examples of motor games include activities that require quickly identifying letters or words, physical games, or exercises that incorporate physical activity during the reading process.

3. **Emotional (Creative and Motivational) Games** Emotional games help improve students' emotional state while also fostering their creative abilities. These games encourage students to engage in creative activities, come up with new ideas, and express their emotions. Examples of such games include activities where students create short stories based on a text they have read or draw pictures related to the content.

The types of didactic games mentioned above make the reading process more interesting and effective through games, increasing the success of primary school students in reading. Games, in turn, also contribute to the development of students'

social and emotional skills. Students learn to work in groups, help each other, and exchange ideas. This fosters mutual respect and the development of teamwork skills. The role of teachers in applying didactic games in the reading process is extremely important. Teachers must select and organize didactic games in a way that aligns with the lesson process. For instance, various forms of games can be applied in teaching students letters and words. Such games increase students' interest, activate them, and make it easier for them to master the basic reading skills. Additionally, students are engaged in games that help them correct their mistakes while reading texts, analyze them, and improve their comprehension. Didactic games increase students' interest in developing reading skills and make the learning process more enjoyable and effective. For example, the use of didactic games in teaching students letters and words helps them to remember these concepts quickly. Through games, students actively participate in improving their pronunciation of words, reading texts correctly, and understanding them. Students can be taught to analyze the meaning of texts, express their ideas, and share their thoughts through games. For example, games where students rephrase or dramatize the content of the text help reinforce reading and comprehension.

Didactic games not only develop students' reading skills but also enhance their creative and analytical thinking. Games offer students opportunities to analyze texts, find solutions to various challenges, and come up with creative ideas. For example, games that encourage students to rewrite a text or describe a read event from a different perspective promote creative thinking. Additionally, games that encourage students to work in groups and analyze texts help develop team thinking and communication skills. During the game process, students actively participate in sharing their thoughts, establishing relationships with others, and generating new ideas.

In conclusion, didactic games are an extremely effective tool in developing the reading skills of primary school students. They increase students' interest in reading, help reinforce knowledge, and develop analytical and creative thinking. Games not only develop reading skills but also improve students' social and emotional competencies. Teachers can make lessons more meaningful and engaging by using didactic games to involve students in reading. Successfully selecting and applying games in alignment with the lesson process increases students' success in reading and fosters their curiosity for knowledge.

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O‘zbekiston Respublikasida investitsiya shartnomalari va arbitraj institutlarini takomillashtirish masalalari

Nurmuxammedova Farruxa Faxriddin qizi

Toshkent davlat yuridik universiteti magistratura bosqichi talabasi

Annotatsiya: Mazkur maqolada O‘zbekiston Respublikasida investitsiya shartnomalarini tuzish bo‘yicha mavjud huquqiy tizim yoritilgan hamda ushbu shartnomalarni takomillashtirish zarurati asoslab berilgan. Maqolada investitsiya nizolarini hal etishda xalqaro arbitraj institutlarining o‘rni ko‘rib chiqilib, ularning faoliyatini milliy qonunchilik doirasida samarali qo‘llash imkoniyatlari baholangan. Shu asosda, investitsiya shartnomalarini yanada takomillashtirishga doir qonunchilikka tegishli takliflar ilgari surilgan.

Kalit so‘zlar: Investitsiya shartnomasi, huquqiy tartibga solish, xorijiy investor, xalqaro arbitraj, shaffoflik, ochiqlik, preferensiyalar, qonunchilik, monitoring, ijtimoiy infratuzilma, davlat kafolatlari, jamoatchilik nazorati.

Annotation: This article examines the existing legal framework for the conclusion of investment agreements in the Republic of Uzbekistan and substantiates the necessity of improving such agreements. It analyzes the role of international arbitration institutions in resolving investment disputes and evaluates the possibilities of effectively applying their mechanisms within the national legal system. Based on this analysis, the article proposes relevant legislative suggestions aimed at further enhancing the regulation of investment agreements.

Keywords: Investment agreement, legal framework, international arbitration, dispute resolution, legislation, legal reform.

Аннотация: В данной статье освещается существующая правовая система заключения инвестиционных соглашений в Республике Узбекистан, а также обосновывается необходимость их совершенствования. Рассматривается роль международных арбитражных институтов в разрешении инвестиционных споров и оцениваются возможности эффективного применения их механизмов в рамках национального законодательства. На основе проведённого анализа предлагаются соответствующие законодательные инициативы по дальнейшему совершенствованию регулирования инвестиционных соглашений.

Ключевые слова: Узбекистан, инвестиционное соглашение, правовая база, международный арбитраж, разрешение споров, законодательство, правовая реформа.

KIRISH

Xalqaro iqtisodiy munosabatlarning faollashib borishi jarayonlari O‘zbekiston Respublikasining jahon savdo tizimiga faol integratsiyalashuvini taqozo etmoqda. Bu esa, o‘z navbatida, mamlakat iqtisodiyotida investitsiyalar, ayniqsa, xorijiy investitsiyalarga bo‘lgan e‘tiborning sezilarli darajada kuchayishiga olib kelmoqda. 2021 yil 24 iyun kuni O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev raisligida investitsiya va eksport sohalaridagi ishlar natijadorligi, yil yakunigacha amalga oshirilishi lozim bo‘lgan ustuvor vazifalar muhokamasiga bag‘ishlangan videoselektor yig‘ilishida ham ushbu masalalar muhokama etilib, davlatimiz rahbari: mamlakatimizda iqtisodiyot va infratuzilmani rivojlantirish, dolzarb loyihalarni mablag‘ bilan ta‘minlash maqsadida faol investitsiyaviy siyosat olib borilayotgani natijasida, 2017 yildan boshlab barcha manbalar hisobidan 716 trillion so‘m (83 milliard dollar) yoki oldingi davrga nisbatan 2 baravardan ziyod investitsiyalar o‘zlashtirilganligini aytib o‘tdi. Shuningdek, ushbu davrda 441 trillion so‘mlik 47 mingdan ziyod yirik, o‘rta va kichik loyihalar ishga tushirilganligi, 680 mingdan ortiq doimiy yangi ish o‘rinlari yaratilgani hamda joriy yilda umumiy qiymati 6 milliard 500 million dollarlik 226 ta yirik tarmoq va hududiy loyihalar ishga tushirilishi, 35 mingta yangi ish o‘rni tashkil etilishi mo‘ljallangani alohida qayd etildi. Yig‘ilishda ularning ijrosi ham ko‘rib chiqildi. Muddatidan kechikayotgan loyihalar ko‘rsatib o‘tilib, ularni o‘z vaqtida ishga tushirish choralari belgilandi. Bundan tashqari, Prezidentimiz tarmoq va hudud rahbarlarining asosiy vazifasi investitsiyaviy faollikni kuchaytirish bilan birga, ularning samaradorligini oshirish bo‘lishi kerakligini ta‘kidladi¹. Investitsiya resurslari orqali ishlab chiqarish tarmoqlarining texnik va texnologik jihatdan modernizatsiya qilinishi ta‘minlanadi, shuningdek, iqtisodiy jihatdan muhim va strategik ahamiyatga ega bo‘lgan loyihalarni amaliyotga tatbiq etish yo‘li bilan mamlakat iqtisodiyotining izchil rivojlanishi, aholining bandlik darajasining oshishi

¹ O‘zbekiston Respublikasi Prezidenti Sh. Mirziyoyevning 2021 yil 24 iyundagi investitsiya va eksport sohalaridagi ustuvor vazifalar muhokamasiga bag‘ishlangan videoselektor yig‘ilishidagi nutqi.

URL:<https://president.uz/uz/lists/view/4449>



hamda ularning hayot sifati va darajasini yaxshilashga erishish mumkin bo‘ladi. Shu munosabat bilan, investitsiya shartnomalarini huquqiy jihatdan chuqur o‘rganish va tahlil qilishga qaratilgan ilmiy-tadqiqot ishlarini olib borish, O‘zbekistonda amalga oshirilayotgan faol investitsiya siyosatining ustuvor yo‘nalishlaridan biri hisoblanadi.

TADQIQOT METODOLOGIYASI

Mazkur tadqiqotda O‘zbekiston Respublikasida investitsiya shartnomalari va arbitraj institutlarini takomillashtirish masalalarini o‘rganishda kompleks ilmiy-uslubiy yondashuv qo‘llanilgan. Tadqiqotning metodologik asosini sistemali, tarixiy, tahliliy hamda qiyosiy-huquqiy yondashuvlar tashkil etadi. Ushbu yondashuvlar orqali investitsiya shartnomalarining O‘zbekiston huquqiy tizimidagi o‘rni, ularning normativ asoslari, huquqiy muammolari chuqur tahlil etildi. Tadqiqot jarayonida O‘zbekiston Respublikasining “Investitsiyalar va investitsiya faoliyati to‘g‘risida”gi Qonuni, Vazirlar Mahkamasining investitsiyaga oid normativ-huquqiy hujjatlari, shuningdek, investitsiya shartnomalarini tuzish, ularni amalga oshirish va nazorat qilish tartiblariga doir amaldagi me‘yoriy-huquqiy bazaga tayangan holda tahliliy yondashuv qo‘llanildi.

ASOSIY QISM

O‘zbekiston Respublikasi hukumati ishtirokida tuziladigan investitsiya shartnomasining predmeti sifatida investor tomonidan muayyan investitsiya loyihasini amalga oshirish maqsadida olib boriladigan investitsiya faoliyati nazarda tutiladi. Mazkur yondashuvdan kelib chiqilsa, shartnoma predmeti uning doirasida bajariladigan harakatlar orqali aniqlanadi, degan xulosaga kelish mumkin. Shu bois, A.S.Danilevichning “Hukumat bilan tuziladigan investitsiya shartnomasining predmeti - bu faqat investitsiyalarning o‘zi” degan qarashiga to‘liq qo‘shilib bo‘lmaydi². Shuningdek, investitsiya shartnomalarining tuzilishi, asosan, xorijiy investitsiyalarni jalb qilish va investitsion muhitni yanada rivojlantirishga xizmat qiluvchi mexanizm sifatida qaraladi³. Jumladan, “Investitsiyalar va investitsiya faoliyati to‘g‘risida”gi Qonunning 41-moddasida xorijiy investor hamda investitsiya

² Данилевич, А.С. Арбитражная оговорка в инвестиционном договоре с Республикой Беларусь / А.С. Данилевич // Пром.-торговое право. - 2010. - № 5. - С. 70.

³ Rustambekov I. Business Environment and Investment Climate in the Republic of Uzbekistan. International Journal of Advanced Research. #4, 2019. P.1282 // URL: <http://www.journalijar.com/article/27382/business>

faoliyatini tartibga soluvchi vakolatli davlat organi nomidan O‘zbekiston Respublikasi Hukumatining investitsiya shartnomasi tuzishdagi vakolatlari belgilangan⁴. Investitsiya shartnomalari, shuningdek ularga kiritiladigan barcha turdagi o‘zgartirish va qo‘shimchalar faqat yozma shaklda tuzilishi lozim. Har ikkala holatda ham shartnoma tuzish jarayoni bir xil tartibda amalga oshiriladi. Ushbu shartnomalar O‘zbekiston Respublikasi Hukumati nomidan Investitsiyalar va tashqi savdo vazirligi tomonidan imzolanadi. Investitsiya shartnomasini tuzish bo‘yicha tashabbus esa chet el investori tomonidan mustaqil ravishda yoki belgilangan tartibda tegishli davlat boshqaruvi organlari, xo‘jalik birlashmalari, mahalliy ijro etuvchi hokimiyat organlari yoki xo‘jalik yurituvchi subyektlar bilan hamkorlikda ilgari surilishi mumkin. Shartnoma tuzish taklifi bilan chiqish uchun investor quyidagi hujjatlarni Investitsiyalar va tashqi savdo vazirligiga yoki Xorijiy investitsiyalarni jalb etish agentligiga taqdim etishi kerak:

investitsiya shartnomasi tuzishdagi asosiy maqsad, tanlangan investitsiya obyekti va investorning ushbu sohadagi tajribasi (agar mavjud bo‘lsa) haqida ma’lumotlarni o‘z ichiga olgan ariza;

tasdiqlangan namunaviy shakldagi shartnoma loyihasi;

zarurat bo‘lgan taqdirda vakolatli organlar tomonidan ekspertizadan o‘tkazilgan texnik-iqtisodiy asoslar va ularga asoslangan biznes-reja.

Tegishli davlat organlari, xususan Adliya vazirligi, Moliya vazirligi, Iqtisodiy taraqqiyot va kambag‘allikni qisqartirish vazirligi, shuningdek Davlat bojxona qo‘mitasi va Davlat soliq qo‘mitasi o‘z vakolatlari doirasida huquqiy, moliyaviy va iqtisodiy jihatlar bo‘yicha xulosalar beradi. Shartnoma loyihasi va unga tegishli hujjatlar tegishli tashkilot tomonidan olgan kundan boshlab 15 kalendar kuni ichida ko‘rib chiqiladi. Agar qo‘shimcha ekspertiza, tahlil yoki boshqa tadbirlar zarur bo‘lsa, ushbu muddat 30 kunga uzaytirilishi mumkin, bu haqda investor yozma tarzda ogohlantiriladi. Barcha vakolatli organlar bilan kelishuvga erishilgach, shartnoma loyihasi Vazirlar Mahkamasiga taqdim etiladi. U yerda hujjatlar ko‘rib chiqilib, tasdiqlanadi yoki lozim bo‘lsa, tuzatishlar kiritish uchun qaytariladi. Vazirlar Mahkamasi tomonidan ma’qullangan shartnoma Investitsiyalar va tashqi savdo vazirligi tomonidan imzolanadi. Shundan so‘ng vazirlik hukumat qarori

⁴ O‘zbekiston Respublikasining “Investitsiyalar va investitsiya faoliyati to‘g‘risida”gi Qonuni. Qonun hujjatlari ma’lumotlari milliy bazasi, 26.12.2019 y., №03/19/598/4221. Elektron manba: <https://www.lex.uz/docs/4664142>



loyihasini tayyorlaydi va uni tasdiqlash uchun Vazirlar Mahkamasiga yuboradi. Shartnoma ushbu qaror qabul qilingan kundan yoki unda belgilangan boshqa sanadan boshlab yuridik kuchga ega bo'ladi. Investitsiyalar va tashqi savdo vazirligi tomonidan investitsiya shartnomasi doirasida investor zimmasiga yuklangan majburiyatlarning bajarilishi ustidan doimiy monitoring amalga oshiriladi. Investor esa shartnomada belgilangan muddatlarda va shaklda hisobot taqdim etish majburiyatiga ega. Investitsiya shartnomasi doirasida nazarda tutilgan qo'shimcha kafolatlar, soliq va bojxona imtiyozlari hamda boshqa preferensiyalar ushbu shartnomaning amal qilish muddati yakuniga yetgach o'z kuchini yo'qotadi. Zarurat tug'ilganda, ular shartnomada ko'rsatilgan tartib asosida muddatidan ilgari ham bekor qilinishi mumkin.

Mamlakatimizda investitsiya faoliyatini huquqiy tartibga solishga qaratilgan O'zbekiston Respublikasining yangi tahrirdagi "Investitsiyalar va investitsiya faoliyati to'g'risida"gi Qonunining (keyingi o'rinlarda Qonun) 8-bobida O'zbekiston Respublikasi Hukumatining xorijiy investorlar bilan tuzadigan investitsiya shartnomalariga oid huquqiy normalar mustahkamlab qo'yilgan. Ushbu normalarga muvofiq, O'zbekiston Respublikasi Hukumatining xorijiy investorlar bilan o'zaro kelishuv asosida tuzadigan investitsiya shartnomalari doirasida, majburiyatlarning bajarilishini ta'minlash maqsadida qo'shimcha imtiyozlar va preferensiyalar nazarda tutilishi mumkin⁵.

Bundan tashqari, O'zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 30-apreldagi №264-sonli qarori bilan tasdiqlangan "O'zbekiston Respublikasi Hukumati bilan chet ellik investor o'rtasida investitsiya shartnomalarini tuzish, o'zgartirish kiritish, tugatish va amalga oshirish tartibi to'g'risida"gi Nizomda ushbu jarayonlarning huquqiy asoslari belgilab qo'yilgan⁶.

Mazkur hujjat xorijiy investorlar uchun qo'shimcha kafolatlar hamda davlat tomonidan ko'rsatiladigan qo'llab-quvvatlash choralari doirasida, O'zbekiston Respublikasi Hukumatining xorijiy investorlar bilan tuzadigan investitsiya

⁵ O'zbekiston Respublikasining "Investitsiyalar va investitsiya faoliyati to'g'risida"gi Qonuni. Qonun hujjatlari ma'lumotlari milliy bazasi, 26.12.2019 y., №03/19/598/4221. – Elektron manba: <https://www.lex.uz/docs/4664142>

⁶ O'zbekiston Respublikasi Vazirlar Mahkamasining "O'zbekiston Respublikasi Hukumatining xorijiy investorlar bilan investitsiya shartnomalarini tuzish, o'zgartirish kiritish, bekor qilish va ularni amalga oshirish tartibi to'g'risidagi Nizomni tasdiqlash haqida"gi 2020-yil 30-apreldagi 264-sonli Qarori. Qonun hujjatlari ma'lumotlari milliy bazasi, 01.05.2020 y., №09/20/264/0530. – Elektron manba: <https://lex.uz/ru/docs/4804055>



shartnomalarini tuzish, o'zgartirish kiritish, tugatish va amalga oshirish tartiblarini aniq belgilaydi.

Biroq, amaldagi qonunchilik hujjatlarida xorijiy investorlar bilan tuziladigan investitsiya shartnomalar bo'yicha teng imkoniyatlarni ta'minlash maqsadida ochiq tanlov o'tkazish va eng maqbul investitsiya loyihalarini saralab olish tartibi belgilab qo'yilmagan. Mazkur holat o'z navbatida, raqobat muhitini va budjetga eng katta foyda keltiradigan loyihalarni tanlab olish imkoniyatini cheklaydi. Masalan, O'zbekiston Respublikasi Hukumati xorijiy investor bilan to'g'ridan-to'g'ri muzokara asosida avtomobil yig'ish zavodi qurish bo'yicha investitsiya shartnomasi tuzdi. Ushbu shartnoma asosida investor mamlakatda yangi avtomobillar ishlab chiqarishni boshlashni va'da berdi va unga soliq, bojxona preferensiyalari, yer maydoni ajratilishi, ishlab chiqarilgan avtomobillarni ichki bozorda realizatsiya qilish uchun huquqlar va imtiyozlar taqdim etildi. Biroq, ayni vaqtda boshqa bir xorijiy investor yashil (green) texnologiyalarga asoslangan elektromobillar ishlab chiqarishni taklif qilgan, yuqori lokalizatsiya darajasini (ya'ni, mahalliy ehtiyot qismlar ulushini) ta'minlashga tayyor bo'lgan, mahalliy muhandis va mutaxassislarni o'qitish markazini ochishni rejalashtirgan bo'lsa, ochiq tanlov tartibi mavjud bo'lmagani sababli, davlat organlari faqat bitta investor bilan muzokara yuritib, boshqa takliflarni ko'rib chiqmagan bo'lishi mumkin. Natijada, texnologik jihatdan zamonaviy va ekologik toza yechimlar, davlat uchun yanada manfaatli iqtisodiy shartlar e'tibordan chetda qolishi mumkin. Shu bois, mazkur yo'nalishda ochiqlik va shaffoflikni ta'minlash, shuningdek, investorlar uchun teng imkoniyatlar yaratish maqsadida investitsiya shartnomalarini auksion (kim oshdi savdosi) natijalari asosida tuzish tartibini joriy etish hamda bu jarayonga jamoatchilik nazoratini tatbiq etish zarurati yuzaga kelmoqda. Bunday yondashuvni qonunchilikda mustahkamlash lozim. Shu nuqtai nazardan, O'zbekiston Respublikasining "Investitsiyalar va investitsiya faoliyati to'g'risida"gi O'RQ-598-sonli Qonunining 43¹- moddasiga hamda Vazirlar Mahkamasining 2020-yil 30-apreldagi 264-son qarori bilan tasdiqlangan "O'zbekiston Respublikasi Hukumati bilan xorijiy investor o'rtasida investitsiya shartnomasini tuzish, o'zgartirish kiritish, bekor qilish va ularni amalga oshirish tartibi to'g'risida"gi Nizomga quyidagi norma kiritilishi maqsadga muvofiq bo'ladi:

“43¹-modda. Kimoshdi savdosi orqali O'zbekiston Respublikasi Hukumati bilan investitsiya shartnomasi tuzish



O‘zbekiston Respublikasi Hukumati bilan investitsiya shartnomasi ochiq auksion (kim oshdi savdosi) natijalariga ko‘ra quyidagi holatlarda tuziladi:

agar bir xil yoki o‘zaro o‘xshash investitsiya loyihasi doirasida, xususan, bitta yer uchastkasida amalga oshirilishi rejalashtirilgan loyihaga nisbatan ikki yoki undan ortiq investor tomonidan hukumat bilan investitsiya shartnomasi tuzish istagi bildirilgan bo‘lsa;

O‘zbekiston Respublikasi hududida yer qa‘ridan foydalanishga oid investitsiya loyihalari amalga oshirilayotgan hollarda.

Ochiq kimoshdi savdolarini o‘tkazish tartibi O‘zbekiston Respublikasi Vazirlar Mahkamasi tomonidan belgilanadi.

Qonunchilikda nazarda tutilgan holatlarda, Vazirlar Mahkamasining tegishli qaroriga muvofiq, investitsiya shartnomasi to‘g‘ridan-to‘g‘ri muzokaralar asosida, ochiq auksionlar o‘tkazilmasdan ham tuzilishi mumkin”.

Bu orqali, xorijiy investorlar uchun teng sharoit yaratiladi, eng yaxshi texnologik, iqtisodiy va ekologik shartlarni taklif etayotgan investor tanlab olinadi, bu esa davlat va jamiyat manfaatlariga xizmat qiladi.

Mamlakatimizda xalqaro investitsiya shartnomalari va xalqaro investitsiya arbitraji bilan bog‘liq muammolardan yana biri mazkur jarayonlarning ochiqligi va shaffofligi bilan bog‘liq masala hisoblanadi. Bugungi iqtisodiy rivojlanish sharoitida zamonaviy huquqiy yondashuvlarni e‘tiborga olish muhim ahamiyat kasb etadi. Jumladan, rivojlangan davlatlar amaliyotida hukumatlar korxonalar uchun zarur ma‘lumotlarning erkin ochiqligini ta‘minlashga alohida e‘tibor qaratmoqda. Mazkur yo‘nalishda, masalan, Singapur tomonidan ilgari surilgan “aqli millat” tashabbusi doirasidagi ochiq ma‘lumotlar konsepsiyasi namuna sifatida ko‘rsatilishi mumkin⁷. Bunday tashabbuslarning bosh maqsadi - investitsiya faoliyatida ochiqlik va shaffoflikni kuchaytirish, raqamli iqtisodiyot infratuzilmasini rivojlantirish, transmilliy darajadagi investitsion ma‘lumotlar almashinuvini jadallashtirish hamda sun‘iy intellekt asosidagi innovatsion texnologiyalarni ilgari surish orqali ilg‘or g‘oyalarni amaliyotga tatbiq etishdan iborat. Ta‘kidlash lozimki, investitsiya shartnomalari faqatgina investorlar va investitsion faoliyat ishtirokchilarining huquq va erkinliklarini emas, balki umumjamoat manfaatlariga taalluqli normalarni ham

⁷<https://docplayer.ru/56568253-Cifrovaya-ekonomikasingapura-sozdanie-ekonomiki-budushchego-i-iniciativa-uinnaya-naciya-nekotorye-fakty-i-cifry-osnovy-ekonomikisingapura.html>



o‘z ichiga oladi. Har qanday investitsiya loyihasining amalga oshirilishi, eng avvalo, u faoliyat yuritadigan hudud aholisi uchun ahamiyatlidir. Masalan, xorijiy investorlar tomonidan mahalliy fuqarolarni ish bilan ta‘minlash, ularning mehnat huquqlarini kafolatlash va loyihani amalga oshirish jarayonida ijtimoiy-iqtisodiy infratuzilmani rivojlantirish orqali mintaqaning o‘zini kompleks tarzda taraqqiy ettirish mumkin bo‘ladi. Mamlakatimizda xalqaro investitsiya shartnomalari haqida ochiq, ommaviy axborotlar mavjud emas, shuningdek, loyihalarning bajarilishi holati haqida ma‘lumotlar tegishli davlat organlarining veb-saytlarida ham yetarlicha e‘lon qilinmaydi⁸. Birlashgan Millatlar Tashkilotining “Biznes va inson huquqlari to‘g‘risidagi shartnomasi”da qayd etilishicha, savdo va investitsiya bitimlari insonlarning ishtirok etish huquqiga hurmat bilan yondashgan holda, davlatlarning ushbu bitimlarni xalqaro huquq standartlariga muvofiq tarzda tuzishi va izohlashi majburiyatini nazarda tutadi. Shu nuqtai nazardan kelib chiqib, O‘zbekiston sharoitida ham investitsiya jarayonlarini ochiqlik va shaffoflik asosida tashkil etish, xususan, inson huquqlarini investitsiya shartnomalarida himoya qilishga doir huquqiy mexanizmlarni takomillashtirish dolzarb masalalardan biridir. Bunda alohida e‘tibor, shartnomalarni tuzish va amalga oshirish bosqichlarida umumiy jamiyat manfaatlarini inobatga olish, hamda keng jamoatchilik nazoratini o‘rnatishga qaratilishi lozim. Xalqaro investitsiya shartnomalarida investorlar uchun maxfiylik tamoyili muhim bo‘lsada, ba‘zi masalalar bo‘yicha ya‘ni shartnoma asosida berilgan imtiyozlar, davlat kafolatlari, mahalliy aholi manfaatlariga taaluqli holatlar yuzasidan jamoatchilik fikrini o‘rganish muhim hisoblanadi. Bunda ochiqlik tamoyili xalqaro investitsiya shartnomalari bilan bog‘liq barcha masalalarga tatbiq etilmaydi. Investorlarga doir moliyaviy, tijorat sirlari va texnologik yechimlar sir saqlanadi, shartnoma doirasidagi strategik axborotlarning raqobatchilarga oshkor bo‘lishini oldini olish uchun zarur chora-tadbirlar ko‘riladi va arbitraj jarayonlarining ayrim bosqichlarida yopiq eshittirishlar va maxfiy hujjatlar saqlab qolinadi. Mazkur islohot doirasida O‘zbekiston Respublikasi Investitsiyalar va tashqi savdo vazirligi tomonidan investitsiya shartnomalari reyestrini yuritish, ularning asosiy shartlari, davlat tomonidan berilgan imtiyozlar va kafolatlari,

⁸ Investitsiyalar va tashqi savdo vazirligi huzuridagi Xorijiy investitsiyalarni jalb qilish agentligining veb-sayti, “Investitsiyaviy loyihalarning amalga oshirilishi bo‘yicha ma‘lumotlar bazasi” bo‘limi.



shuningdek, jamiyat manfaatlariga oid boshqa masalalar haqida ochiq ma'lumotlar tizimini shakllantirish zarurdir.

Xorijiy investorlar bilan tuziladigan investitsiya shartnomalarining muhim elementlaridan biri, ularning nafaqat iqtisodiy daromad keltirish, balki mahalliy infratuzilmani rivojlantirishga ham xizmat qiluvchi huquqiy mexanizm sifatida ko'rilishidir. Investitsiya shartnomalarida hududning ishlab chiqarish va ijtimoiy infratuzilmasini rivojlantirish bo'yicha tomonlarning o'zaro majburiyatlari, chet ellik investorning texnologiyalarni joriy etish, mahalliy xodimlarni o'qitish va malakali ishchi kuchi yaratish bo'yicha majburiyatlari, chet el investori tomonidan loyiha tugagandan so'ng ham ijtimoiy ta'sirni davom ettirish (masalan, tashkilot xodimlarini o'qitish, ijtimoiy infratuzilmani saqlab qolish) kabi majburiyatlar nazarda tutiladi⁹. O.Tsegelnikning fikricha, davlat bilan tuziladigan investitsiya shartnomalarida qo'llab-quvvatlash choralari (imtiyoz va preferensiyalar) berish jarayoni faqat qonun hujjatlarida belgilangan tartibda, vakolatli davlat organining normativ-huquqiy hujjati orqali amalga oshirilishi kerak¹⁰. O'zbekiston amaliyotida ham investitsiya shartnomalari orqali imtiyoz va preferensiyalar berish to'g'ridan-to'g'ri muzokaraga asoslanadi, aniq qonun normalariga ko'ra, investitsiya qilish chog'ida taqdim etiladi. Shunindek, O'zbekiston Respublikasi hukumati bilan tuziladigan investitsiya shartnomalarida investitsiya faoliyati doirasida hududlarning o'ziga xos xususiyatlari va mavjud imkoniyatlarini inobatga olgan holda, investitsiyaga ko'proq muhtoj bo'lgan hamda investorlar uchun yanada qulay kafolat va imtiyozlar yaratadigan **“Investitsiya faoliyatining ustuvor obyektlari”** tushunchasini qonunchilikka kiritish maqsadga muvofiqdir. Chunki bunday huquqiy norma chekka hududlardagi investitsion ehtiyoj yuqori bo'lgan obyektlarga mablag'lar jalb etishga xizmat qilib, amaliy investitsiya loyihalari orqali ushbu hududlarning iqtisodiy rivojiga ijobiy ta'sir ko'rsatish imkonini yaratadi. Bu borada mutaxassis A. Mingazovaning ta'kidlashicha, bunday obyektlarning qonunchilikda alohida mustahkamlanishi, iqtisodiyotning rivojlanishga muhtoj bo'lgan sohalariga investitsiyalarni jalb etishga xizmat qiladi. Xususan, ana shunday obyektlarga

⁹ F. Zaynobiddinova. O'zbekiston Respublikasi Hukumat bilan tuziladigan investitsiya shartnomasining o'ziga xos xususiyatlari. “O'zbekiston qonunchiligi tahlili” jurnali. 2020/1. B. 105. // URL:

<https://drive.google.com/file/d/1dvx9UtEgUFiekWni-FJzmrEn8dl3gfPm/view>

¹⁰ Цегельник О.В. Инвестиционный договор с государством (Республикой Беларусь или административно-территориальной единицей) // Промышленно-торговое право. – 2006. – №2. – С. 57–60. URL:

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kapital kiritgan investorlar uchun qo‘shimcha imtiyoz va preferensiyalarni taqdim etish, ushbu hududni rivojlantirishda muhim ahamiyat kasb etadi hamda iqtisodiyotning tegishli tarmoqlarini ilgari surishda samarali vosita bo‘lib xizmat qiladi¹¹.

Xorijiy investorlar ishtirokida tashkil etilgan korxonalar uchun soliqlar va boshqa majburiy to‘lovlarga doir ayrim afzalliklar belgilangan muddatlarga taqdim etiladi. Shu bilan birga, bu kabi imtiyozlarning doimiy asosda amal qilishi mumkin emas. Eng asosiy jihatlardan biri shundaki, xorijiy investor bilan tuzilayotgan investitsiya shartnomasi doirasida unga boshqa bozor ishtirokchilaridan ustun mavqega ega bo‘lish imkonini beruvchi noaniq huquqlarni berish qat’iyan man etiladi. Bugungi kunda hukumat bilan tuzilayotgan investitsiya shartnomalarida nazarda tutilgan qo‘shimcha qo‘llab-quvvatlash choralarining shartnoma maqsadlari doirasidan tashqarida qo‘llanilayotgan holatlar ham uchramoqda. Masalan, ayrim xorijiy investorlar bojxona to‘lovlaridan ozod qilingan moddiy resurslarni o‘z nazoratidagi boshqa firmalarga o‘tkazib, ularni yuqori narxlarda sotmoqda yoki imtiyozli shartlarda mamlakatga olib kirilgan mulkni ishlab chiqarish ehtiyojlaridan tashqari maqsadlarda ishlatmoqda. Bu esa investitsiya shartnomasi shartlarining buzilishi holatlaridan biri sifatida baholanadi. Bunday holatlarning oldini olish maqsadida, imtiyoz va preferensiyalar taqdim etilgan investitsiya shartnomalarida ularning maqsadga muvofiqligini baholovchi monitoring mexanizmini joriy etish, shuningdek, monitoring natijalariga ko‘ra investitsiya shartnomasini bekor qilish tartibini qonunchilikda aniq belgilab qo‘yish maqsadga muvofiqdir.

O‘zbekiston Respublikasi Prezidentining 2019 yil 14 maydagi PF-5717-sonli Farmoni¹² va Vazirlar Mahkamasining 2019 yil 22 iyuldagi 616-sonli qaroriga muvofiq, Prezident huzuridagi Loyiha boshqaruvi milliy agentligi tomonidan “Investitsiya loyihalarini amalga oshirishni nazorat va monitoring qilish” avtomatlashtirilgan axborot tizimi joriy etilishi belgilangan¹³. Bu tizim quyidagi imkoniyatlarni yaratadi:

¹¹ Мингазова А.М., Договорное регулирование инвестиционной деятельности: автореф. дис, на соиск. учен. стел, к.ю.н.: спец. 12.00.03 / Казань 2017.- С. 23. // URL <https://www.twirpx.com/file/2162327/>

¹² O‘zbekiston Respublikasi Prezidentining “Investitsiya dasturini shakllantirish va amalga oshirishning sifat jihatidan yangi tizimiga o‘tish chora-tadbirlari to‘g‘risida”gi Farmoni Qonun hujjatlari ma’lumotlari milliy bazasi, 15.05.2019 y., 06/19/5717/3132-son; 18.08.2020 y., 06/20/6042/1190-son // URL:<https://lex.uz/docs/4336166>

¹³ O‘zbekiston Respublikasi Vazirlar Mahkamasining “Investitsiya loyihalarini nazorat va monitoring qilish sohasida axborot tizimini joriy etish va undan foydalanish bo‘yicha tashkiliy chora-tadbirlar to‘g‘risida”gi qarori. Qonun hujjatlari ma’lumotlari milliy bazasi, 23.07.2019 y., 09/19/616/3465-son / URL: <https://lex.uz/docs/4432862>



investitsiya loyihalari ustidan tizimli hisob, monitoring va nazoratni yuritish;
loyihalarning vaqtida bajarilishi, byudjeti va asosiy maqsadlariga erishilishini
nazorat qilish;

jalb etilgan va foydalanilgan investitsiyalar, shu jumladan, to‘g‘ridan-to‘g‘ri
xorijiy investitsiyalar hajmi haqida aniq ma’lumotlar shakllantirish;

loyiha natijalarini baholash va investitsiyadan keyingi bosqichda kutilgan
ko‘rsatkichlarga erishilganini kuzatish.

Vazirlar Mahkamasining “Eksport va investitsiyalarni rivojlantirish bo‘yicha
hukumat komissiyasi to‘g‘risidagi nizomni tasdiqlash haqida” gi qaroriga asosan esa
ushbu komissiyaga investitsiya loyihalarining samarali amalga oshirilishini
ta’minlash borasida ko‘plab funksiyalar yuklatilgan.

Yuqoridagi normativ-huquqiy hujjatlar tahlilidan kelib chiqib, shuni aytish
mumkinki, amaldagi tartibda asosan investitsiya loyihalarining amalga oshirilishi
e’tiborda bo‘lgan bo‘lib, ularni bajarishda asosiy hujjat sifatida tuzilgan investitsiya
shartnomasi shartlariga rioya etilishi masalasi yetarlicha aks ettirilmagan. Shuning
uchun qonunchilikda investitsiya shartnomalari shartlarining bajarilishi bo‘yicha
monitoring mexanizmini ishlab chiqish, ayniqsa davlat tomonidan qo‘shimcha
imtiyozlar, preferensiyalar, soliq va bojxona yengilliklari bilan ta’minlangan
loyihalarda bu imtiyozlarning maqsadli va samarali qo‘llanilishini baholash
imkonini beruvchi huquqiy asosni yaratish zarur. Shuningdek, ekologik xavfsizlik
investitsiya faoliyatining tarkibiy qismi sifatida ajralib turadi. Asosiy qonun -
O‘zbekiston Respublikasi Konstitutsiyasida ekologik xavfsizlikni ta’minlash
majburiyati aniq belgilangan bo‘lsa-da, amaliyotda ayrim investitsiya loyihalari
ekologik tahdidlarni keltirib chiqarmoqda. Shu bois, investitsiya shartnomalarida
alohida bo‘lim sifatida ekologik mas’uliyat va barqarorlik talablari nazarda tutilishi
maqsadga muvofiqdir. Shuningdek, vakolatli davlat organi tomonidan monitoring
o‘tkazilib, agar shartnomada ko‘zda tutilgan imtiyoz va preferensiyalar noto‘g‘ri
ishlatilgani aniqlansa, ushbu organ asoslovchi hujjatlar bilan birgalikda yozma
ogohlantirish yuborishi va shartnomani bekor qilish tartibi qonuniy asosda
mustahkamlanishi zarur. Hukumat bilan tuzilgan investitsiya shartnomasi bekor
qilingan taqdirda, investor unga ajratilgan imtiyozlar va preferensiyalar hisobiga
to‘lanmagan soliqlar va boshqa majburiy to‘lovlar bo‘yicha davlat budjetiga to‘liq
hisob-kitob qilib berishi lozim. Ammo agar investitsiya shartnomasi tomonlarning
o‘zaro roziligi asosida muddatidan oldin bekor qilinadigan bo‘lsa, tomonlar



o‘rtasidagi majburiyatlarning bajarilishi ham o‘zaro kelishuv asosida amalga oshiriladi. Bundan tashqari, investitsiya shartnomasi bekor qilingan yoki investitsiya loyihasi yakuniga yetkazilganidan so‘ng, investor o‘zining investitsion faoliyati natijasida olgan daromadlarini amaldagi qonunchilikka muvofiq soliqlar, yig‘imlar va boshqa to‘lovlar to‘lab bo‘linganidan keyin mustaqil tarzda tasarruf etish huquqiga ega bo‘lishi zarur. Bu investorlar uchun huquqiy kafolat sifatida alohida ahamiyat kasb etadi. Kapitalni qaytarish (repatriatsiya) bu – maxsus tartibga ega bo‘lgan jarayon bo‘lib, u orqali investor ilgari xorijga yo‘naltirgan mablag‘larini o‘z yurti hududiga qaytarib, yangi loyihalarda foydalanish imkoniyatiga ega bo‘ladi. Bunday ehtiyoj, odatda, investor mamlakatida yangi moliyaviy imkoniyatlar yuzaga kelganda yoki investitsiya kiritilgan davlatda siyosiy yoki iqtisodiy barqarorlik yomonlashganda paydo bo‘ladi. Ko‘pchilik hollarda kapital eksport qiluvchi mamlakatlar o‘z investitsiyalarining daromadliligini ta‘minlash uchun maxsus kredit va soliq siyosatini, shuningdek, turli kafolatlar va imtiyozlarni nazarda tutadi. Mutaxassislar fikricha, “ko‘pincha repatriatsiya jarayonida ilgari xorijga noqonuniy tarzda kapital chiqargan shaxslarga davlat amnistiya e‘lon qiladi”.¹⁴ Bunga zid ravishda, kapitalni qabul qiluvchi davlatlar esa ko‘pincha iqtisodiy inqiroz sharoitida ilgari jalb qilingan investitsiyani o‘z yurisdiksiyasiga qaytarishga doir cheklovlar joriy etadi.

Bundan tashqari, investitsiya shartnomasi tuzishda e‘tibor qaratilishi lozim bo‘lgan yana bir muhim jihat – ushbu shartnoma faqat “xorijiy investor” tushunchasi asosida tuzilishi va unga oid kafolat va qo‘llab-quvvatlash choralari faqat xorijiy investorlar uchun mo‘ljallanganligidir. Bu esa o‘z navbatida qonunchilikdagi bo‘shliq sifatida baholanadi. Amaliyotda esa bu holat, mahalliy investorlarning o‘z mablag‘larini aylantirish yo‘li bilan xorijiy investitsiya sifatida ko‘rsatib, imtiyozlarga ega chiqishga urinishlariga sabab bo‘lmoqda. Agar shunday turdagi investitsiya shartnomalari, masalan, kamida 10 million AQSh dollariga teng xorijiy investitsiya ulushiga ega bo‘lgan loyihalar bo‘yicha tuzilsa, bu shartnomalar orqali taqdim etiladigan imtiyoz va preferensiyalar hajmining ham ancha yuqori bo‘lishi tabiiydir. **Shu jihatdan, xorijiy investorlar qatorida mahalliy investorlar uchun ham teng shart-sharoitlar yaratish, xususan, foyda solig‘i, qo‘shilgan qiymat**

¹⁴ Laila Martin, Agatino Camarda. Best practices in tax amnesty and asset repatriation programmes. September, 2017 © 2017 Transparency International. URL: <https://knowledgehubtransparency.org/assets/uploads/helpdesk/>



solig‘i, mol-mulk solig‘i, bojxona to‘lovlari kabi soliq va bojxona preferensiyalarini bir xil asosda taqdim etish zarur.

XULOSA

Xulosa qilib aytganda, O‘zbekiston hukumati bilan tuziladigan investitsiya shartnomalari bu investitsiya loyihalarini amalga oshirishga qaratilgan bitim bo‘lib, davlat tomonidan qo‘shimcha kafolat va qo‘llab-quvvatlovchi choralarning taqdim etilishi bilan ajralib turadi. Bu holatda davlat, bir tomondan, suveren subyekt, ikkinchi tomondan esa fuqarolik munosabatlarining teng ishtirokchisi sifatida ikki turdagi funksiyani bajarmoqda. O‘zbekiston Respublikasida investitsiya shartnomalarini tuzish, ularni amalga oshirish va monitoring qilishga doir normativ-huquqiy baza shakllangan bo‘lsa-da, mavjud amaliyotda qator tizimli muammolar va bo‘shliqlar saqlanib qolmoqda. Xususan, investitsiya shartnomalarini tuzish tartibida ochiqlik, raqobat va jamoatchilik nazoratini ta‘minlash mexanizmlarining yetarlicha ishlab chiqilmagani, xorijiy investorlar bilan bevosita muzokaralarga asoslangan shartnomalar davlat manfaatlarini to‘liq aks ettirishga doimo xizmat qilmasligi mumkinligini ko‘rsatmoqda. Investitsiya shartnomalari orqali davlat tomonidan taqdim etilayotgan preferensiyalar va imtiyozlarning shaffofligi, ularning maqsadga muvofiqligi ustidan doimiy monitoringni yo‘lga qo‘yish zarurati mavjud. Shuningdek, ushbu shartnomalarning amal qilish jarayonida inson huquqlari, ekologik xavfsizlik, mahalliy infratuzilmani rivojlantirish kabi ijtimoiy manfaatlar ham inobatga olinishi lozim. Shu boisdan, O‘zbekiston Respublikasida investitsiya shartnomalarini tuzish jarayoniga oid qonunchilikni takomillashtirish, shartnomalar ustidan monitoring mexanizmlarini kuchaytirish, investitsiyaviy nizolarni hal etishda xalqaro arbitraj institutlarining roli va huquqiy mexanizmlarini yanada aniqlashtirish bo‘yicha zarur choralarni ko‘rish bugungi kunda dolzarb vazifalardan biridir.

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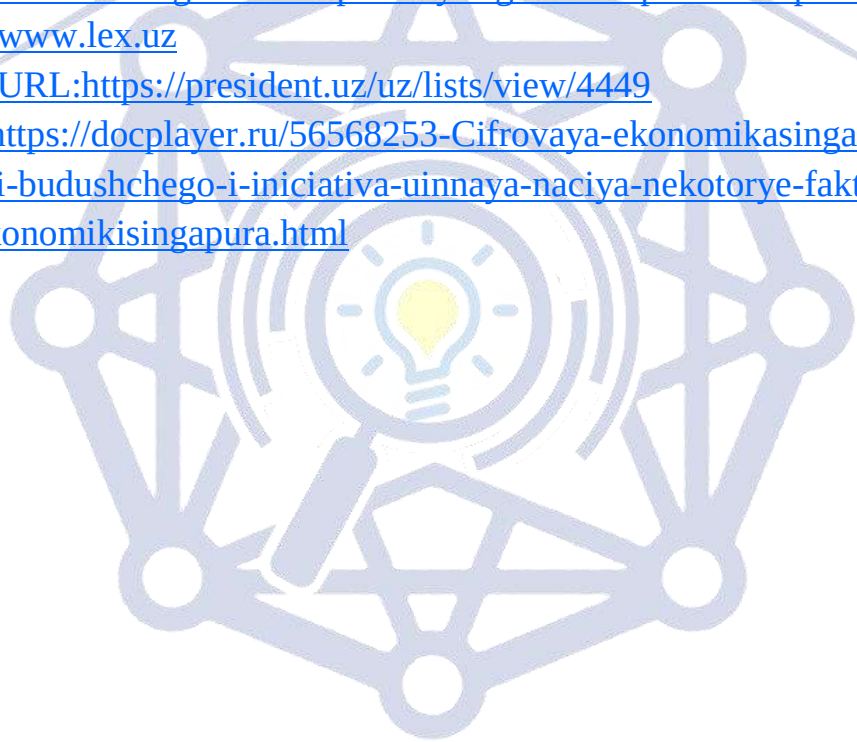
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O‘ZBEKISTON HUDUDIDAGI TABIIY FOSFORIT KONLARINI QAYTA ISHLASH ASOSIDA YUQORI SAMARALI MINERAL O‘G‘ITLAR ISHLAB CHIQUARISH TEXNOLOGIYASINI TAKOMILLASHTIRISH

Salimov Abdullajon Abdumutalipovich

Annotatsiya: Mazkur ilmiy maqola O‘zbekiston Respublikasi hududida mavjud bo‘lgan tabiiy fosforit konlarini chuqur qayta ishlash asosida yuqori samarali va iqtisodiy jihatdan maqbul bo‘lgan mineral o‘g‘itlar ishlab chiqarish texnologiyasini takomillashtirish muammolariga bag‘ishlangan. Tadqiqot davomida fosforitlarning mineralogik va kimyoviy tarkibi, ularning qayta ishlashga yaroqliligi, xususan, ammoniyli komponentlar bilan kompleks reaksiyalarga kirishish xususiyatlari o‘rganilgan. Shuningdek, tabiiy fosforit asosida diammofof, monoammoniy fosfat kabi o‘g‘itlarni olish bo‘yicha ilg‘or texnologik yechimlar ishlab chiqilgan. Mazkur yondashuv fosforitlarni to‘liq o‘zlashtirish, atrof-muhitga zararli ta’sirni kamaytirish va mamlakatning qishloq xo‘jaligi uchun strategik ahamiyatga ega bo‘lgan o‘g‘itlarni ichki imkoniyatlar hisobidan ishlab chiqarishni kengaytirishga xizmat qiladi.

Kalit so‘zlar: O‘zbekcha: Fosforit, qayta ishlash, mineral o‘g‘it, diammofof, monoammoniy fosfat, texnologik jarayon, ekologik xavfsizlik, xomashyo.

• O‘zbekiston hududidagi fosforit konlari va ularning xomashyoviy imkoniyatlari

O‘zbekiston hududida aniqlangan fosforit konlari tarkibida fosfor (P_2O_5) moddasi 12–20% atrofida bo‘lib, bu ko‘rsatkich ularni sanoat miqyosida qayta ishlash uchun o‘rtacha darajadagi xomashyo sifatida qaralishiga imkon beradi¹. Yirik konlar asosan Qizilqum cho‘li hududida, Navbahor, Tomdi, Forish va Nurata tog‘ tizimlari yaqinida joylashgan bo‘lib, ularda har xil granulometrik tuzilishdagi fosforit jinslari mavjud.

Bu konlardagi fosforitlar asosan apatit, frankolit, va kollofosfat kabi fosfat minerallari shaklida uchraydi. Shu bilan birga, ularning tarkibida kremniy oksidi

¹ Axmedov, R. va boshq. (2021). O‘zbekiston kimyo sanoatining xomashyo manbalari. Toshkent: Fan nashriyoti.

(SiO₂), alyuminiy oksidi (Al₂O₃), va ba’zida uglerodli moddalarning mavjudligi ularni oddiy mexanik ajratish orqali tozalashni murakkablashtiradi².

- **Fosforit asosida o’g’it ishlab chiqarish texnologik sxemasi**

Fosforit asosida murakkab o’g’it ishlab chiqarish jarayoni bir nechta asosiy bosqichlardan iborat:

- Maydalash va tasniflash

Tabiiy fosforit rudasining donadorligi texnologik jarayonlarga ta’sir qilgani sababli, uni dastlab mikron darajasida maydalash zarur. Shundan so’ng sirt maydoni oshadi va kislotali eritmalar bilan reaksiyaga kirishish tezlashadi.

- Kimyoviy faollashtirish (kislotalash)

Maydalangan fosforit sulfat yoki fosfat kislotasi bilan reaksiyaga kiritiladi. Bu bosqichda issiqlik chiqishi nazorat qilinadi va harorat 60–70°C darajada saqlanadi.

- Ammoniyash va neytrallash

Hosil bo’lgan fosfat kislotasiga ammiak yoki ammoniy selitrasi eritmasi qo’shib, kerakli reaksiya olib boriladi. Bu bosqichda pH darajasi va reaksiyaning davomiyligi o’g’it sifatiga ta’sir qiladi.

- Quritish, granulatsiya va sovitish

So’nggi mahsulot quritilib, kerakli donadorlikka keltiriladi. Granulalar sovutilgandan so’ng, qadoqlanadi.

Bu jarayonlarning har biri maxsus reaktorlarda, sirkulyatsiyali aralashtirgichlar yordamida amalga oshiriladi³.

- **Mahsulot sifatini baholash va samaradorligi**

Tajriba natijalari shuni ko’rsatadiki, O’zbekiston fosforitlarini ammoniy kislotali usulda qayta ishlash orqali P₂O₅ tarkibi 25-30% bo’lgan yuqori samarali diammofofos granulalari olish mumkin. Ushbu o’g’itlar eruvchanligi va tuproqda tarqalishi bo’yicha import o’g’itlardan qolishmaydi, hatto ba’zan ustun ham bo’ladi⁴.

² Jumanov, S. (2020). “Fosforit konlarining geokimyosi va ularni sanoatga tadbiiq etish imkoniyatlari.” Geologiya va mineral resurslar №2, 45–52.

³ Smirnov, A.N. (2019). Fosfatli o’g’itlar texnologiyasi. Moskva: Ximiya.

⁴ Nazarov, Z. (2023). “Fosforli o’g’itlar sifatini tahlil qilish metodikasi.” Agrokimyo va ekologiya, №1, 33–38.

Mahalliy xomashyo asosidagi o'g'itlar quyidagi afzalliklarga ega:

- ✓ Iqtisodiy tejamkorlik: Import xarajatlari yo'q, transport tannarxi kamayadi.
- ✓ Ekologik xavfsizlik: Chiqindilar nazorat qilinadi, zararli moddalar minimallashtiriladi.
- ✓ Qishloq xo'jaligida moslashuvchanlik: Mahalliy tuproq-tabiiy sharoitlarga mos laborator sinovlardan o'tgan.

•Texnologiyani sanoatlashtirish istiqbollari

Mazkur texnologiyani “Navoiyazot”, “Ammofos–Maxam–Chirchiq”, yoki “Uzkimyosanoat” tizimidagi boshqa korxonalarda joriy qilish orqali yiliga minglab tonna diammofofos va monoammoniy fosfat ishlab chiqarish mumkin. Bu esa O'zbekistonning agrokimyoviy suverenitetini ta'minlab, eksport salohiyatini oshirishga xizmat qiladi.

Xulosa

O'zbekiston hududida mavjud bo'lgan tabiiy fosforit konlari mamlakatning qishloq xo'jaligini yuqori sifatli mineral o'g'itlar bilan ta'minlashda muhim xomashyo bazasi bo'lib xizmat qilishi mumkin. Tadqiqotlar shuni ko'rsatdiki, ushbu fosforitlarni ammoniy birikmalari bilan modifikatsiyalash orqali o'simliklar uchun oson o'zlashtiriladigan shakldagi murakkab azot-fosforli o'g'itlar – xususan, diammofofos va monoammoniy fosfat olish mumkin.

Taklif etilgan texnologik model tarkibida fosforitlarni maydalash, kislotalash, ammoniylash, quritish va granulatsiyalash bosqichlari mavjud bo'lib, ularning har biri energetik va iqtisodiy jihatdan optimallashtirilgan. Bu model asosida ishlab chiqarilgan o'g'itlar nafaqat eksportga yo'naltirilishi, balki ichki ehtiyojlarni ham to'liq qondira oladi. Mazkur yondashuv respublika miqyosida agrokimyoviy mahsulotlar ishlab chiqarishning innovatsion bosqichga ko'tarilishiga, import o'rnini bosuvchi texnologiyalarni rivojlantirishga hamda O'zbekistonning agrosanoat barqarorligini ta'minlashga xizmat qiladi. Shu bilan birga, chiqindilarni kamaytirish, ekologik xavfsizlikni ta'minlash va xomashyoning to'liq o'zlashtirilishini kafolatlaydi.

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**Qurilish chizmachiligini o‘qitishda kompyuter texnologiyalarining roli:
innovatsion yondashuv va zamonaviy tendensiyalar.**

Yoqubboyeva Sevara Qurbondurdiyevna

Urganch davlat pedagogika instituti

Muhandislik grafikasi va dizayn nazariyasi

Mutahassisligi 1 bosqich magistranti

Annotatsiya. Mazkur maqolada qurilish chizmachiligini o‘qitish jarayonida zamonaviy kompyuter texnologiyalaridan foydalanishning didaktik imkoniyatlari va afzalliklari tahlil etiladi. AutoCAD, Revit, 3ds Max kabi dasturlar yordamida kasbiy ta’lim sifatini oshirish, talabalarning muhandislik fikrlashini shakllantirish va amaliy ko‘nikmalarini rivojlantirishga xizmat qiluvchi mexanizmlar ochib beriladi.

Kalit so‘zlar :Qurilish chizmachiligi, kompyuter texnologiyalari, AutoCAD, muhandislik fikrlash, innovatsion metodlar

Аннотация. В данной статье анализируются дидактические возможности и преимущества использования современных компьютерных технологий в процессе обучения строительному черчению. Раскрываются механизмы повышения качества профессионального образования с помощью таких программ, как AutoCAD, Revit, 3ds Max, формирования инженерного мышления и развития практических навыков студентов.

Ключевые слова: Строительное черчение, компьютерные технологии, AutoCAD, инженерное мышление, инновационные методы.

Abstract. This article analyzes the didactic potential and advantages of using modern computer technologies in the process of teaching construction drafting. It explores mechanisms that enhance the quality of vocational education through software like AutoCAD, Revit, and 3ds Max, helping to develop students’ engineering thinking and practical skills.

Keywords: Construction drafting, computer technologies, AutoCAD, engineering thinking, innovative methods.

Kirish:

Bugungi globallashuv va raqamli transformatsiya davrida ta'lim tizimi oldida zamonaviy texnologiyalarni ta'limga integratsiyalash vazifasi turibdi. Ayniqsa, qurilish sohasi uchun kadrlar tayyorlashda chizmachilik fanini o'qitishdagi yondashuvlar tubdan yangilanmoqda. An'anaviy usullar bilan bir qatorda AutoCAD, Revit, 3ds Max kabi dasturlar vositasida maktab, kollej va oliy ta'lim muassasalarida vizual, interaktiv o'qitish imkoniyati paydo bo'ldi. Mazkur maqola shu imkoniyatlarni chuqur tahlil qiladi hamda o'quv jarayoniga kompyuter texnologiyalarini samarali integratsiyalash mexanizmlarini ko'rsatib beradi.

Asosiy qism

1. Kompyuter texnologiyalarining o'quv jarayonidagi o'rni.

Bugungi kunda chizmachilikni o'qitishda kompyuter dasturlari o'quvchilarning nafaqat bilimlarini, balki amaliy ko'nikmalarini ham kuchaytiruvchi vositaga aylangan. AutoCAD yordamida talabalar binolar, infratuzilma elementlari va boshqa qurilish detallari bo'yicha aniqlik darajasi yuqori bo'lgan chizmalarni yaratishga o'rganadi. Revit esa binoning butun hayot aylanish davrini, ya'ni loyiha – qurilish – ekspluatatsiya bosqichlarini qamrab olgan modellashtirish tizimini taqdim etadi.

2. Talabalarni motivatsiyalash va kreativ fikrlashni rivojlantirish

Kompyuter texnologiyalari vositasida o'qitish o'quvchilarni fanlarga qiziqtirishda muhim omil hisoblanadi. 3D modellashtirish orqali real qurilish ob'ektlariga yaqin loyihalar ustida ishlash, o'z fikrini chizma orqali ifodalash, muammolarga amaliy yechimlar topishga imkon yaratadi. Bu esa o'quvchilarni ijodiy fikrlashga undaydi.

3. O'qituvchining roli va zamonaviy metodik yondashuvlar

Kompyuter texnologiyalari o'qituvchilardan ham yangicha pedagogik yondashuvni talab etadi. Endilikda o'qituvchi faqat bilim beruvchi emas, balki fasilitator, loyiha rahbari, texnologik yo'naltiruvchi rolini bajaradi. Shu sababli, pedagoglarning raqamli kompetensiyasini oshirish maqsadida malaka oshirish kurslari tashkil etilishi zarur.

4. Amaliyotga yo'naltirilgan o'quv loyihalari

Kompyuter yordamida chizmalar tayyorlashni o'rganish, qurilish sohasidagi haqiqiy loyihalarni modellashtirish orqali amalga oshirilmoqda. Bu esa nafaqat o'rgatish, balki o'rganuvchilarning tanqidiy fikrlashini, texnik savodxonligini ham

rivojlantiradi. Ayniqsa, AutoCAD va Revit dasturlarida o'rgatilgan loyiha asosida binoning elektr ta'minoti yoki kanalizatsiya tizimini modellashtirish orqali real kasbiy faoliyatga tayyorlaniladi.

Kompyuter texnologiyalarining qurilish chizmachiligidagi asosiy vositalari.

CAD dasturlari. AutoCAD, ArchiCAD, Revit kabi CAD (Computer-Aided Design) dasturlari qurilish loyihalarini chizish va modellashtirishda keng qo'llaniladi. Ular aniq, tez va ko'p qirrali chizmachilik ishlarini bajarishga yordam beradi, xatoliklarni kamaytiradi va loyihalarni qayta ishlashni osonlashtiradi.

3D modellashtirish. 3D modellashtirish orqali loyiha nafaqat chizmalar asosida, balki uch o'lchamli formatda yaratiladi. Bu talabalar va mutaxassislar uchun loyihaning tuzilishini yaxshiroq anglash imkonini beradi, shuningdek, dizaynda yuzaga kelishi mumkin bo'lgan muammolarni oldindan aniqlashga yordam beradi.

BIM (Building Information Modeling). BIM — bu qurilish jarayonlarini raqamli boshqarish tizimi bo'lib, loyiha ma'lumotlarini birlashtiradi va jamoaviy ishni samarali qiladi. BIM texnologiyasi yordamida loyihalar nafaqat chiziladi, balki qurilish jarayoni, resurslar va xarajatlar ham boshqariladi.

Virtual va kengaytirilgan reallik (VR/AR). VR va AR texnologiyalari qurilish loyihalarini virtual muhitda ko'rib chiqish, o'quvchilarga real sharoitlarda amaliy ko'nikmalarni shakllantirish imkonini yaratadi. Bu texnologiyalar o'quv jarayonining interaktivligini oshiradi va o'rganishni yanada samarali qiladi.

Innovatsion yondashuvlar.

Interaktiv o'quv dasturlari. Zamonaviy ta'limda interaktiv o'quv dasturlaridan foydalanish talabalarga nazariy bilimlarni amaliyot bilan uyg'unlashtirish imkonini beradi. Masalan, simulyatsiya dasturlari yordamida chizmachilik jarayonini qayta ko'rish va tahlil qilish mumkin.

Bulutli texnologiyalar. Bulutli xizmatlar loyihalarni masofadan boshqarish, ularni saqlash va bir nechta foydalanuvchi tomonidan bir vaqtda ishlash imkonini beradi. Bu esa hamkorlikda ishlashni rivojlantiradi va loyiha ustida ishni tezlashtiradi.

Zamonaviy tendensiyalar va o'quv jarayonidagi o'zgarishlar



Bugungi kunda qurilish chizmachiligini o‘qitishda quyidagi tendensiyalar kuzatilmoqda:

- Raqamli ko‘nikmalarni o‘rgatish ustuvorlik kasb etmoqda.
- Simulyatsiyalar va virtual mashg‘ulotlar soni ortmoqda.
- O‘quv dasturlari modullar asosida yaratilmoqda, bu esa talabalar ehtiyojlariga moslashishni osonlashtiradi.
- Onlayn ta’lim platformalari va mobil ilovalar kengaymoqda.

Xulosa

Xulosa qilib aytganda, qurilish chizmachiligini o‘qitishda kompyuter texnologiyalarini joriy etish ta’lim sifatini yangi bosqichga olib chiqmoqda. O‘quvchilar va talabalar real kasb muhiti bilan tanishib, raqamli chizma va modellashtirish ko‘nikmalarini egallaydilar. Bu esa ularning mehnat bozorida raqobatbardosh bo‘lishiga xizmat qiladi. Zamonaviy o‘qituvchining raqamli kompetensiyasi, o‘qitish metodikasining yangiligi va o‘quv dasturlarining texnologik integratsiyasi asosiy ustunlik hisoblanadi. Kelgusida ushbu yo‘nalishda ilmiy izlanishlar, metodik qo‘llanmalar va raqamli platformalarning kengaytirilishi sohani yanada rivojlantirishga xizmat qiladi. Kompyuter texnologiyalari qurilish chizmachiligini o‘qitishda zamonaviy, innovatsion va samarali yondashuvlarni ta’minlaydi. Ular talabalarni professional sohada raqobatbardosh qilishda, amaliy ko‘nikmalarni oshirishda katta ahamiyatga ega. Shu bois, ta’lim muassasalari o‘z dasturlarida ushbu texnologiyalarni keng joriy etishlari zarur.

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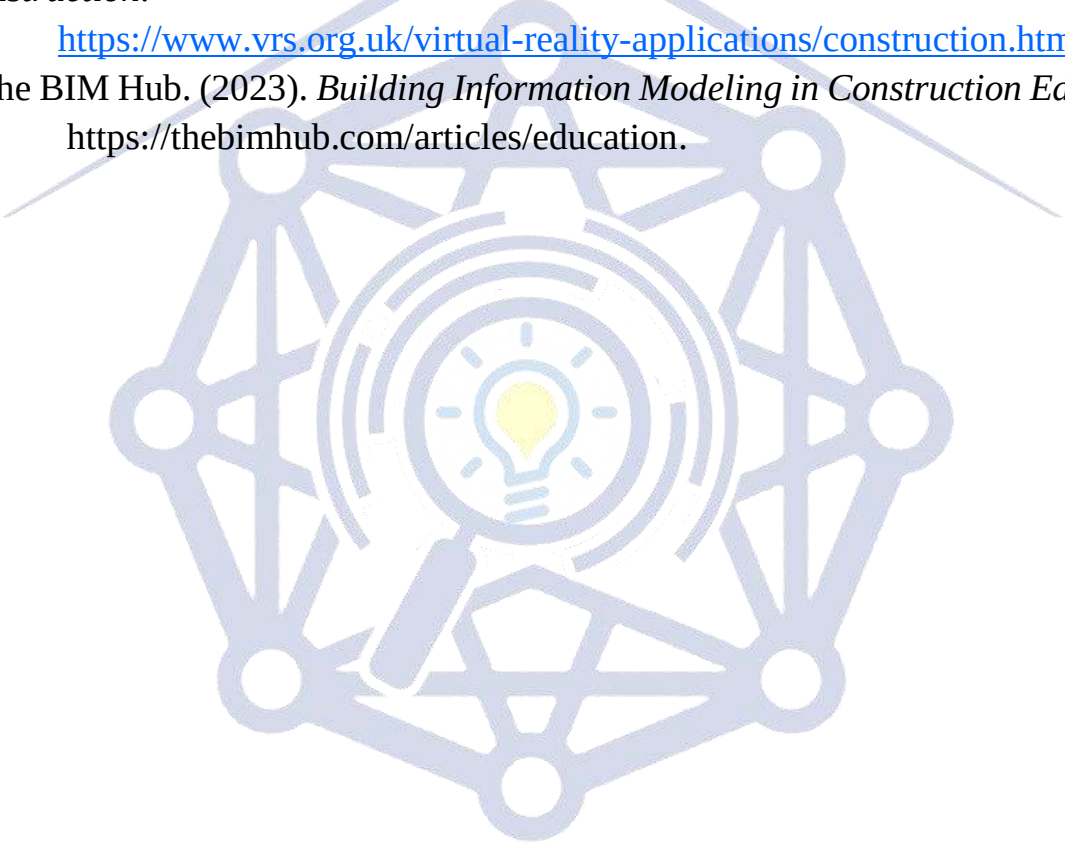
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Historical Evolution of idioms of life in the English language

Iskandarova Gulifor Muzaffar kizi

UrSU 2nd year student group 2303

E-mail: gulifor.iskandarova@bk.ru

Abstract: This article explores the historical evolution of "idioms of life" within the English language, tracing their origins, development, and semantic shifts from Old English to contemporary usage. By analyzing a corpus of key idioms related to human existence, experience, and destiny, this study investigates how societal changes, cultural influences, and linguistic innovations have shaped their forms and meanings over centuries. The research highlights the dynamic nature of idiomatic expressions as reflections of evolving worldview and provides insights into the enduring power of language to encapsulate universal human experiences.

Keywords: idioms, English language, historical linguistics, semantic change, etymology, life, metaphor, cultural evolution

Introduction: Idiomatic expressions, as fixed phrases whose meaning cannot be deduced from the literal meanings of their constituent words, form a vibrant and integral part of any language. Among these, idioms pertaining to the concept of "life" — encompassing existence, experience, stages of life, and the human condition — offer a particularly rich avenue for linguistic and cultural inquiry. These "idioms of life" are not merely linguistic curiosities; they are deeply embedded in the cognitive and communicative fabric of English speakers, reflecting shared understanding, beliefs, and often, profound philosophical insights. This article aims to provide a historical overview of these idioms, demonstrating how they have emerged, transformed, and endured across different periods of the English language. Understanding their evolution offers a unique lens through which to observe the interplay between language, culture, and human experience over time.

Relevance of Work: This research holds significant relevance for several reasons. Firstly, it contributes to the field of historical linguistics by providing a focused examination of a specific semantic domain within idiomatic expressions, thereby enriching our understanding of semantic change and lexical evolution in English. Secondly, it offers valuable insights for lexicographers and etymologists by tracing the origins and trajectories of specific idioms that are often taken for granted

in contemporary usage. Thirdly, for language learners and educators, comprehending the historical context of these idioms can deepen their appreciation and mastery of English nuances. Finally, from a broader cultural perspective, the study of "idioms of life" reveals how societies have conceptualized and articulated the universal experience of being alive, offering a unique window into past worldviews and societal values.

Purpose: The primary purpose of this article is twofold:

1. To identify and categorize a representative sample of "idioms of life" that have been prominent in the English language across its historical development (Old English, Middle English, Early Modern English, Modern English).
2. To analyze the diachronic evolution of these idioms, focusing on their etymological origins, semantic shifts, and the socio-cultural factors that have influenced their formation and survival.

Materials and Methods of Research: This study will employ a qualitative, diachronic approach, drawing upon historical linguistic methodologies.

• **Corpus Selection:** The primary materials will consist of a curated corpus of idiomatic expressions related to "life" from various historical periods of English. This will involve consulting:

- Historical dictionaries (e.g., Oxford English Dictionary, Middle English Dictionary).
- Literary texts from different periods (e.g., Beowulf, Chaucer, Shakespeare, King James Bible, canonical works from later periods) to identify idiomatic usage in context.
- Specialized historical idiom collections and etymological resources.

• **Methodology:**

- **Etymological Analysis:** Tracing the origins of each idiom, including its root words and initial conceptualizations.
- **Diachronic Semantic Analysis:** Examining how the meaning and connotations of idioms have evolved over time, noting any broadening, narrowing, amelioration, or pejoration of meaning.
- **Contextualization:** Analyzing the social, cultural, and historical contexts in which these idioms emerged and gained prominence, considering the influence of religion, philosophy, science, and everyday life.

○ **Comparative Analysis:** Where appropriate, comparing the evolution of similar "life" idioms across different periods or with idioms in other Germanic or Romance languages to highlight unique English developments.

Results and Discussion: This section will present the findings of the research, organized chronologically or thematically.

• **Old English Roots:** Discussion of early conceptualizations of life and any emergent fixed expressions (e.g., compounds, phrases related to "feorh," "lif"). While fully fledged idioms in the modern sense might be scarce, this section will identify precursor forms or conceptual metaphors.

• **Middle English Transformations:** Analysis of the influence of Norman Conquest, Latin, and French on the lexicon and idiomatic expressions. Examples might include phrases related to "worldly life," "soul life," or the concept of fate.

• **Early Modern English and the Shaping of Modern Idioms:** This period saw a significant flourishing of idiomatic language. The impact of the Renaissance, exploration, and the printing press will be discussed. Many current "life" idioms likely took shape or gained widespread currency during this era (e.g., "facts of life," "struggle for life," "walk of life"). The role of key authors like Shakespeare and the King James Bible in popularizing certain expressions will be highlighted.

• **Modern English Developments:** Examination of idioms emerging from the Industrial Revolution, scientific advancements, and contemporary society. Discussion of how existing idioms have adapted or acquired new nuances (e.g., "a new lease on life," "the school of hard knocks," "life in the fast lane").

• **Thematic Grouping:** Beyond chronological progression, results could be grouped thematically:

- Idioms related to the beginning and end of life.
- Idioms describing stages and experiences of life.
- Idioms expressing the challenges and triumphs of life.
- Idioms related to the quality or essence of life.

• **Semantic Shifts and Metaphorical Underpinnings:** Detailed analysis of how the underlying metaphors of these idioms have functioned and changed. For instance, how "life as a journey," "life as a struggle," or "life as a game" metaphors have manifested in idiomatic expressions.

• **Cultural Reflections:** Discussion of how the evolution of these idioms reflects changing cultural values, societal priorities, and philosophical outlooks concerning human existence.

Conclusion: The historical evolution of "idioms of life" in the English language provides compelling evidence of language's dynamic nature and its profound connection to human experience and cultural change. From the rudimentary expressions of Old English to the nuanced and diverse idioms of today, these phrases have consistently served as linguistic containers for universal truths about existence. This study has demonstrated how external influences, internal linguistic processes, and the creative spirit of language users have shaped these vital expressions. The enduring presence and adaptability of "idioms of life" underscore their fundamental role in English communication, offering not only efficiency but also depth and resonance in articulating the complexities of the human condition. Future research could delve deeper into regional variations, specific literary influences, or the cross-linguistic comparison of "life" idioms.

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MUNDARIJA

№	Maqola nomi va muallif(lar) F.I.SH.	Betlar
1.	MARK TVENNING “GEKLBERRI FINNING BOSHIDAN KECHIRGANLARI” ROMANIDA BOLALAR OBRAZI VA XARAKTERINING IFODASI Sattarov Farrux Nuridinovich	8-19
2.	A COMPARATIVE LINGUACULTURAL STUDY OF METAPHORS IN ENGLISH AND UZBEK IDIOMS AND PROVERBS Halimova Shakhlo Hisomiddin kizi Musayeva Dilsuz Tuychievna	20-26
3.	BARQAROR RAQAMLI EKOTIZIMLAR SHAROITIDA TURIZM KOMPANIYALARIDA MARKETING STRATEGIYALARINI BOSHQARISHNING INNOVATION- PARADIGMATIK ASOSLARI Mo‘ydinjonova Durdonaxon Ilhomjon qizi Boyqo‘ziyeva Gulsanamxon Adxamovna	27-32
4.	DIABETIK NEFROPATIYA RIVOJLANISHINING PATOGENETIK MEKANIZMLARI Raximiddinov G‘.S., Tursunova L.D., Jabbarov O.O.	33-49
5.	Автоколебания линейного консольного стержня Мансуров Мухсин Маннонович	50-55
6.	O‘ZBEKISTONDA VIRUSLI GEPATIT A: EPIDEMIOLOGIK DINAMIKA VA PROFILAKTIK STRATEGIYALAR Matnazarova G.S., Saidkasimova N.S., Ismoilov O.D.,	56-61



7.	TUPROQLARNING SHO'RLANISHI BARTARAF ETISH CHORA-TADBIRLARI O.M.Yusupova	62-68
8.	Такрорий кунгабоқар экинини зовур сувлари билан суғоришнинг тупрокни хажм массасига таъсири У.Муродов У.А.Жураев О.М.Юсупова	69-74
9.	BOSHLANG'ICH SINF O'QUVCHILARINING TASAVVURI VA TAFAKKURINI KENGAYTIRISHDA BADIY ASARLARNING O'RNI Otabayeva Xusniya Sharofiddin qizi	75-79
10.	“O'ZBEKISTON – 2030” STRATEGIYASI, XOTIN- QIZLARNI QO'LLAB-QUVVATLASHGA QARATILGAN IMKONIYATLAR ESHIGI Xusanova Shohida Alibek qizi	80-85
11.	ПОЛИПОЗ РИНОСИНУСИТ БЕМОРЛАРДА БАЪЗИ ДАВО УСЛУБЛАРИНИНГ САМАРАДОРЛИГИ Қаршиев Бобир Ботир ўғли, Назаров Сухраб Ўлмас ўғли, Ғаниев Дастон Нурали ўғли	86-96
12.	Kredit bozorlarining iqtisodiy rivojlanishga ta'siri va defolt xavfi No'monjonova Shoxsanam Muzaffar qizi	97-102
13.	"Teri-tanosil infeksiyasi" to'g'risida Ziyodullayeva Iroda Baxriddinovna	103-110



14.	СОВРЕМЕННЫЕ ПОДХОДЫ К ЛЕЧЕНИЮ ХРОНИЧЕСКОГО АТРОФИЧЕСКОГО ФАРИНГИТА РИНИТОМ Хушвакова Нилуфар Джуракулова Очилов Тоир Муродович	111-114
15.	СОВРЕМЕННЫЕ ПРИНЦИПЫ ЛЕЧЕНИЯ ХРОНИЧЕСКОГО АТРОФИЧЕСКОГО РИНОСИНУСИТА Хушвакова Нилуфар Джуракулова Очилов Тоир Муродович	115-120
16.	SPORT TELEKANALIDA SPORT JURNALISTLARI VA ULARNING YANGILIKLAR UZATISH TEZLIGI Sadetova Ilmira Oralbaevna	121-124
17.	MUSIQASHUNOSLIKDA IBN SINONING O‘RNI Toshboyeva M.	125-131
18.	Shimoliy Amerika davlatlari mavzusini o‘qitishda interfaol ta‘lim metodlaridan foydalanish Abdupattoyeva Muslima	132-135
19.	MAKTABGACHA YOSHDAGI BOLALARNING KOGNITIV RIVOJLANTIRUVCHI FAOLIYATIGA TARBIYACHINING POLIFUNKSIONAL YONDASHUVI M.R.Rahimberganova	136-139
20.	RUS VA O‘ZBEK MAQOLLARI DUNYO TIL MANZARASINING AKS ETTIRISHI SIFATIDA: LINGVOKULTUROLOGIK TAHLIL	140-148



	Davlatmurotov Siroj Ravshanbekovich	
21.	EFFICIENCY AND SAFETY OF USING “OZONE” IN THERAPY OF PATIENTS WITH CHRONIC TUBERCULOSIS OF THE MIDDLE EAR IN PATIENTS WITH PULMONARY TUBERCULOSIS Iskandarova Shahina Khamitovna	149-158
22.	BLOGING: ZAMONAVIY AXBOROT MAYDONINI SHAKLLANTIRUVCHI KUCH Iroda Murodjonova	159-163
23.	ИЗУЧЕНИЕ МИКРОБНОЙ ФЛОРЫ ГНОЙНОЙ РАНЫ ПРИ ФЛЕГМОНАХ ЧЛО У БЕРЕМЕННЫХ Шадиев Саъдулла Самехжанович Усманов Рахматулло Файзуллаевич	164-173
24.	QORAQALPOG‘ISTON SHAROITIGA MOSLASHGAN DARAXTLAR Ametova Sapargul Berdimuratovna Yo‘ldoshova Dilnoza Bahodir qizi	174-179
25.	The Influence of Natural and Climatic Conditions on the Architectural Development of Cities Abbosova Mehribon Sabir kizi	180-190
26.	Accessible Furniture and Interior Design: What to Consider Kurbanova Maksuda Karshiyevna	191-204
27.	MAKHALLA - THE DISAPPEARING HISTORICAL APPEARANCE OF OLD TASHKENT Sereyeva Guljazira Adilbaevna	205-212



28.	O‘zbek teatri san’ati va dramaturgiyasining shakllanishida Abdulhamid Sulaymon o‘g‘li Cho‘lponning o‘rni. Shavkatov Sardor Xurshid o‘g‘li	213-222
29.	Психолого-педагогические основы мотивации к изучению русского языка Касимова Камила Махаммаджоновна	223-229
30.	GLOBAL PROBLEMS IN THE TEXTILE INDUSTRY AND THEIR SOLUTIONS Rakhimjonov Azizbek Ravshanbek ugli	230-235
31.	THEORETICAL ANALYSIS OF THE FACTORS AFFECTING THE TENSION OF TANDA THREADS Rakhimjonov Azizbek Ravshanbek ugli	236-241
32.	Kalsiy elementining miqdori o ‘zgarishi natijasida kelib chiqadigan kasalliklar. Dilmurodov Fuzayljon Gulmurod o‘g‘li¹ Dilmurodova Fayoz Gulmurod qizi²	242-246
33.	Методы объективной оценки качества цифровых телевизионных изображений для прикладного телевидения Хайдаралиева Хилола Фарход кизи Суюнов Шохижахон Холмумин угли	247-253
34.	Интеграция ИИ в системы обработки видеосигналов Суюнов Шохижахон Холмумин угли	254-260
35.	Определение эффективности очистки по технологии 1ВП и усовершенствование очистного оборудования	261-265



	3. Холикова	
36.	АНАЛИЗ ДАВЛЕНИЯ ВОЗДУХА ПРИ ТРАНСПОРТИРОВКЕ ХЛОПКА-СЫРЦА ПО ПНЕВМОТРАССЕ 3. Холикова	266-270
37.	ОПРЕДЕЛЕНИЕ ПОКАЗАТЕЛЕЙ КАЧЕСТВА ШЕРСТИ Тоштемиров Косимжон Абдуллахоевич	271-274
38.	ОПРЕДЕЛЕНИЕ ПОКАЗАТЕЛЕЙ КАЧЕСТВА ШЕРСТИ Тоштемиров Косимжон Абдуллахоевич	275-281
39.	IMPROVING THE EFFICIENCY OF THE TECHNOLOGY OF CLEANING SEED COTTON FROM SMALL IMPURITIES Ogiloy A. Bakhtiyorova	282-285
40.	СОВРЕМЕННОЕ СОСТОЯНИЕ И ПЕРСПЕКТИВЫ РАЗВИТИЯ РЕЛИГИОЗНОГО ПАЛОМНИЧЕСТВА Абдухалилова Хуршидабону Содикжон қизи	285-290
41.	АНАЛИЗ КОРМОВОЙ БАЗЫ И ПРОИЗВОДСТВЕННОГО ПРОЦЕССА В ШЕЛКОВОДСТВЕ Тоштемиров Косимжон Абдуллахоевич	291-296
42.	O‘zbek va nemis tillaridagi kolorinim tarkibli frazologik birliklarning etimologik xususiyatlari va semantik jihatlar Otayeva Karomatxon Matnazar qizi	297-302



	Sarayeva Rayhon Bobojonovna	
43.	Қадимги Хоразмнинг ижтимоий-иқтисодий муносабатлари, этник жараёнлари ҳамда дафн маросимлари таҳлили (археологик тадқиқотлар манбалари асосида) РАХИМОВ ШИХНАЗАР БЕКТУРДИЕВИЧ	303-309
44.	ЖИСМОНИЙ ТАРБИЯ ТИЗИМИДА ХАЛҚ ЎЙИНЛАРИНИНГ АҲАМИЯТИ Тангиров Давлат Туғилович	310-313
45.	1XK rusumli paxtani mayda iflosliklardan tozalash uskunasi takomillashtirish Yu.Ergashov M.Babayeva X.Jo‘rayeva	314-318
46.	BOSHLANG‘ICH SINF GRAMMATIKA VA IMLO DARSLARIDA QIZIQARLI O‘YINLARDAN FOYDALANISH Shomurotova Sevinchoy San‘at qizi,	319-326
47.	BOSHLANG‘ICH SINF GRAMMATIKA VA IMLO DARSLARIDA QIZIQARLI O‘YINLARDAN FOYDALANISH Shomurotova Sevinchoy San‘at qizi,	327-332
48.	ТЕХНОЛОГИЧЕСКИЙ АНАЛИЗ ОБОРУДОВАНИЯ МАРКИ 1PU ДЛЯ УЛАВЛИВАНИЯ ТЯЖЁЛЫХ ПРИМЕСЕЙ НА ХЛОПКООЧИСТИТЕЛЬНЫХ ПРЕДПРИЯТИЯХ Имамназаров Хуршидбек Хушназар огли Ахмадалиева Сарвиноз Хилолиддиновна	333-336

49.	IMPROVING COLOSSAL GRID OF 5LP LINTING TECHNOLOGY PROSESSES AND INITIAL IMPROVEMENT Z. Kholiqova	337-341
50.	ПНЕВМОТРАНСПОРТ ОРҚАЛИ ТАШИЛАЁТГАН ПАХТАНИ ҚУВУРНИНГ УЗУНЛИГИ БЎЙИЧА ҲАВО ЗИЧЛИГИНИ ЎЗГАРИШИ НАЗАРИЙ ТАҲЛИЛИ Д.У.Турғунов, Б.Қ.Қобилов	342-345
51.	NAM MATERIALLARNI QURITISH TEKNOLOGIYALARI TAHLILI Q.O. Toshmirzayev N.Sharipova	346-350
52.	Vizual mediata’lim G’iyasova Azizaxon Muratovna Xoliqberdiyeva Rayhona Sanjarbek qizi	351-355
53.	INTERBANK ACCOUNTING SYSTEM Berdiyeva Aziza Qalandar qizi	356-361
54.	ИҚТИСОДИЁТНИ СОЛИҚЛАР ОРҚАЛИ РИВОЖЛАНТИРИШ ВА ТАРТИБГА СОЛИШ МЕХАНИЗМИ МОҲИЯТИ Бабахонов Жафар Мухиддинович	362-367
55.	O’BEKISTONDA YURIDIK SHAXSLAR FOYDASINI SOLIQQA TORTISHNING JAHON TAJRIBASI Babaxonov Ja’far Muhiddinovich	368-374



56.	IMAGE DENOISING AND RECONSTRUCTION IN MEDICAL IMAGING Khatamov Orif Yusupovich	375-379
57.	BASED ON TECHNOLOGICAL PARAMETERS OF IMPROVED COTTON SEPARATORS Maxmudova Gulshanoy Ozodjon qizi	380-389
58.	The Role of Civil Society Organizations in Strengthening Parliamentary Oversight in Uzbekistan Azamat Norov	390-394
59.	Assessment Techniques for English Language Learners: Enhancing Equity and Accuracy in Language Evaluation Egamberdieva Khusnora	395-399
60.	Enhancing Educational Effectiveness: Strategies to Improve Prediction Skills, Motivation, Classroom Dynamics, and Homework Completion Sodiqjonova Gulhayo Akbar qizi	400-404
61.	RESEARCH ON THE PRODUCTION OF MEDICAL SUITS BASED ON FLAX FIBER FABRICS Isroilova Navruza Bakhtiyorjon kizi	405-409
62.	Солиққа тортишнинг ташқи савдодаги ўрни: назарий ва амалий ёндашувлар Алмурадов Неъмат Абдуллаевич	410-414
63.	ANALYSIS OF MODERN METHODS OF PRODUCT PROCESSING IN THE LEATHER-SHOE INDUSTRY Raxmonova Malohat Mirkomilovna	415-417



64.	APPLICATION OF METHODS FOR CONTROLLING AND REDUCING YARN DEFECTS IN A SPINNING PLANT. Urishev M.M	418-423
65.	Development of the technology of preliminary processing of flax plant, long and short fiber extraction in the territory of Fergana region Urishev Murodjon Musulmonqul ogli	424-433
66.	O'ZBEKISTONDA SOLIQ TIZIMIDAGI ISLOHOTLAR DJURAYEV ANVAR MEYLIEVICH	434-437
67.	TOLALI VA YOG'LI ZIG'IRNI FARG'ONA VILOYATIDA YETISHTIRISHNING IMKONIYATLARI VA AHAMIYATI A.O.Ibragimov M.M.Odilov	438-444
68.	ANALYTICAL STUDY AND FORMATION OF THE ASSORTMENT OF WOMEN'S LIGHTWEIGHT CLOTHING Isroilova Navruza Bakhtiyorjon kizi	445-451
69.	RAQAMLI TEXNOLOGIYALARNI IQTISODIYOTGA JALB QILISHNING MOLIYAVIY JIHATLARI SHODIYEV ODILJON SALIM O'G'LI	452-458
70.	Analysis of the design of stone holders in cotton cleaning processes Imomnazarov Khurshidbek Khushnazar's boy Tojimatova Feruza Mamaro'zi's girl	459-463



71.	ERGONOMIC AND AESTHETIC APPROACHES IN THE DEVELOPMENT OF CHILDREN'S CLOTHING MODELS Yuldashaliyeva Zulayho Olimjon kizi	464-467
72.	RAQAMLI DIZAYN TEXNOLOGIYALARIDA KIYIM BALANSINING NAZORATI R.A. Berdiyeva	468-475
73.	THE IMPORTANCE OF THE IMPACT OF FIBER DEFECTS IN THE YARN PRODUCTION PROCESS Mahmudova Gulshanoy Ozodjon kizi	476-480
74.	MOLIYA BOZORINI RIVOJLANTIRISHDA MOLIYAVIY TEXNOLOGIYALARNI JORIY ETISH YO'NALISHLARI SHODIYEV ODILJON SALIM O'G'LI	481-484
75.	Opportunities and importance of growing linseed fiber in the Fergana Valley A.O.Ibragimov	485-489
76.	PAREMIOLOGIK MATNLARNING KOMMUNIKATIV-PRAGMATIK XUSUSIYATLARI Egamberdiyeva Yulduz Bahodir qizi	490-493
77.	SENSORLI IPLAR YORDAMIDA SMART TRIKOTAJ MATOLARNING HARAKATGA SEZGIRLIGI: REABILITATSIYA VA SPORT UCHUN QO'LLANILISHI Tojaliyev Davronbek O'rinboy o'g'li Xomidov Voxidjon Obidovich	494-498



78.	METHODS OF MOIST-HEAT TREATMENT OF CLOTHES AND ANALYSIS OF THE EQUIPMENT USED IN THEM Tursunova Khilola Shukhratjon kizi	499-503
79.	Tabiiy ipakdan yangi turdagi to‘qimalar va ularni ishlab chiqarish takomillashtirilgan resurstejamkor texnologiyasini yaratishning nazariy asoslari Xomidov Voxidjon Obidovich	504-507
80.	Alternative Ways of Starting Classes, Ending Classes, and Deciding on a Syllabus in Language Education Nazokat Sayfullayeva Abdusalim qizi	508-511
81.	NOFILOLOGIK YO'NALISH TALABALARIGA INGLIZ TILINI RAQAMLI TEXNOLOGIYALAR ASOSIDA O'QITISH METODIKASINI TAKOMILLASHTIRISH TEXNOLOGIYASI Xolbo'tayeva Moxinur Temurboy qizi	512-516
82.	YOSHI KATTA AYOLLAR UCHUN "GARDEROB" TO'PLAMINI ISHLAB CHIQISH Yaxyojonova Mohidil Husan qizi	517-523
83.	ПАХТАНИ ПНЕВМОТРАНСПОРТГА ҒАРАМ БУЗГИЧ-ТАЪМИНЛАГИЧ ЁРДАМИДА УЗАТИШНИНГ НАЗАРИЙ ТАҲЛИЛИ Саттаров Нурилло Музаффар ўғли	254-528
84.	ПЕРСПЕКТЫ СОЗДАНИЕ ТУТОВЫХ ПЛАНТАЦИИ В РЕГИОНАХ С НЕБЛАГОПРИЯТНЫМИ МЕЛИОРАТИВНЫМИ СОСТОЯНИЯМИ ПОЧВ, КАК КОРМОВОЙ БАЗЫ Мухамадрасулов Шамсиддин Хасанович	529-532
85.	ТЕХНОЛОГИЯ ПРЯДЕНИЯ ИЗ ЧИСТОЙ ШЕРСТИ Тоштемирова Косима Абдулхаевича	533-537
86.	MAQOL VA MATALARNING STRUKTURAVIY-SEMANTIK XUSUSIYATLARI	538-543



	Maxsudova Fayzilat Shaxabovna	
87.	ILMIY PARADIGMADA “BAXT” KONSEPTI Valieva Noiba Abbasxonovna	544-553
88.	GIPS ASOSIDAGI QURUQ QURILISH QORISHMASI ISHLAB CHIQUARISH TEXNOLOGIYASINI TAKOMILLASHTIRISH Quziboyev Shoirjon Shavkat o‘g‘li Sharipov Islomjon Qaxramonjon o‘g‘li	554-559
89.	Такрорий ипак қурти боқиш усулида пилла етиштириш ва уларни қайта ишлов бериш жараёнларига тайёрлаш Ниязалиева Мухайё Махмудовна	560-564
90.	Такрорий ипак қурти боқиш усулида пилла етиштириш ва уларни қайта ишлов бериш жараёнларига тайёрлаш Ниязалиева Мухайё Махмудовна	565-573
91.	New innovative technologies and solutions of cotton from small contaminants Nishonov Islombek Abdumuxtor o‘g‘li	574-578
92.	Kurash bo‘yicha murabbiylik faoliyatining zamonaviy yondashuvlari: Ta’limda interfaol metodlar, murabbiy va sportchi o‘rtasidagi kommunikatsiya Ochilova Sarvinoz Salim qizi Sarvinoz Salim qizi Ochilov	579-583
93.	Yashar Kamol asarlaridagi folklor unsurlari, ramzlar va ularning tarjimalarda berilishi Shodmonova Dilfuza	584-589
94.	FARG‘ONA VODIYSIDA ZIYORAT TURIZIMIDAN FOYDALANISH MASALALARI Abdimovminov Tog‘oy Nazar Abdinaxat o‘g‘li Xoliqov Xasanjon Imomnazar o‘g‘li	590-597
95.	LINGUISTICS AS SCIENCE ABOUT LANGUAGE	598-603

	Adilova Zilola Xushnudovna	
96.	КУЛЬТУРНО-ЯЗЫКОВЫЕ ОТНОШЕНИЯ В ОБОГАЩЕНИИ ЛЕКСИКИ УЗБЕКСКОГО ЯЗЫКА Арипджанова Ш.Г	604-609
97.	KANOP O‘SIMLIGI TARIXI UNING RIVOJLANISHI HAQIDA UMUMIY MA’LUMOTLAR Mirboboyeva Gulxayo	610-614
98.	MODULLI TA’LIM TEXNOLOGIYASI KELIB CHIQISHI VA TAMOYILLARI Dilshodbekova Mashrabxon Dilshodbek qizi	615-621
99.	IQBOL MIRZO ASARLARINI O‘QITISHNING TARBIYAVIY AHAMIYATI (“DARAXTLAR” SHE’RI MISOLIDA) Xudayberganova Diana Vladimirovna,	622-624
100.	ТЕХНОЛОГИЧЕСКИЙ АНАЛИЗ СЕПАРАТОРА СС-15А, ИСПОЛЪЗУЕМОГО НА ХЛОПКОПРИЁМНЫХ ПУНКТАХ Хуршидбек Имомназаров Ахмадалиева Сарвиноз Хилолиддиновна	625-630
101.	SURXONDARYO VILOYATIDAGI SPORT VA EKOTURISTIK MASKANLAR Hamrayeva Dilbar Hamza qizi	631-635
102.	Charm poyabzal chiqindilaridan samarali foydalanish usullari. Методы эффективного использования отходов кожаной обуви. Methods for effective use of leather shoe waste. A.O.Xomidjonov M.A.Jumayeva	636-639
103.	O‘zbek va nemis tillarida hayvon va o‘simliklar bilan bog‘liq paremiyalarning tarjima muammolarini tahlil qilish	640-644

	Raximova Malika Sultonovna M.B.Tillayeva	
104.	Mintaqada investitsion faollikni oshirishda yashil iqtisodiyotning ahamiyati Masharipov Sardorbek Farxadovich	645-654
105.	EMOTSIONAL INTELLEKT VA UNING KUNDALIK HAYOTDAGI AHAMIYATI ISHMATOVA MAFTUNA NURMUHAMMEDOVNA	655-660
106.	TIBBIYOT TALABALARINI O‘QITISHDA VIRTUAL REALLIK TEXNOLOGIYALARIDAN FOYDALANISH Egamov Sultonjon Malikovich Xo'jamurodov Jaloliddin Eldor O'g'li	661-665
107.	Yurak ishemik kasalligi,surunkali buyrak yetishmovchiligi va 2 tip qandli diabet bilan og‘rigan bemorlarni hayot sifati xususiyatlarini o'rganish Shoymurodova Gulasal Baxtiyor qizi Nuritdinova Sevara Karimovna Tulyaganova Dildora Karimovna	666-669
108.	BOLALAR ADABIYOTINING JAHON ADABIYOTIDAGI AHAMIYATI VA UNING RIVOJLANISHI Mamarasulova Shoiraxon Maxammad qizi	670-684
109.	YADRO ITQITUVCHILARDA SPORT NATIJALARINING JISMONIY SIFATLARGA BOG‘LIQLIGINI TADQIQ ETISH E.A.Erkayev	685-689
110.	Yengil atletika uloqtirsh turlarida sport mashg‘uloti nazariyasi va metodikasining rivojlanishini tahlil qilish E.A.Erkayev	690-695
111.	O‘SMIR TAEKWANDOCHILARINING JISMONIY TAYYORGARLIGINI RIVOJLANTIRISH Abdufattoyev Abrorjon Abdurahmon o‘g‘li	696-700

112.	O‘ZBEKISTONDA MOLIVAVIY HISOBOTLARNING XALQARO STANDARTLARIGA O‘TISHNING AFZALLIKLARI VA BU BORADAGI ILK ISLOHOTLAR G'ofurova Sadoqatxon G'ayratjon qizi	701-708
113.	Nishotiyning “Husn-u Dil” dostonida tasavvufiy va ma’rifiy terminlar Shernazarova Gulshan Abdullayevna	709-714
114.	Naive Bayes klassifikatori: ehtimollar nazariyasi asosida C# tilida modellashtirish Ismonjanova Sumbula Sherzod qizi	715-722
115.	H-2274 pomidor navi urug‘ining unuvchanligi Ismayilova I. dotsent, Kenjayeva D., magistrant,	723-725
116.	SWOT va PEST tahlillari asosida loyiha xavflarini baholash Husanova Dilnura Mamarajab qizi	726-732
117.	FARZAND YO‘QOTGAN OTA-ONALARNING PSIXOLOGIK TIKLANISH BOSQICHLARI VA ULARNI QO‘LLAB-QUVVATLASH MEXANIZMLARI Ravshanova Gavharoy Xolmurodovna	733-736
118.	<u>ВЫРАЖЕНИЕ ВРЕМЕНИ ГЛАГОЛОВ В РУССКОМ ЯЗЫКЕ В УСТНОЙ РЕЧИ И ЕГО ДИФФЕРЕНЦИАЛЬНЫЕ ОСОБЕННОСТИ</u> Салимова Камила Бахридиновна	737-743
119.	THE WORK OF OYBEK “NAVAI” AND EXPLANATION OF NATIONAL COLOR Jumayeva Shahlo Shokirovna	744-747
120.	The Importance of Didactic Games in Developing Reading Skills of Primary School Students Yusupbayeva Lobar Alisherovna	748-751
121.	O‘zbekiston Respublikasida investitsiya shartnomalari	752-766

	va arbitraj institutlarini takomillashtirish masalalari Nurmuxammedova Farruxa Faxriddin qizi	
122.	O‘ZBEKISTON HUDUDIDAGI TABIIY FOSFORIT KONLARINI QAYTA ISHLASH ASOSIDA YUQORI SAMARALI MINERAL O‘G‘ITLAR ISHLAB CHIQRISH TEXNOLOGIYASINI TAKOMILLASHTIRISH Salimov Abdullajon Abdumutalipovich	767-770
123.	Qurilish chizmachiligini o‘qitishda kompyuter texnologiyalarining roli: innovatsion yondashuv va zamonaviy tendensiyalar. Yoqubboyeva Sevara Qurbondurdiyevna	771-775
124.	Historical Evolution of idioms of life in the English language Iskandarova Gulifor Muzaffar kizi	776-779
125.	MUNDARIJA	780-796

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