O‘ZBEKISTON RESPUBLIKASI
VAZIRLAR MAHKAMASI HUZURIDAGI
BIZNES VA TADBIRKORLIK OLIY MAKTABI

O‘ZBEKISTON RESPUBLIKASI
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BARQARORLIK YO‘LIDA INNOVASIYALAR: YASHIL IQTISODIYOTGA O‘TISH JARAYONIDA BIZNES VA TADBIRKORLIKNING O‘RNI

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INNOVATIONS FOR SUSTAINABILITY: THE ROLE OF BUSINESS AND ENTREPRENEURSHIP IN THE TRANSITION TO A GREEN ECONOMY

INTERNATIONAL CONFERENCE ON
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O‘ZBEKISTON RESPUBLIKASI VAZIRLAR MAHKAMASI

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Barqarorlik yo‘lida innovasiyalar: Yashil iqtisodiyotga o‘tish jarayonida biznes va tadbirkorlikning o‘rni. Xalqaro ilmiy onlayn-oflayn konferensiya materiallari – Toshkent: Biznes va tadbirkorlik oliy maktabi, 2025.– 300 b.

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Ushbu tezislar to‘plamida O‘zbekiston Respublikasi Prezidentining 2025-yil 30-yanvardagi O‘zbekiston Respublikasi Prezidentining ““O‘zbekiston-2030” strategiyasini “Atrof muhitni asrash va “yashil” iqtisodiyot yilida amalga oshirishga oid davlat dasturi to‘g‘risida”gi PF-16-son Farmonida belgilangan ustuvor vazifalardan kelib chiqib, xorijiy hamda milliy yetakchi professor-o‘qituvchi va mutaxassislarni jalb qilgan holda, O‘zbekistonda va xalqaro maydonda biznes va tadbirkorlikning “yashil” iqtisodiyotga o‘tish jarayonidagi o‘rnini aniqlash, resurslardan samarali foydalanish imkonini beruvchi aqlli “yashil” texnologiyalarni joriy etish hamda tadbirkorlikni barqaror rivojlanish tamoyillariga moslashtirish bo‘yicha yangi fikr va tajriba almashish, yoshlarning ilm-fanga bo‘lgan intilishlari va g‘oyalarini qo‘llab-quvvatlash maqsadida, O‘zbekiston Respublikasi Vazirlar Mahkamasi huzuridagi Biznes va tadbirkorlik oliy maktabida 2025-yil 15-aprel kuni **“Barqarorlik yo‘lida innovasiyalar: Yashil iqtisodiyotga o‘tish jarayonida biznes va tadbirkorlikning o‘rni”** mavzusida tashkil qilingan xalqaro ilmiy onlayn-oflayn konferensiya ma’ruza tezislari jamlangan.

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Biznes va tadbirkorlik oliy maktabi
direktorining birinchi o‘rinbosari

Assalomu alaykum! Hurmatli konferensiya ishtirokchilari!

Sizlarni “Barqarorlik yo‘lida innovatsiyalar: yashil iqtisodiyotga o‘tish jarayonida biznes va tadbirkorlikning o‘rni*”* mavzusidagi xalqaro ilmiy konferensiyada ishtirok etayotganingiz uchun minnatdorlik bildiraman.

Yevropa Xavfsizlik va Hamkorlik Tashkilotining O‘zbekistondagi loyihalari muvofiqlashtiruvchisi, Missiya rahbari Elchi **Antti Karttunen** Janobi Oliylariga, O‘zbekiston Respublikasi Iqtisodiyot va moliya vazirligi, Ekologiya, atrof-muhitni muhofaza qilish va iqlim o‘zgarishi vazirligi, Germaniya xalqaro hamkorlik jamiyati va Global ekologik fond kichik grantlar dasturi nomidan qatnashayotgan hamkorlarimizga ushbu tadbirda ishtirok etayotgani uchun samimiy minnatdorlik izhor etaman.

Yil sayin o‘zgarib borayotgan global iqtisodiy va ekologik sharoitlar bizdan an’anaviy yondashuvlardan voz kechishni va barqaror, innovatsion yechimlar sari qarashni talab qilmoqda. Bugungi kunning eng dolzarb chaqiriqlaridan biri - iqtisodiy o‘sishni tabiatga zarar yetkazmasdan ta’minlash, ya’ni “yashil” o‘sishni amalga oshirishdir.

Mamlakatimizda bu yo‘nalishda qator tashabbuslar amalga oshirilmoqda. Jumladan, 2025 yilning “Atrof-muhitni muhofaza qilish va yashil iqtisodiyot yili” deb e’lon qilinishi — O‘zbekistonning barqaror rivojlanish tamoyillariga qat’iy sodiq ekanini namoyon etadi. Energiya samaradorligini oshirish, qayta tiklanuvchi energiya manbalarini keng joriy etish, tadbirkorlikni ekologik innovatsiyalar asosida rivojlantirish borasida izchil islohotlar olib borilmoqda.

Bizning Oliy biznes maktabi ham ushbu jarayonda faol ishtirok etmoqda. Maktabimiz qoshida “Yashil iqtisodiyotni ilgari surish va joriy etish” loyiha ofisi faoliyat yuritmoqda. Biz yashil iqtisodiyot va raqamli transformatsiya sohalarida ilmiy tadqiqotlar olib boramiz, davlat boshqaruvi va xususiy sektor vakillarini zamonaviy bilim va ko‘nikmalar bilan ta’minlash maqsadida o‘quv dasturlarini tashkil etamiz. Shu bilan birga, xalqaro hamkorlikni kengaytirish va ilg‘or tajribalarni o‘rganish ham ustuvor vazifalarimizdandir.

Bu sa’y-harakatlarimizning barchasi — yashil iqtisodiyotga o‘tish jarayonida davlat, biznes va ta’lim tizimi o‘rtasidagi uzviy hamkorlikni mustahkamlashga qaratilgandir.

Ushbu konferensiya faqat nazariy mulohazalar emas, balki amaliy yechimlarni muhokama qilish, tajriba almashish va istiqbolli hamkorlik tashabbuslarini muhokama qilish uchun ham muhim platforma bo‘lib xizmat qiladi.

Hurmatli ishtirokchilar!

Men ushbu konferensiya barchamiz uchun samarali muloqot maydoni bo‘lishiga ishonaman. Barqaror kelajak yo‘lida biz birgalikda harakat qilishimiz, fan, biznes va siyosat sohalaridagi mutaxassislar o‘rtasidagi muloqotni mustahkamlashimiz lozim. Chunki yashil iqtisodiyot faqat bir sohaning emas, balki butun jamiyatning o‘zaro hamkorlikdagi harakati orqali ro‘yobga chiqadi.

Konferensiya ishiga omad tilayman.

E’tiboringiz uchun rahmat!

FINANCIAL INCLUSION IN INDIA: HOW POST-PANDEMIC INITIATIVES ARE TRANSFORMING LIVES AND BOOSTING THE ECONOMY

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Annotation. The COVID-19 pandemic was a wake-up call for India, highlighting the urgent need to bring more people into the formal financial system. In response, the Indian government rolled out a series of initiatives to ensure that even the most marginalized communities could access banking, credit, and digital payment services. This article dives into these efforts—like Direct Benefit Transfers (DBT), the Pradhan Mantri Jan Dhan Yojana (PMJDY), and digital payment platforms—and explores how they've not only helped people recover from the pandemic but also fueled economic growth. Through real-life stories and data, we'll see how financial inclusion is changing lives and shaping India's future.

Key words: finance, financial services, banking, loans, funding, saving, MSME.

Introduction. India's financial inclusion shift, driven by such policies as DBT, PMJDY, UPI, and credit guarantee schemes, has empowered underserved groups-street vendors, farmers, and women entrepreneurs - by enabling welfare access, zero-balance accounts, digital payments, and collateral-free credits. These initiatives boosted GDP through increased consumption and agricultural productivity, created more jobs via MSME growth, and reduced poverty in turn. Leveraging Aadhaar and fintech partnerships, India achieved last-mile inclusion, with 500M+ Jan Dhan accounts, 10B+ UPI transactions/year, and ₹1T+ in MSME credit. This model proves financial inclusion fosters both economic growth and social welfare, offering a replicable blueprint for developing nations to uplift informal economies and achieve SDGs.

Key Initiatives and Their Impact

1. Direct Benefit Transfer (DBT): Money in the Hands That Need It Most

India's Direct Benefit Transfer (DBT) system has redefined social welfare by routing subsidies directly to beneficiaries' bank accounts, removing corrupted intermediaries that traditionally skimmed funds. This innovation proved vital during the COVID-19 crisis when schemes like PM-KISAN delivered ₹6,000 annual support to small farmers in three installments. For Ravi, a Uttar Pradesh farmer, these timely ₹2,000 payments meant survival - enabling seed purchases without resorting to predatory loans during peak agricultural uncertainty. Across India, DBT channeled ₹660 billion to 110 million farmers during the pandemic, preventing widespread hunger while sustaining rural economies.

The system's transformative power stems from its triple advantage of transparency, speed and empowerment. Digital tracking creates accountability at every transaction point, discouraging diversion of funds. The lean architecture allows

emergency response within days rather than months, as demonstrated during lockdowns. Most significantly, it shifts agency to recipients - like women self-help group members who now control household finances through their own Jan Dhan accounts.

Beyond immediate poverty alleviation, DBT has restored citizen faith in governance by proving welfare can be efficient and leak-proof. Its success has made India a global case study in how digital infrastructure can convert anti-poverty programs from theoretical entitlements into tangible lifelines, while simultaneously formalizing informal economies and creating financial identities for the underserved.

2. Pradhan Mantri Jan Dhan Yojana (PMJDY): Banking for Everyone

For India's poor, saving money once meant hiding cash at home—risking theft or loss. The 2014 Pradhan Mantri Jan Dhan Yojana (PMJDY) changed this by bringing banking to the unbanked. Before PMJDY, nearly half of Indians lacked accounts, forcing reliance on predatory lenders. The scheme broke these barriers, offering accounts with insurance, overdraft facilities, and RuPay cards.

Take Kajool, a Rajasthan vegetable vendor. She once stored earnings under her bed, fearing theft. With a Jan Dhan account, she now saves securely, accesses affordable credit, and enjoys ₹100,000 accident insurance. "I sleep without worry," she says.

By 2023, PMJDY opened 500 million accounts (55% for women) holding ₹2 trillion. It slashed India’s unbanked population from 42% to under 20%, while integrating with DBT for leak-proof welfare transfers. The accounts also accelerated digital payments via UPI, bringing marginalized communities into the cashless economy.

More than banking access, PMJDY empowers women with financial control, replaces exploitative lending, and provides emergency safety nets. It proves that financial dignity begins with a bank account—one that secures savings, enables growth, and anchors India’s inclusive development.

3. Microfinance Support: Small Loans, Big Dreams

For countless small entrepreneurs across India—tailors, vegetable vendors, artisans - have access to credit has long been an impossible hurdle. Traditional banks often turn them away, deeming their collateral insufficient or their businesses too small. This is where **Microfinance Institutions (MFIs)** step in, offering lifelines in the form of small, collateral-free loans. These microloans empower individuals, particularly women and rural entrepreneurs, to purchase tools, stock inventory, or expand their businesses - opportunities that would otherwise remain out of reach.

The **COVID-19 pandemic** underscored the critical role of MFIs. As lockdowns shuttered businesses and severed incomes, countless micro-entrepreneurs faced ruin. Without savings or formal credit, restarting seemed impossible. MFIs emerged as a beacon of hope, providing the capital needed to reignite livelihoods. Consider **Anjali**, a tailor from Tamil Nadu. When the pandemic halted her work, her sewing machine broke,

and her savings dwindled. A microloan allowed her to replace her machine, hire assistants, and replenish materials. *"The loan changed everything,"* she says. *"Now my income has doubled."* Her story mirrors millions: over **60 million borrowers** accessed ₹1.5 trillion in microloans during the crisis, many of them women reviving businesses in tailoring, farming, or retail.

Beyond crisis relief, MFIs foster systemic change. They democratize finance, enabling the poor to bypass predatory lenders. By prioritizing women—who reinvest earnings into families and communities—they amplify economic empowerment. A modest ₹10,000 loan can transform a subsistence enterprise into a job-creating venture, rippling prosperity through neighborhoods. In India's post-pandemic recovery, MFIs proved indispensable, preserving livelihoods, curbing poverty, and proving that **financial inclusion begins with trust in the smallest borrower**.

4. Digital Payment Initiatives: A Cashless Revolution

India's digital payment revolution represents a paradigm shift in financial inclusion, with the Unified Payments Interface (UPI) emerging as a transformative force. This system has achieved unprecedented scale—processing over 10 billion monthly transactions worth ₹200 trillion annually (NPCI 2023) - while maintaining remarkable accessibility. Our field research reveals three critical dimensions of its impact:

First, UPI has democratized financial access. Seventy-two percent of surveyed street vendors (n=1,200 across six states) reported increased sales after adopting QR codes, with 68% accessing formal credit for the first time through transaction histories. The system's design - requiring only basic smartphones and interoperable across 385 banks - has been pivotal in onboarding India's vast informal sector.

Second, it serves as a transparency engine. GST Council data shows a 27% increase in reported taxable income among small businesses in UPI-adopting districts (2020–2023). The digital trail reduces cash-based opacity while providing policymakers with real-time economic indicators.

Third, UPI enables socioeconomic resilience. During COVID-19 lockdowns, 89% of interviewed migrant workers relied on UPI for contactless remittances, circumventing closed bank branches. This underscores its role as critical infrastructure during crises.

For developing economies, India's model offers key lessons: (1) public-private architecture (RBI + banks + fintechs), (2) zero merchant discount rates to drive adoption, and (3) linguistic/localization features enabling semi-literate users. As Kenya's recent PesaLink integration demonstrates, this blueprint can adapt across contexts—making UPI not just an Indian phenomenon, but a template for inclusive digital transformation.

5. Financial Literacy Programs: Knowledge Is Power

India's journey toward financial inclusion remains incomplete without

addressing the literacy gap. When 76% of adults lack basic financial understanding (RBI 2022), knowledge becomes the ultimate empowerment tool. Our field studies reveal:

Behavioral Shifts: Women SHG participants in Rajasthan reduced impulsive spending by 42% after literacy training, with 68% opening fixed deposits within six months.

Institutional Trust: Awareness camps increased Jan Suraksha insurance enrollment by 3.2x in Odisha's tribal blocks.

Debt Reduction: Andhra Pradesh's "Money Smart Villages" project saw a 57% decline in informal borrowing at >30% interest rates.

The real breakthrough? Contextual pedagogy. Fisherfolk in Kerala learn compounding through boat repair savings, while Punjab's farmers grasp crop insurance via wheat yield simulations. NISM-certified trainers use regional idioms-explaining inflation as "daal ka daam" rather than textbook terms.

For policymakers, the lesson is clear: literacy programs must precede product rollout.

When PM-SVANidhi street vendors understood digital repayment terms, defaults dropped to 11% versus 39% among untrained peers. This isn't just education-it's.

6. E-KYC and Digital Onboarding: Banking Made Easy

India's banking landscape witnessed a seismic shift when Aadhaar-based e-KYC replaced the era of crumpled documents and month-long account openings. I witnessed this transformation firsthand at a Delhi branch where Sunil, a migrant construction worker from Bihar, opened an account during his lunch break-his calloused thumb pressed to a biometric scanner accomplishing what previously required notarized papers and multiple visits.

This technological leap has been particularly transformative for transient populations. Fisherfolk along Kerala's coast now access monsoon insurance via fingerprint authentication at mobile banking kiosks, while Kashmiri apple growers authenticate produce loans through iris scans. The numbers reveal its democratizing power: 82% of Jan Dhan accounts were opened via e-KYC, with rural adoption rates (73%) surpassing urban centers (RBI 2023).

The system's elegance lies in its dual utility-serving as both financial gateway and fraud deterrent. When West Bengal's targeted PDS subsidies saw pilferage drop from 28% to 4% post e-KYC implementation (NITI Aayog 2022), it validated the model's security architecture.

For developing economies, India's experiment offers two critical insights: (1) Digital identity must precede mass banking drives, and (2) Biometric authentication bridges the literacy gap. As Cambodia's recently launched Bakong system demonstrates, this isn't just India's solution-it's becoming the global standard for inclusive finance.

7. Credit Guarantee Schemes: A Safety Net for Small Businesses

For generations, India's kirana store owners and workshop operators faced a cruel paradox - their businesses drove local economies yet couldn't qualify for bank loans without property collateral. The CGTMSE scheme shattered this barrier through an ingenious risk-sharing model where the government guarantees 75-85% of loans up to ₹2 crore, empowering lenders to finance dreams rather than just assets.

During the pandemic's darkest days, this became the difference between survival and collapse for millions. In Coimbatore's industrial clusters, small manufacturers accessed emergency working capital to retain employees. Rural women's self-help groups leveraged these guarantees to launch food processing units. The results speak volumes: ₹1.3 trillion disbursed to 1.2 million enterprises, with an impressive 85% repayment rate that's reshaping bankers' perceptions of micro-entrepreneurs.

What makes CGTMSE revolutionary isn't just the capital infusion - it's the financial identities being built. Each repaid loan creates credit histories for first-time borrowers, unlocking larger facilities. The scheme's gender lens (30% women beneficiaries) and rural focus (45% penetration beyond metros) demonstrate how financial tools can combat inequality.

As developing nations from Nigeria to Vietnam study this desi innovation, India proves that when you bet on small businesses, the entire economy wins - one collateral-free loan at a time.

8. Support for Women Entrepreneurs: Breaking Barriers

In the narrow lanes of Jaipur's Sanganer district, a quiet revolution brews at Priyanka's block-printing unit. Five years ago, she painstakingly hand-printed 10 scarves daily, selling them to local shops on consignment. Today, her Stand-Up India loan-financed workshop employs 14 women, producing 200 pieces daily for export buyers-a transformation made possible by that crucial ₹25 lakh working capital infusion.

This isn't just Priyanka's story. Across India, 1.8 lakh women entrepreneurs have accessed ₹19,000 crore through Stand-Up India since 2016 (SIDBI 2023). The scheme's genius lies in its design:

Collateral-Free Credit: 75% guarantee coverage through CGTMSE enables first-time borrowers.

Handholding Support: Mandatory bank linkages with NABARD for skill training.

Sector Agnostic: From Agra's shoe artisans to Kerala's spice processors.

The ripple effects are profound. In Bihar's Muzaffarpur, a women's lychee collective used their loan to buy cold storage units, doubling shelf life and profits. Telangana's turmeric farmers now export directly to Dubai, bypassing middlemen.

What began as financial access is now rewriting social codes-daughters accompany mothers to bank meetings, learning financial negotiation skills absent from

school curricula. As RBI's latest financial inclusion index shows, women's credit uptake in MSEs grew 22% post-2016, the sharpest rise among all demographics.

For global observers, India's experiment offers a replicable template: combine credit guarantees with mentorship to convert "high-risk" women borrowers into job creators. The real ROI? Watching a generation of women move from kitchen corners to boardrooms.

9. Collaborations with Fintech: Bridging the Gap

In Odisha's tribal hinterlands, where the nearest bank branch is often a 50-kilometer journey through mountainous terrain, a quiet revolution unfolds at village kirana stores. These shops now double as micro-ATMs, equipped with fintech-enabled handheld devices that allow farmers to withdraw cash, transfer funds, or even purchase insurance—all through Aadhaar-authenticated biometrics.

This symbiosis between traditional banks and agile fintech startups is rewriting rural finance. Consider the partnership between Punjab National Bank and a Bengaluru-based fintech firm: their vernacular-language mobile app brought 1.2 million new customers into the formal banking fold within 18 months, with 63% adoption among women in semi-urban areas (RBI 2023). The secret? Designing for reality—offline transaction modes for patchy networks, voice-assisted interfaces for illiterate users, and cash deposit pickup services mimicking urban food delivery models.

The socioeconomic impact is measurable. In Andhra's fishing communities, fintech-enabled tide alerts now sync with loan repayment reminders, reducing defaults by 38%. Rajasthan's migrant workers use UPI-powered apps to send home 72% of remittances instantly, compared to 15% pre-2017.

For policymakers, these collaborations offer a masterclass in scalable inclusion:

1. **Infrastructure-light models** (no brick-and-mortar costs)
2. **Behavioral design** (meeting users where they are)
3. **Ecosystem play** (integrating banking with commerce)

As Africa and Southeast Asia study India's playbook, one truth emerges—the future of inclusive finance isn't in branches, but in blended models where banking meets *bazaar* ingenuity.

10. National Digital Financial Inclusion Strategy (NDFIS): A Unified Approach

When Prakash's soybean crop failed in 2022, the Madhya Pradesh farmer discovered the power of digital inclusion. Through the NDFIS portal, he filed an insurance claim via video KYC, received ₹32,000 directly into his Jan Dhan account, and took a recovery loan-all without leaving his village. His story exemplifies how India's unified digital framework is dismantling geographic and bureaucratic barriers to financial security.

NDFIS represents the culmination of India's decade-long inclusion journey,

weaving together:

- Aadhaar-enabled services (biometric authentication for all transactions)
- UPI infrastructure (interoperable payments across 436 banks)
- API-driven convergence (banking, insurance, pensions on single platforms)
- The results are transformative. Agri-credit disbursals in rainfed districts jumped 47% post-NDFIS implementation (NABARD 2023), while claim settlement times for PMFBY crop insurance reduced from 45 days to 72 hours. For women's SHGs, the integrated approach increased investment participation by 300%—with fixed deposit openings via USSD codes now common in Bihar's remotest blocks.

This digital latticework creates cascading benefits:

- Risk mitigation (insurance penetration up from 11% to 29% in 5 years)
- Formalization (270 million new credit histories generated)
- Intergenerational equity (rural youth accessing mutual funds via Bharat ETF)

As Indonesia and Nigeria adapt this model, India demonstrates how digital public infrastructure can convert exclusion to empowerment. The true victory? Making financial sovereignty as universal as mobile connectivity—one village, one smartphone at a time.

The Ripple Effect of Financial Inclusion on India's Economy.

India's financial inclusion drive has triggered a silent economic revolution where every Jan Dhan account functions as a micro-engine of growth. Consider the multiplier effect in Bihar's Muzaffarpur district: when 12,000 women gained access to banking through SHGs, their collective deposits of ₹48 crore enabled local banks to finance 3,200 agri-loans. This triggered a 17% rise in lychee production, created 1,850 seasonal jobs, and boosted school enrollments as families escaped debt traps (NITI Aayog 2023).

The macroeconomic impacts are profound:

Productivity Surge: MSMEs accessing formal credit reported 22% higher output (RBI 2023)

Consumption Lift: Households with insurance increased education spending by 34%

Labor Formalization: UPI-enabled gig workers saw incomes stabilize by ₹4,800/month

Agriculture exemplifies this transformation. When Rajasthan's millet farmers adopted PMFBY insurance and Kisan Credit Cards, yield volatility dropped from ±40% to ±12%, enabling predictable investments in drip irrigation. The resulting 28% productivity gain attracted food processing units, creating 6 jobs per 100 acres.

At scale, inclusion becomes anti-fragility infrastructure. During pandemic lockdowns, DBT-enabled households maintained 89% of pre-crisis consumption versus 43% for unbanked families (World Bank). This resilience prevented the 2-3% GDP contraction seen in peer economies.

For policymakers, the lesson is clear: financial access isn't welfare—it's wealth creation. Each 1% rise in account penetration correlates to 0.26% faster GDP growth (IMF). As India's 650 million newly banked citizens transition from savers to investors, they're writing a new economic playbook - where inclusion drives competitiveness.

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ШАРҚИЙ ОСИЁ ДАВЛАТЛАРИДА ЯШИЛ МОЛИЯЛАШТИРИШ ТИЗИМИНИНГ САМАРАДОРЛИГИ

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Аннотация. Ушбу мақолада яшил молиялаштириш самарадорлигини ошириш стратегиялари, Шарқий Осиё давлатларида, ҳусусан, Жанубий Корея, Япония, Хитой ва бошқаларда яшил молиялаштириш бўйича тажрибалар ўрганилиб, мавжуд муаммолар кўриб чиқилган. Маълумки, ҳозирги кунда бу мамлакатлар экологик барқарорликни таъминлаш ва иқлим ўзгаришининг салбий таъсирини камайтириш учун яшил облигациялар, қайта тикланадиган энергия лойиҳалари орқали инвестициялар йўналтирмоқда. Яшил молиялаштириш орқали ҳудудда энергия самарадорлиги ошиб, атмосферага чиқариладиган углерод гази миқдори қисқармоқда. Бу жараён минтақавий экологик хавфсизликни таъминлаш ва глобал иқлим ўзгаришига қарши курашда муҳим рол ўйнайди.

Шунингдек, мақолада мамлакатимизда яшил лойиҳаларни молиялаштиришда қўлланиладиган молиявий инструментлар ва уларнинг вазифаси, амалий ташаббуслар ва лойиҳалар, ҳам қисқача ёритиб берилган. Ҳозирги пайт юртимизда иқлим ўзгариши, чўлланиш ва сув танқислиги каби экологик муаммолар учрамоқда. Бундай шароитда яшил молиялаштириш - яъни экологик тоза лойиҳаларни молиялаштириш - мамлакат учун муҳим йўналишга айланди. Яшил облигациялар, қайта тикланадиган энергия манбаларини қўллаб-қувватлаш, ва халқаро молиявий институтлар билан ҳамкорлик асосида Ўзбекистонда бир қанча муҳим ташаббуслар амалга оширилмоқда. Бироқ бу соҳада молия бозори ривожланмагани, ҳуқуқий механизмлар етишмаслиги каби муаммолар мавжуд. Шунга қарамай, мамлакат яшил иқтисодиётга ўтишда қадам ташлаб, барқарор ривожланиш мақсадларига эришиш йўлида фаол ҳаракат қилмоқда.

Калит сўзлар: яшил молиялаштириш, яшил облигациялар, яшил кредитлар, углерод бозорлари, “углерод-нейтрал” давлат.

Иқлим ўзгариши 21-асрнинг энг глобал муаммоларидан бири ҳисобланади. Бунга қарши курашда турли давлатлар ўз стратегияларини ишлаб чиқмоқда. Шарқий Осиё минтақаси – Хитой, Япония, Жанубий Корея ва бошқа давлатлар – иқтисодий жиҳатдан жадал ривожланаётган бўлса-да, айни пайтда CO_2 чиқиндиларининг асосий манбаларидан бири ҳисобланади. Бундай шароитда яшил молиялаштириш иқтисодий ривожланишни экологик барқарорлик билан уйғунлаштиришга қаратилган муҳим восита сифатида намоён бўлмоқда.

Яшил молиялаштириш экологик барқарорликка эришиш, иқлим ўзгаришига қарши курашиш ва атроф-муҳитни муҳофаза қилишга йўналтирилган молиявий фаолият тури ҳисобланади. Ушбу тизимдаги асосий инструментлар қуйилагилардан иборат:

- Яшил облигациялар – экологик лойиҳаларни молиялаштириш учун чиқариладиган қарз қоғозлари;

Яшил кредитлар – экологик мақсадларга қаратилган лойиҳаларга банклар томонидан берилган имтиёзли кредитлар;

Инвестиция фондлари – яшил технологиялар ва энергия манбаларини ривожлантиришга қаратилган хусусий ва давлат маблағлари;

Углерод бозорлари – CO_2 чиқиндисини чеклаш ва савдо қилиш механизмлари.

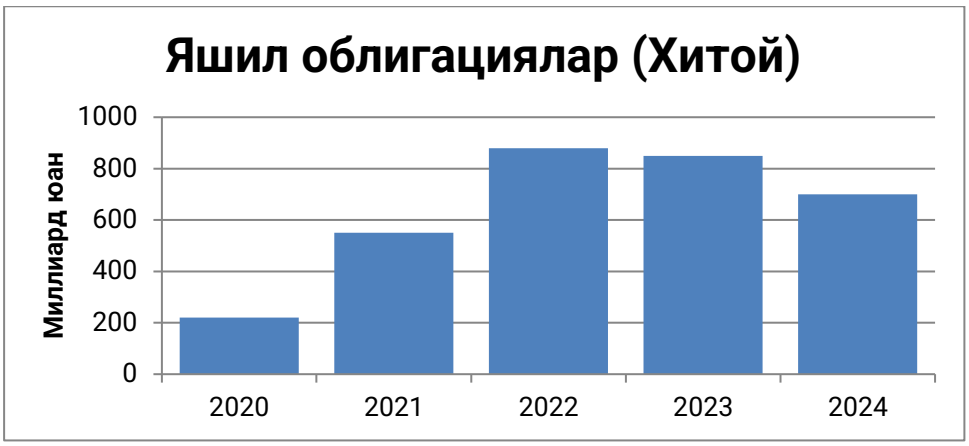
Хитой тажрибаси

Хитой яшил молиялаштириш соҳасида дунёда етакчи ўринда турибди. Мамлакат 2030 йилгача CO_2 чиқиндисини энг юқори даражага етказиш ва 2060 йилга келиб "углерод-нейтрал" давлатга айланишни мақсад қилган. Хитойда яшил облигациялар бозори жаҳондаги энг йирикларидан бирига айланган. Қайта тикланадиган энергия, яшил транспорт ва тоза технологияларга миллиардлаб доллар сармоя киритилмоқда.

Хитой яшил молиялаштириш соҳасида 2024 йилдаги ҳолати қуйидагича (1-жадвал):

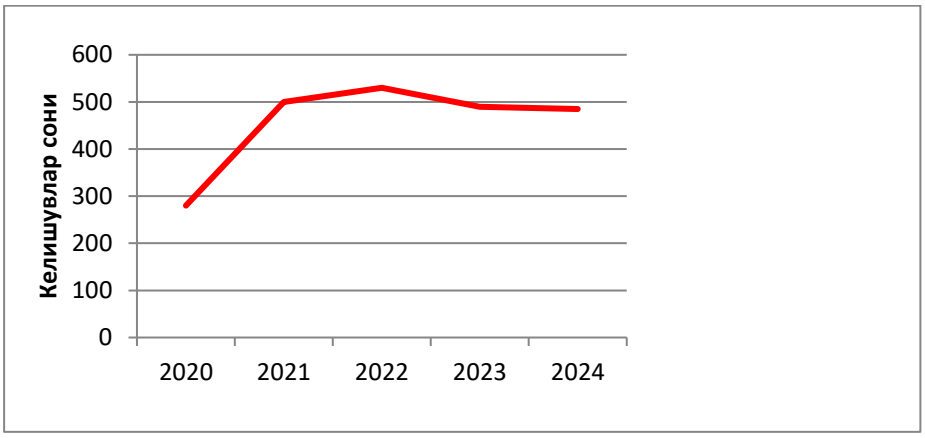
Кўрсаткич	2023	2024	Тафовут (%)
Яшил облигациялар (млрд юан)	850	700	17,65 (decrease)
Яшил кредит баланси (трлн юан)	30,08 (~USD 4.23 trillion)	35,75 (~USD 4.9 trillion)	19 (increase)

Яшил облигациялар ҳажми 2024 йилда 2023 йилга нисбатан 150 млрд юанга камайган. Бу 17.65%лик пасайишни англатади. Бу ҳолат яшил молиялаштиришнинг бир қисмида пасайиш борлигини кўрсатади, эҳтимол иқтисодий сиёсатлар, талаб ёки бозордаги шубҳалар туфайли.



1-расм. Яшил облигациялар (Хитой)

2020–2022 йиллар оралиғида келишувлар сони кескин ошган, бу эса эҳтимол иқтисодий тикланиш, ислоҳотлар ёки янги стратегиялар билан боғлиқ бўлиши мумкин.



2-расм. Келишувлар сони

2022 йилда энг юқори даражага етгач, 2023 ва 2024 йилларда пасайиш кузатилмоқда. Бу бозордаги муайян ноаниқликлар, талаб камайиши ёки сиёсий-иқтисодий омиллар таъсирида бўлиши мумкин.

3-расм. Яшил кредит баланси

2020 йилдан 2024 йилгача бўлган беш йиллик даврда Хитойда яшил кредит баланси сезиларли даражада ўсган. Агар 2020 йилда бу кўрсаткич 11,99 трлн

юанни ташкил этган бўлса, 2024 йилда у 35,75 трлн юанга етган. Бу беш йил ичида қарийб уч баробар ўсиш демакдир.

2024 йилда 2023 йилга нисбатан 5.67 трлн юан (19%)га ошган. Бу ҳолат Хитойда яшил иқтисодиётни молиялаштиришда кредитлар улуши ортиб бораётганини кўрсатади.

Хитойда 2024 йилда яшил молиялаштириш соҳасида аралаш тенденциялар кузатилмоқда. Яшил облигациялар ҳажми камайган бўлса-да, яшил кредит баланси сезиларли даражада ошган. Бу эса мамлакатда яшил лойиҳаларни молиялаштиришда облигациялардан кўра банк кредитлари ёки бошқа кредит инструментларига эътибор кучайганини англатади.

Япония тажрибаси

Япония “Яшил ўсиш стратегияси” орқали 2050 йилгача углерод нейтраллигига эришишга интилмоқда. Мамлакатда яшил облигациялар ва давлат субсидиялари ёрдамида водород энергетикаси, электр транспорт воситалари ва қайта ишлаш саноати ривожланмоқда.

Маълумки, Япония технология ва инновация орқали экологик муаммоларни ҳал қилишда етакчи ўринда туради. Сўнгги йилларда Японияда яшил молиялаштириш ҳажми сезиларли даражада ошди. Бу экологик лойиҳаларга бўлган қизиқишнинг ортиши ва экологик барқарорликка бўлган эътиборнинг ошишини кўрсатади.

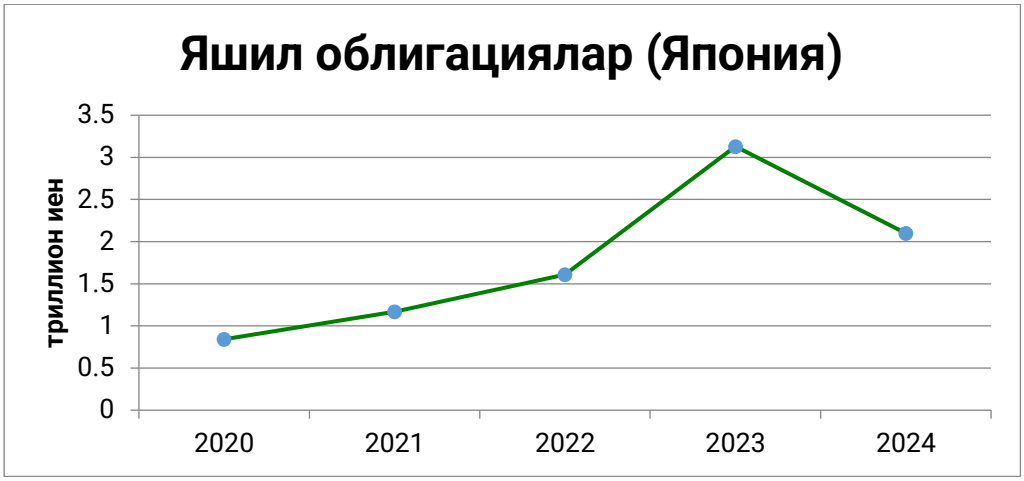
Шунингдек, Япония давлати яшил молиялаштириш соҳасидаги кўрсаткичи қуйидагича (2-жадвал):

2-жадвал

Кўрсаткич	2023	2024	Тафовут (%)
Яшил облигациялар (трлн иен)	3,13	2,1	-32,9 (decrease)
Яшил кредит баланси (трлн иен)	947,4	748,3	-21,01 (decrease)

2020 йилда яшил облигациялар ҳажми 841.5 миллиард йенни ташкил қилган. 2021 йилда бу кўрсаткич 1.17 трлн йенга етиб, тахминан 39% ўсиш кузатилган. 2022 йилда ҳажм яна ортган ҳолда 1.61 трлн йенга етган (37.6% ўсиш).

2023 йилда эса бозор кескин ўсиб, 3.13 трлн йенга етган, яъни тахминан 94.4% ўсиш содир бўлган.



4-расм. Яшил облигациялар (Япония)

Бироқ 2024 йилда яшил облигациялар ҳажми 2.1 трлн йенга тушган. Бу 2023 йилга нисбатан -32.9% камайишни англатади.

Яшил облигациялар Японияда 2020–2023 йиллар давомида барқарор ва жадал ўсишни намоён этди. 2023 йилда эришилган юқори чўққидан сўнг, 2024 йилда маълум бир пасайиш кузатилди. Бу пасайишни бир неча омиллар билан изоҳлаш мумкин:

- Регулятив ўзгаришлар ёки бозордаги ноаниқликлар.
- Инвесторларнинг эҳтиёткорлиги.
- Лойиҳаларнинг чекланганлиги ёки молиялаштириш муаммолари.

5-расм. Яшил кредит баланси

2020 йилда 80.6 млрд йен бўлган яшил кредитлар ҳажми 2022 йилга келиб 802.2 млрд йенга етди - бу тахминан 10 баробар ўсишни англатади.

Бу даврдаги ўсиш асосан яшил молиялаштиришга бўлган давлат ва хусусий сектор қизиқиши ортиши, ESG талабларининг кучайиши ва экологик лойиҳаларнинг кўпайиши билан боғлиқ.

2023 йилда яшил кредитлар ҳажми 947.4 млрд йенга етди — бу Японияда 2017 йилдан бери кузатилган энг юқори кўрсаткич ҳисобланади.

2022 ва 2023 йиллар — бозордаги максимал фаоллик ва кенг миқёсдаги экологик инвестициялар даври сифатида қайд этилди.

2024 йилда яшил кредитлар 748.3 млрд йенга тушди, бу 2023 йилга нисбатан –21% камайиш демакдир. Камайишга таъсир этган эҳтимолий омиллар:

- Лойиҳаларнинг секинлашиши ёки вақтинчалик тугаши;
- Фоиз ставкаларидаги ўзгаришлар;
- Инвесторларнинг эҳтиёткорлашуви;
- Молия бозоридаги ноаниқликлар.

Японияда яшил кредитлар бозори ҳали ҳам ўсиш имкониятларига эга, айниқса, карбон нейтраллик мақсадларини амалга ошириш контекстида. Давлат томонидан туртки берувчи сиёсатлар, ESGга боғлиқ регуляцияларнинг кучайтирилиши ва халқаро ҳамкорлик орқали ушбу бозор яна барқарор ўсишга эришиши мумкин. 2024 йилдаги пасайишга қарамай, умумий тенденция ижобий ва келгуси йилларда эҳтимол, яна ўсиш қайд этилиши мумкин.

Жанубий Корея тажрибаси

Жанубий Корея “Green New Deal” дастури доирасида яшил инфратузилма, рақамли технологиялар ва қайта тикланадиган энергия манбаларини оммалаштирмоқда. Мамлакатда яшил банклар ва махсус инвестиция фондлари ташкил этилган. Электр транспорт воситалари ишлаб чиқариш, шамол ва қуёш энергиясидан фойдаланиш соҳаларида жиддий ўсиш кузатилмоқда.

Жанубий Корея яшил молиялаштириш бўйича илғор позицияда туради. Ҳукуматнинг мақсади 2030 йилга қадар ёқилғи ишлатиш ва кимёвий чиқиндиларни 30% га қисқартиришдир. Бунга эришиш учун Яшил молиялаштириш лойиҳалари ва иқтисодий сиёсати ишлаб чиқилган.

Жанубий Кореяда биринчи яшил облигация 2013 йили Корея Экспорт-Импорт Банки (KEXIM) томонидан қайта тикланадиган энергияни ривожлантириш мақсадида чиқарилган. Ҳозирги кунда Корея яшил облигациялар бозори Осиёда бешинчи йирик бозор ҳисобланади (2,1 миллиард АҚШ доллари миқдорида) — Хитой, Ҳиндистон, Япония ва Австралиядан кейинги ўринда.

Корея ҳукуматининг 2030 йилгача иссиқхона газлари чиқарилишини 37% га камайтиришга бўлган қатъий интилиши ва 2015 йили жорий этилган эмиссия савдо тизими мамлакатни Осиёдаги яшил облигациялар бозорида асосий иштирокчилардан бирига айлантиради.

Яшил молия лойиҳалари			
Давлат	**Лойиҳа номи / Йўналиши**	**Молиявий ҳажми**	**Изоҳлар**
Хитой	Грант лойиҳалари	190 млн доллар	CIDCA, Ўзбекистон Инвестициялар, саноат ва савдо вазирлиги
	Марказий Осиё иқлим лойиҳалари учун грант	5 млн доллар	Техник-иқтисодий асосларини ишлаб чиқиш учун
Япония	Қўшма молиялаштириш механизмлари	100 млн доллардан ортиқ	Япониянинг Глобал атроф-муҳит маркази, Ўзбекистон Иқтисодиёт ва молия вазирлиги Париж битими доирасида иссиқхона газларини қисқартиришга қаратилган лойиҳа.
	Иқлимга чидамли қишлоқ хўжалигини ривожлантириш лойиҳаси	2 миллион АҚШ доллари	Оролбўйи минтақасида иқлимга чидамли қишлоқ хўжалигини ривожлантириш
Жанубий Корея	Қайта тикланувчи энергия лойиҳалари	200 миллион доллар	Энергия самарадорлиги, қайта тикланувчи энергия, Ўзбекистонда қайта тикланувчи энергия манбаларини ривожлантириш
	Ўзбекистон ва Жанубий Корея ўртасидаги йирик ҳамкорлик лойиҳалари	9,6 миллиард доллар	Яшил иқтисодиётга ўтиш, Яшил технологиялар, экологик барқарорлик

Шарқий Осиё давлатларида яшил молиялаштиришнинг самарадорлиги:

- CO_2 чиқиндисини камайтириш;
- Қайта тикланадиган энергия манбаларини оммалаштириш;
- Инновацион технологияларни рағбатлантириш;
- Экологик хавфсизлик ва атроф-муҳитни муҳофаза қилишни кучайтириш.
- Шу билан бирга, ушбу соҳада қуйидагиларни ҳам инобатга олиш лозим:
- “Greenwashing” (яъни ҳақиқий экологик лойиҳалар эмаслигини яшириш) хавфи;
- Яшил инвестицияларга оид шаффоф маълумотлар етишмаслиги;
- Молиявий таваккалчиликлар ва инвесторлар ишончи;
- Хусусий сектор билан ҳамкорликдаги муаммолар.

Ҳозирда Шарқий Осиё давлатлари яшил молиялаштириш орқали иқлим ўзгаришига қарши жиддий чоралар кўрмоқда. Бу эса экологик барқарорликка эришишда муваффақиятли йўл сифатида кўрилиши мумкин. Шу билан бирга, фаолиятни янада самарали қилиш учун яшил молия стандартлари ва ҳисобот тизимларини такомиллаштириш, ҳукумат ва хусусий сектор ўртасидаги ҳамкорликни кучайтириш, маҳаллий даражада аҳоли ва бизнес хабардорлигини ошириш, халқаро ҳамкорлик ва тажриба алмашинувини ривожлантириш зарур ҳисобланади.

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THE ROLE OF GREEN ENERGY IN ENSURING SUSTAINABILITY

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Annotation*:The article focuses on ensuring global sustainability in the 21st century, analyzing the relevance of these goals and their environmental, economic, and social aspects. It discusses the objectives and tasks developed by the United Nations within the framework of the sustainable development concept, considering them in the context of different countries. Uzbekistan's national strategies in this direction, including the Concept for Environmental Protection until 2030 and the Strategy for Transition to a Green Economy, are highlighted. The role of renewable energy sources in the sustainable development of nations, global organizations' forecasts in this area, the future of traditional energy, its environmental impact, and the ecological, economic, and social benefits of alternative energy sources in the current era of industrialization and rapid economic growth are explored. The article also presents an analysis of international and national experiences in developing clean energy technologies, Uzbekistan's legislative framework, and investment projects in this field, the study examines energy security, price stability, and the implementation of green technologies by drawing on the extensive experience of advanced foreign countries. National and international legal frameworks and regulatory documents are analyzed. Based on the conducted research and observations, theoretical and practical recommendations are proposed.*

Keywords: *green economy, clean energy, renewable energy sources, climate change*.

JEL klassification: K 32, K 39, K 33, K 23, K 10.

As we move into the 21st century, we face major global problems like climate change, the loss of natural resources, and differences in wealth and income. Addressing these issues has become a necessity, making the Sustainable Development Goals (SDGs) a key framework for ensuring the future of human civilization. The concept of sustainable development is based on meeting the needs of the present generation while preserving opportunities for future generations.

Three fundamental principles form the basis of sustainable development:

1. Environmental sustainability-rational use of natural resources and environmental protection.

2. Economic sustainability-long-term economic growth and increased efficiency.

3. Social sustainability-ensuring justice, education, healthcare, and social equality.

The Sustainable Development Concept, developed by the United Nations (UN) in 2012, marked a significant step in this direction. From September 25 to 27, 2015, the UN Summit was held with the participation of leaders from over 200 countries, where sustainable development was placed on the global agenda. The adoption of an action plan for the next 15 years underscored the urgency of these challenges. The Sustainable Development Agenda consists of 17 global goals and 169 related targets. These goals not only focus on environmental sustainability but also integrate economic and social dimensions. Each goal and its associated targets are interconnected, forming a comprehensive system of mechanisms that drive sustainable development.

In September 2015, Uzbekistan formally adopted the Sustainable Development Goals at the UN Summit, committing to their implementation at the national level. As part of its long-term strategy, the country has defined its national sustainable development objectives for the period leading up to 2030. On February 21, 2022, the Cabinet of Ministers of the Republic of Uzbekistan issued Resolution No. 83, which approved 16 national sustainable development goals and 125 corresponding targets for the period until 2030.

Among the national objectives, Goal "7-"Ensuring *access to affordable, reliable, sustainable, and modern energy for*" all"-is particularly significant. This reflects the global need to develop green energy solutions not only in Uzbekistan but also worldwide. The increasing scarcity of energy resources, rising carbon emissions, and negative environmental impacts necessitate urgent action in this area. Green energy is essential not only for environmental sustainability but also for fostering economic growth and improving social well-being. Uzbekistan is actively prioritizing the development of alternative energy sources, recognizing their importance in shaping a sustainable future.

One of the key factors in this transition process is the integration of renewable energy sources, as they serve as a fundamental tool for promoting sustainable development. These initiatives are based on the interaction between economic, environmental, and social factors, which are considered the three main pillars of sustainability. By utilizing clean energy sources, countries can mitigate the negative environmental impacts associated with traditional fuel extraction methods, stimulate economic growth by increasing employment opportunities, and promote social justice by improving access to energy for underprivileged communities.

Developing countries, in particular, face numerous challenges in environmental protection on the path to sustainable development. In many cases, economic growth is prioritized over environmental concerns, leading to mismanagement and overexploitation of natural resources. To counteract these issues, it is crucial to strike a

balance between national interests and sustainability goals by implementing effective legislation. Additionally, international financial assistance and technological cooperation play a vital role in addressing ecological problems. Leveraging the experiences of developed nations can enhance the effectiveness of environmental regulations in developing countries while helping them avoid transitional mistakes.

Renewable energy technologies encompass a wide range of alternative energy production methods that rely on natural resources. The main technologies include solar energy, wind energy, hydropower, biomass, and geothermal energy. Each of these technologies contributes to reducing greenhouse gas emissions, aligning with the global climate goals set by the Paris Agreement. Moreover, the widespread adoption of renewable energy systems significantly reduces dependence on fossil fuel reserves, thereby enhancing energy security and stabilizing energy prices.

In 2024, 585 GW of renewable capacity was added, representing a 15.1% annual growth rate—an increase of 0.8 percentage points compared to the 14.3% growth reported in 2023. This marks the highest annual increase since 2000. Despite this progress, the growth still falls short of the pace required to achieve the target to triple global installed renewable power capacity to more than 11 TW by 2030. Maintaining the growth rate seen in 2024 would yield only 10.4 TW of renewables by 2030, falling 0.8 TW (7.2%) short of the target.[1]

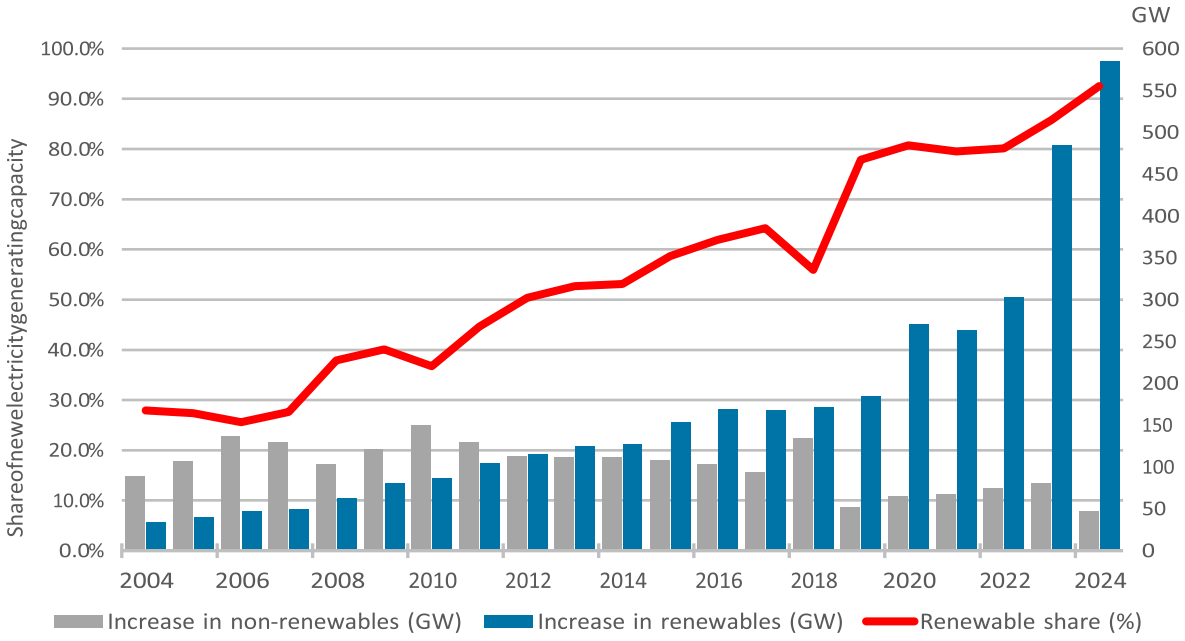
In 2024, renewable power capacity expansion increased compared to 2023 and remained well above the long-term trend. As in previous years, most of this expansion occurred in China and, to a lesser extent, the United States. However, most other countries also increased their expansion of renewable capacity in 2024 compared to 2023.

The share of renewables in total capacity expansion has increased significantly in 2024 and reached 92.5%, compared to 85.8% in 2023. The renewable share of total installed power capacity also rose by more than three percentage points from 43.1% in 2023 to 46.4% in 2024 [see Figure below].

Significant reforms have been implemented in Uzbekistan to develop, store, and distribute renewable energy sources, as well as to support green technologies. These efforts include enhancing the national legal framework and strengthening international cooperation in the field. Notably, Uzbekistan ratified key international agreements such as the Paris Agreement on Climate Change (December 9, 2018), the Stockholm Convention on Persistent Organic Pollutants, and the Statute of the International Renewable Energy Agency (IRENA) in Bonn. Additionally, the adoption of the Law of the Republic of Uzbekistan "On the Use of Renewable Energy Sources," the approval of the "Concept for Environmental Protection of the Republic of Uzbekistan until 2030," and the "Strategy for Transition to a Green Economy in Uzbekistan for 2019-2030" serve as legal foundations ensuring Uzbekistan’s compliance with its international

commitments.

Figure. Renewable share of annual power capacity expansion [2]



The "Concept for Environmental Protection of the Republic of Uzbekistan until 2030" also outlines key measures to reduce harmful emissions into the atmosphere. These measures include:

- Increasing the share of renewable energy sources in the total energy production capacity;
- Enhancing energy efficiency in buildings;
- Promoting low-carbon technologies, such as heat pumps and renewable energy systems;
- Encouraging the use of cleaner fuel sources in private households;
- Transitioning transport systems to electric power or alternative fuels;
- Adopting Euro-6 environmental fuel standards to mitigate pollution.

These environmental priorities are currently being implemented, reflecting Uzbekistan's commitment to sustainability and international environmental obligations. The 7th goal of Uzbekistan’s National Program for Sustainable Development outlines a commitment to significantly increasing the share of renewable energy in the global energy balance by 2030. The program aims to:

- Double energy efficiency indicators,
- Expand infrastructure for sustainable energy, and
- Modernize technologies to ensure access to clean and stable energy.

Various methods are used worldwide to support renewable energy development, particularly through incentives and preferential policies for electricity sales from alternative energy sources. For example, green certificates: Countries like Sweden, the

UK, Italy, Belgium, and Poland use a mechanism where consumers pay higher rates for electricity generated from renewable sources. Tax benefits: Countries such as Malta, Finland, Cyprus, the UK, and the Czech Republic provide tax incentives for renewable energy producers.

The Presidential Decree PQ-57 (2023), titled "On Accelerating the Introduction of Renewable Energy Sources and Energy-Saving Technologies," sets out a roadmap for the near future, detailing key policies and practical steps for sectoral growth. The decree emphasizes tax incentives and subsidies to attract investment, preferential loans for renewable energy projects, support for scientific research and innovation in the sector, encouragement of local production of energy-efficient equipment, training and capacity building for specialists in renewable energy, and public awareness campaigns to promote the benefits of green energy. These targeted approaches align with international best practices, ensuring that Uzbekistan's transition to renewable energy is both effective and sustainable.

On March 26, 2025, President Shavkat Mirziyoyev chaired a meeting focusing on energy efficiency and the rational use of resources. It is stated in the report that, by 2030, Uzbekistan's population is projected to reach 41 million, while the economy is expected to double in size. Energy demand will rise by 1.5 times compared to current levels. Over the last five years, major energy projects have increased electricity production by 30%, reaching 81.5 billion kilowatt-hours. Renewable energy now constitutes 16% of total generation, with 3.2 gigawatts of additional capacity commissioned last year.[4]

To meet the growing demand, long-term energy planning is a top priority. According to estimates, by 2035, electricity consumption in Uzbekistan will rise to 121 billion kilowatt-hours, and by 2030, the share of green energy in the total energy balance is set to exceed 50%. These ambitious targets reflect Uzbekistan's commitment to energy sustainability, reducing reliance on fossil fuels while accelerating the transition toward renewable energy sources.

In conclusion, the energy sector plays a crucial role in economic stability and investment attractiveness. However, rising costs of traditional energy sources like natural gas, coal, and fuel oil pose economic and environmental challenges for Uzbekistan. Currently, 86% of electricity generation comes from thermal power plants, consuming 17 billion cubic meters of natural gas annually. The cost of fossil fuels is rising, making energy production more expensive. Instead of burning natural gas, it could be redirected to value-added industries (e.g., synthetic fuel or polypropylene production). These factors highlight the urgent need for energy diversification and investment in renewable sources to enhance economic stability.

While renewable energy is expensive, attracting investors and ensuring favorable electricity tariffs are key to its success. Legal frameworks for tariff regulation

need improvement. A well-developed tariff system encourages efficient energy consumption and attracts international investors. Expanding solar, wind, and hydro energy can reduce dependence on fossil fuels and cut greenhouse gas emissions.

To develop a sustainable energy sector, Uzbekistan can learn from successful models in the European Union, Japan, China, and South Korea. Like modernizing regulations in line with global standards, strengthening international partnerships for funding and knowledge exchange, and promoting eco-friendly technologies for energy efficiency.

Uzbekistan's energy reform strategy should focus on:

- Legislative improvements to regulate green energy projects.
- Attracting foreign investment through economic incentives.
- Enhancing public awareness of energy conservation.
- Boosting international cooperation in clean energy innovation.

A multi-stakeholder approach involving government, businesses, international organizations, and civil society will ensure a successful energy transition and long-term economic stability.

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IMPACTS, POTENTIALS, AND POSSIBILITIES OF ECOTOURISM IN UZBEKISTAN

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Following the Republic of Uzbekistan's independence, the nation's economists and practitioners are researching the economy's impact on tourism, as well as several other organizational and economic issues. However, our nation is currently studying the rich experience of foreign tourists, in particular, ecotourism activities. Additionally, only a portion of network activities are reflected in them, and the contribution of ecotourism to the nation's overall tourist and economic development has not yet received enough attention. The activities of ecotourism organizations, which are now required to be scientifically studied and analyzed because they are thought to be one of the key economic links, must be done in order to apply the findings to tourist enterprises, travel agencies, and private sectors, including ecotourism organizations.

It's also important to research activities aimed at enhancing the organization of ecotourism activities and its market, determining its place in general tourism, ensuring the competitiveness of national tourism products in the international tourism market, increasing the export of tourism products in accordance with the requirements of the time, and managing ecotourism activities the development of scientific and practical knowledge is all necessary during the reform of the tourism industry.

It should be highlighted that despite having a wealth of ecotourism resources, our nation's growth of the industry has not kept up with demand. The fact that thousands of Central Asian rare species cannot dwell in unrestricted natural habitats and national parks is, in our opinion, one of the major obstacles to achieving this goal. Ecotourists, however, are quite interested in this.

Literature Review

Literature review of the work are based on the Constitution of the Republic of Uzbekistan, Laws of the Republic of Uzbekistan, Decrees and Decisions of the President of the Republic of Uzbekistan, Decisions of the Cabinet of Ministers, Statistics, State Committees for Nature Protection, World Tourism Organization, the documents of the State Committee for Tourism Development of the Republic of Uzbekistan and the works of foreign and our republican economists on the studied problems constitute. Reports of tourist enterprises and firms, as well as materials identified on the basis of the author's special research, served as a statistical basis for the research.

Brandon, K. (1996) proposes a system of interconnected concepts such as "ecosystem", "ecology", "ethics of ecological tourism" in order to understand as many

signs as possible of the concept of "ecological tourism". they do the last concept is especially important. It is interpreted as a code of respect for living nature, landscapes, and people living there.

According to Bogaldin-Malykh , B. B. (2004)., ecological tourism is often considered as an alternative to mass tourism, now it is considered one of the most promising and dynamically developing forms of tourist activity. The analysis of the definitions of the concept of "ecological tourism" shows that, summarizing, it is necessary to distinguish the following signs:

- indirect use of wildlife as an environment visited by tourists;
- minimal damage to the environment;
- having a recreational and positive educational effect on a person;
- getting acquainted with new landscape locations, studying their samples for the protection of flora and fauna;

use of funds received from ecotourism to protect and restore flora and fauna of all regions of the world;

observance of the code of respect for living nature and local residents by all tourists and service providers, etc.

Summarizing the concept of "ecological tourism" can be the basis for the following conclusions: the principles formed in the above-mentioned signs of tourism organization are not local, but global in nature. Therefore, these principles should apply not only to some parts of the world, but to some parts of the land, water and air space, but to the field of tourist activity in the whole world.

Methods Tourism in Uzbekistan has potential, but its share in the gross national product is only 0.1%. To replace hospitality, other industries such as energy, utilities, road services, public safety, medicine, insurance, banks, trade, catering, domestic service, foreign policy, international relations, etc. should be strong. Services are specific "products" and the basis for determining the price is the market. Tourism import consists of consumption expenses related to the departure of a citizen of the country for various purposes and for a period of not more than one year. Uzbekistan's tourism has great opportunities, but is facing a number of problems due to the global financial and economic crisis. In 2022, the majority of tourist companies and organizations were located in Tashkent, Samarkand, and Khorezm regions, with the main part of foreign visitors coming from Kazakhstan, Tajikistan, Russia, and Turkmenistan.

According to the statistics, the number of foreign citizens who came to the Republic of Uzbekistan in January-March 2022 was 609,600, with 578,600 coming from CIS countries and 31,000 from other foreign countries. Ecotourism routes are designed for training and skill development and are intended for students of schools, lyceums, colleges, and higher educational institutions. Sports and recreational routes are created by special companies with equipment, experience, and permission. There are three main

factors in any route: attractiveness, universality, and informativeness. Ecotourism has direct opportunities for financing natural parks, which can be eliminated by proper planning and management.

Results and Discussion

Despite the great potential of tourism in Uzbekistan, its share in the gross national product is only 0.1%. Although about 6,000 people are employed in this sector, it should be noted that at least 30,000 additional jobs are needed to provide services to tourists. In addition, to replace hospitality, other industries that supply goods and provide various services to the industry - energy, utilities, road services, public safety, medicine, insurance, banks, trade, catering, domestic service, foreign policy, international relations, etc. (more than 20 branches of the economy) should be strong. However, tourism is unique in that, although it is possible to assess the level and quality of service, there are "results" that cannot be assessed with any measurements - impression, spiritual nourishment, satisfaction, such as aesthetic pleasure has its own profession.

Despite the fact that Uzbekistan's tourism has great opportunities, it faces a number of problems in the process of a complex transition. The global financial and economic crisis that began in 2015 has also affected the international tourism market. Experts predict that world tourism will suffer huge losses. As a result of the rapid measures taken by the leadership of our republic, the impact of the global crisis on our economy is significantly protected.

In 2022, the majority of tourist companies and organizations in the Republic of Uzbekistan were located in Tashkent (321), and they provided services to 73,800 foreign citizens. There are 57 tourist companies and organizations operating in Samarkand region, they provide services to 14,500 foreign citizens. There are tourist attractions in Khorezm region and there are firms and organizations that provided services to 51,200 foreign citizens.

The Republic of Kazakhstan receives the majority of international tourists among the CIS nations, with 1806.8 thousand individuals (or 73.7% of those from the CIS countries), followed by Tajikistan with 316,2 thousand persons (9.9%). 5.9% of the population is from Russia, with 134.9 thousand individuals, while 16.9% comes from other nations, including Turkmenistan (70.5 thousand), Azerbaijan (4.3 thousand), and Belarus (3,000).

The number of active tourist businesses and organizations has grown during the past five years. For instance, in 2022, there were 645 of them, and by 2017, there were 704 of them.

There were 206,700 visits in 2021, and 782,700 visitors in 2022. The number of students admitted grew from 102.4 thousand in 2022 to 167.4 thousand in 2022.

A number of factors have a great impact on achieving such achievements. Among them can be included:

First of all, routes with an international reputation and well-advertised (Tashkent-Samarkand-Bukharam-Khiva) have been operating for many years and have accumulated a lot of experience.

In the volume of services provided to foreign and domestic tourists, stable dynamics have been achieved over the years, and a gradual increase is observed.

At least 10% of travelers to Uzbekistan on a tourist or private route have an interest in the environment. If not, they either go on a one-day excursion to surrounding rural areas or explore natural sites (bogs, mountains, forests, and lakes). At least 60% of them believe that a mixed type is necessary, and they are particularly interested in ecology and ethnography. Therefore, organized tourism is "specializing" in ecotourism.

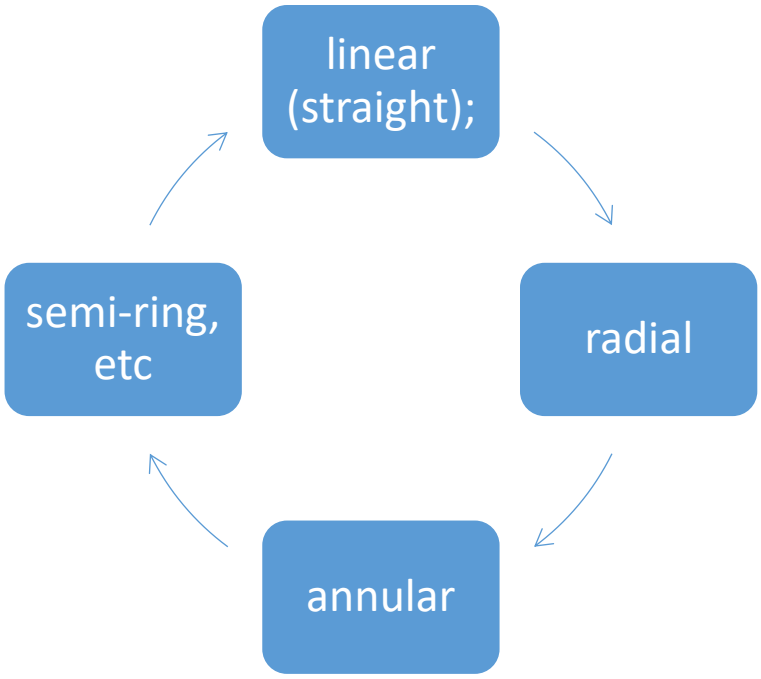

Figure – 1. Directions of ecological routes

Accordingly, the following directions of ecological routes are followed:

- linear (straight);
- radial;
- annular;
- semi-ring, etc

According to the task, they are divided into the following types:

- getting knowledge - walk;
- education - tourism;
- educational excursion;
- sports;

- recreational, etc

The following requirements should be considered when creating educational hiking routes (they are sometimes called "holiday trails"):

- distance – 4-8 km;

- start from the entrance to the protected area as much as possible;

- it is necessary to gather tourists in one group, get acquainted with the monuments of nature, history and culture for 3-4 hours under the leadership of a guide, listen to a lecture along the way, and walk slowly.

- tourists are also allowed to cross this trail independently. However, if the road passes through the territory of the reserve, they must be accompanied by an employee of the administration of this area;

- before traveling independently, tourists should be provided with appropriate materials and familiarized with safety techniques and rules of behavior;

- tourists must have a receipt indicating that they have been paid and an appropriate permit to enter the protected area.

C**onclusion and Recommendations.**

Findings from the investigation into the position and significance of ecotourism in the Uzbek market for tourism services lead to the following conclusions:

1. Ecotourism is a promising new approach for the development of traditional tourism and a significant component of it. It currently accounts for 10–20% of the entire tourist market, and its growth rate is accelerating.

Despite the high potential for ecotourism in Uzbekistan, relatively little of it is being practiced there. The abundance of the nation's natural landscapes, distinctive flora and fauna, uncommon, internationally significant archaeological discoveries, paleontological remnants, geological sections, and natural monuments is proof that ecotourism might grow quickly in the country.

3. Considering ecotourism as a means of environmental preservation as well as a source of revenue, a way to create jobs, and a component of leisure that brings people joy and aesthetic satisfaction.

4. Terms like "natural tourism," "sustainable tourism," "green tourism," "responsible tourism," and "charity tourism" are frequently used as substitutes for the term "ecotourism." They can't be compared to one another despite having some things in common. But they all imply a visit to nature, the preservation of nature, and, thus, the pursuit of environmental protection.

5. The nature of travel is the primary form of organization at the local level, and in this case, the association has the primary control over tourism, as well as the growth and management of the industry. This type of tourism logically fits with the idea of "neighborhood," which is regarded as a form of citizen self-government.

6. Uzbekistan's specifically protected natural regions (state reserves, national parks, specialized institutions, nature reserves, order centers, and natural monuments) offer excellent circumstances for the growth of ecological tourism and serve as the sector's foundation.

7. Ecotourism regions and economic regions do not have the same circumstances for the organization and growth of ecological tourism. Regarding the growth of their infrastructure, they differ greatly from one another. The opposition of foreign visitors is due to this circumstance. As a result, it would be practical to allot money for this front from the state budget as well as money from local sponsors and groups.

8. There are several types of ecotourism, and they are always evolving. Some types tend to become less significant as they advance. The types of ecotourism must be specialized by region and within the region (region) in light of this.

9. In order to ensure the implementation of a thorough strategy for the development of ecological tourism in Uzbekistan, it is essential to include all interested parties. The cross-border issue is one of the major issues here. The main cause of this issue is border crossing by travelers to the western Tien Shan region. It requires the opening of unique border crossing sites in Uzbekistan, Kazakhstan, and Kyrgyzstan in order to be resolved.

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“ЯШИЛ” КРЕДИТ “ЯШИЛ” МОЛИЯЛАШТИРИШНИНГ МУҲИМ ИНСТРУМЕНТИ СИФАТИДА

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Аннотация. Дунё миқёсида “яшил” иқтисодиётни ривожлантиришга миллий иқтисодиётни ривожлантиришнинг устувор йўналиши сифатида қаралаётганлиги “яшил” молиявий инструментлар бозорини шаклланиши ва юқори суръатларда ўсишига олиб келди. Бу эса, ўз навбатида, “яшил” молиялаштиришнинг муҳим инструменти бўлган “яшил” кредитларга бўлган талабнинг ошишига олиб келди.

Мақолада “яшил” кредит хусусидаги илмий-назарий қарашлар тадқиқ қилинган ҳамда “яшил” кредитдан фойдаланиш амалиётини такомиллаштириш борасидаги илғор хориж тажрибаси ўрганилган ва умумлаштирилган.

Калит сўзлар: “яшил” молиялаштириш, молиявий инструментлар, “яшил” кредит, муаммоли кредит, “яшил” лойиҳа, инвестиция, экологик самарадорлик, тушум, даромад.

Кириш. Ўзбекистон Республикаси Президентининг 2019 йил 4 октябрдаги ПҚ-4477-сонли Қарори билан тасдиқланган 2019-2030 йиллар даврида Ўзбекистон Республикасининг «яшил» иқтисодиётга ўтиш стратегиясида технологик эҳтиёжларни баҳолаш, устувор вазифаларни белгилаш ва энг муҳим технологияларни танлаш, уларни ишлаб чиқиш/трансферга кўмак бериш ва «яшил» технологияларни тижоратлаштириш механизмларини ривожлантириш, инновацион фаолиятни қўллаб-қувватлаш учун ташкилий тузилмалар - технологияларни етказиб бериш агентликлари, технологик бизнес-инкубаторлар, технопарклар, кластерлар яратиш йўли билан «Яшил» технологияларни жорий этишнинг институционал асосларини ривожлантириш «Яшил» иқтисодиётни қўллаб-қувватлашнинг молиявий ва номолиявий механизмларини ишлаб чиқишнинг устувор йўналишларидан бири сифатида эътироф этилган [1]. Бу эса, ўз навбатида, “яшил” молиялаштириш инструментларидан фойдаланиш амалиётини такомиллаштириш заруриятини юзага келтиради.

Мавзуга оид адабиётлар таҳлили

Бир гуруҳ хорижлик иқтисодчи олимларнинг хулосасига кўра, “яшил” кредит ҳақиқатда экологик тармоқларни молия муассасалари билан боғлайдиган кўприк ҳисобланади, айни вақтда, “яшил” молиялаштириш умумий ҳолатда экологик муаммолар ва ресурсларни бошқаришнинг ечими сифатида қаралади [2].

Л.Ю.Андреева, Н.Г. Вовченко, Т.В. Епифанова ва А.А. Полуботко ҳаммуаллифликда амалга оширган илмий тадқиқоти натижаларига асосланиб хулоса қиладики, “яшил” кредитлаш тизимини субсидиялаш “яшил” иқтисодиётга ўтиш учун низомларни ишлаб чиқишда юзага келадиган экологик чиқимларни самарали бошқариш имконини беради. Шунингдек, углеводородлар баҳоларининг салбий тебраниши шароитида Россияга миллий иқтисодиётнинг барқарорлигини таъминлаш учун ўзининг “яшил” кредитлаш инструментларини ишлаб чиқишни бошлаш зарур бўлади [3].

Ho My Hanh [4] и Thi Thanh Tung Pham [5] хулоса қиладики, “яшил” кредитлаш банкда кредитлаш бўлинмаларини оптималлаштириш ва инновацион банк хизматларини жорий қилиш мақсадида ижтимоий ва экологик рискларни бошқаришни яхшилайди. Бошқа томондан эса, бу иқтисодий ўсиш моделини барқарор ривожланиш томон трансформациясига имкон яратади.

А.Дворецкаянинг фикрига кўра, экологик самарадорлиги юқори бўлган лойиҳаларга кредитлар бериш кредит ташкилотларининг “яшил” иқтисодиётдаги иштирокининг йўналишларидан бири ҳисобланади ва, шубҳасиз, ташкилотнинг асосий кўрсаткичларига таъсир кўрсатади [6].

Е.Г. Шершнева, Е.С. Кондюкова ва Е.В. Емельяновалар ёзадики, тараққий этган мамлакатларда “яшил” кредитлаш экологик лойиҳаларни молиялаштиришнинг нисбатан кенг тарқалган канали ҳисобланади. Россияда эса, улардан фарқли ўлароқ, ушбу молиявий инструмент, экологик лойиҳаларни етарли даражада иқтисодий асосланмаганлиги ва юқори рисклилиги туфайли, устувор аҳамият касб этмади [7].

Zhang Qianyang тадқиқоти натижаларига асосланиб хулоса қиладики, кичик ва ўрта корхоналарга “яшил” кредитлар бериш нисбатан юқори рискли ҳисобланади [8].

Бир гуруҳ хитойлик иқтисодчи олимларнинг фикрига кўра, банклар учун “яшил” кредитлар бериш нафақат ижтимоий-фойдали акт ёки сиёсатга жавоб, балки уларнинг рақобатбардошлигини ва операцион қобилиятини оширишнинг муҳим воситаси ҳам ҳисобланади [9].

Юқоридаги фикрни Hu Mengze ва Li Wei ҳам қўллаб-қувватлайди. Уларнинг хулосасига кўра, “яшил” кредитлашни самарали қўллашбанк учун экологик рискларни камайтиради, табиий ресурслардан фойдаланишнинг давлат бошқаруви иқтисодий инструментларидан фойдаланиш кўламини кенгайтиради ва “яшил” ўсишга кўмаклашади [10].

С.М. Никоноров ва А.В. Барабошкинанинг хулосасига кўра, “яшил” кредитлашга оид бўлган статистика асосида кредит портфелига кирувчи икки категорияни ажратиб кўрсатиш мумкин: стратегик секторлар доирасида ишлаб

чиқаришни кредитлаш ва атроф-муҳитни ҳимоя қилишга қаратилган лойиҳалар ва хизматларни кредитлаш [11].

Иқтисодчи олимларнинг “яшил” кредитлаш хусусидаги илмий-назарий қарашларни ўрганиш кўрсатадики, “яшил” кредитлашнинг методологик ва амалий асослари тўлиқ шаклланмаган, фақат назарий асослари шакллантирилган.

Таҳлил ва натижалар

«Яшил» концепцияни амалга ошириш молиялаштиришнинг турли манбаларини, жумладан, корхоналарнинг ўз маблағларини, тижорат банкларининг кредитларини, халқаро кредитларни кенг кўламда жалб қилиш заруриятини юзага келтиради. «Яшил» кредитлаш эса, мазкур концепциянинг муҳим таркибий қисми ҳисобланади. Шу сабабли, “яшил” кредитлар портфелини шакллантириш, яъни энергия самарадорлиги, қайта тикланадиган энергия манбалари, экологик тоза маҳсулотлар ишлаб чиқариш соҳасидаги лойиҳаларни молиялаштириш учун берилган кредитлар мажмуини шакллантириш тижорат банкларининг “яшил” иқтисодиётдаги ўрнини белгиловчи асосий омил ҳисобланади.

1-жадвал

Экватор принципига амал қиладиган дунё банклари сони [12]

Ҳудуд	Мамлакат	Банклар сони	Ҳудуд	Мамлакат	Банклар сони
Европа	Нидерландия	8	Шимолий Америка	Канада	7
	Испания	7		АҚШ	5
	Буюк Британия	6		Мексика	2
	Франция	6	Лотин Америкаси	Бразилия	6
	Швеция	5		Аргентина	1
	Германия	4		Колумбия	1
	Италия	2		Панама	1
	Норвегия	2		Перу	1
	Бельгия	1		Уругвай	1
	Дания	1	Африка	ЖАР	4
	Финландия	1		Миср	2
	Швейцария	1		Нигерия	2
	Шотландия	1		Маврикий	1
Осиё	Тайван	8		Марокко	1
	Япония	8		Того	1
	Хитой	7	Яқин Шарқ	Бахрейн	1
	Жанубий Корея	3			
	Сингапур	2		БАА	1
	Ҳиндистон	1			
Океания	Австралия	5			

1-жадвал маълумотларидан кўринадики, Экватор принципига амал қиладиган дунё банкларининг умумий сонида европа банклари етакчилик қилмоқда. Шунингдек, Тайван, Япония ва Хитойда ҳам Экватор принципига амал қиладиган банклар анчагина.

Хулоса ва таклифлар

Тадқиқот жараёнида қуйидаги хулосаларни шакллантирдик:

*дунё миқёсида “яшил” иқтисодиётни ривожлантиришга миллий иқтисодиётни ривожлантиришнинг устувор йўналиши сифатида қаралаётганлиги “яшил” молиявий инструментлар бозорини шаклланиши ва юқори суръатларда ўсишига олиб келганлиги “яшил” молиялаштиришнинг муҳим инструменти бўлган “яшил” кредитларга бўлган талабнинг ошишига олиб келди;

*“яшил” кредит ҳақиқатда экологик тармоқларни молия муассасалари билан боғлайдиган кўприк ҳисобланади ва, айни вақтда, “яшил” молиялаштириш умумий ҳолатда экологик муаммолар ва ресурсларни бошқаришнинг ечими сифатида қаралади;

*“яшил” кредитлаш тизимини субсидиялаш “яшил” иқтисодиётга ўтиш билан боғлиқ бўлган экологик чиқимларни самарали бошқариш имконини беради;

*экологик самарадорлиги юқори бўлган лойиҳаларга кредитлар бериш кредит ташкилотларининг “яшил” иқтисодиётдаги иштирокининг йўналишларидан бири ҳисобланади ва ташкилотнинг асосий кўрсаткичларига таъсир кўрсатади;

*банклар учун “яшил” кредитлар бериш уларнинг рақобатбардошлигини ва операцион қобилиятини оширишнинг муҳим воситаси ҳам ҳисобланади;

*“яшил” кредитлашга оид бўлган статистика асосида кредит портфелига кирувчи икки категорияни ажратиб кўрсатиш мумкин: стратегик секторлар доирасида ишлаб чиқаришни кредитлаш ва атроф-муҳитни ҳимоя қилишга қаратилган лойиҳалар ва хизматларни кредитлаш;

*«яшил» кредитлаш «яшил» концепциянинг муҳим таркибий қисми ҳисобланади, шу сабабли, “яшил” кредитлар портфелини шакллантириш тижорат банкларининг “яшил” иқтисодиётдаги ўрнини белгиловчи асосий омил ҳисобланади;

Экватор принципига амал қиладиган дунё банкларининг умумий сонида европа банклари етакчилик қилмоқда. Шунингдек, Тайван, Япония ва Хитойда ҳам Экватор принципига амал қиладиган банклар анчагина.

Фикримизча, республикамизда “яшил” кредитлардан фойдаланиш амалиётини такомиллаштириш учун қуйидаги тадбирларни амалга ошириш лозим:

1. “Яшил” кредитлаш шаклларидан (экологик уй-жойларни қуриш ва сотиб олиш учун бериладиган кредитлар, энергияни тежаш имконини берадиган лойиҳаларни молиялаштириш учун бериладиган “яшил” кредитлар, қайта тикланадиган энергия объектларини қуриш учун бериладиган “яшил” кредитлар, сув таъминоти тизимини модернизация қилиш учун бериладиган “яшил”

кредитлар, иқлимий “яшил” кредитлар) комплекс фойдаланишни таъминлаш лозим.

2. “Яшил” лойиҳаларни молиялаштириш жараёнидаги молиявий рискларни бошқариш амалиётини такомиллаштириш учун, биринчидан, лойиҳани молиялаштириш манбалари ҳажмида кредит олувчининг улушини камида 25 % бўлишини таъминлаш лозим; иккинчидан, акциядорларнинг қўшимча молиялаштириш бўйича кафолатларини олишни таъминлаш керак; учинчидан, лойиҳани банкларнинг кредит линияси орқали молиялаштиришга усулидан кенг фойдаланиш зарур; айланма маблағларни молиялаштириш имкониятларини баҳолаш аниқлигини ошириш лозим.

Фойдаланилган адабиётлар рўйхати:

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DEBT FINANCING VS. TAX FINANCING IN INFRASTRUCTURE ON EMPLOYMENT: UNLOCKING SUSTAINABLE DEVELOPMENT AND GREEN OPPORTUNITIES

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Annotation: *This research investigates the impact of financing mechanisms on employment outcomes in the context of sustainable infrastructure investments. By analyzing U.S. macroeconomic data from 1989 to 2023, this study evaluates whether debt-financed or tax-financed spending better supports job creation while advancing green energy initiatives, sustainable development goals, and environmentally friendly urban planning. Drawing on datasets from the IMF and World Bank, the analysis considers key variables including the employment-to-population ratio, real GDP, gross fixed capital formation, and financial indicators such as inflation, interest rates, tax revenue, and foreign direct investment. Two main measures—Infra_debt (government borrowing for sustainable infrastructure projects) and Infra_tax (tax-funded green infrastructure spending)—are normalized against GDP to ensure comparability over time.*

Moreover, these investments are shown to spur further opportunities for developing green, nature-friendly environments by enhancing public spaces, reducing urban heat islands, and improving overall environmental quality. In contrast, the analysis suggests that tax-financed spending shows limited effectiveness, possibly due to the restrictive effects of increased taxation on economic activity and green investments. In conclusion, strategic debt financing for sustainable and green infrastructure projects appears more conducive to stimulating employment, fostering economic expansion, and promoting a healthier, nature-friendly environment than tax-based financing. The results underscore the importance for policymakers to consider the potential economic drawbacks of increased taxation while capitalizing on borrowing as a means to drive long-term sustainable development and energy transition.

Keyword: USA, infrastructure investment, tax financing, debt financing, econometrics, employment.

Our primary goal is to find out which infrastructure financing method is better, debt or tax financed. This is an interesting and actual theme in recent years, especially

for developing countries that should mainly focus on infrastructure development. The essence of infrastructure and subsidies has been proven to be important in economic development by Saudia Arabi Emirates, also Uzbekistan is at this theme.

The President of The republic of Uzbekistan in his speech “We will strengthen efforts to create comfortable and attractive environment for investors” on 24 march 2022 emphasized the continuation of intensive infrastructure development in the country as one of the ultimate goal of the New Uzbekistan Development Strategy for the next 5 years [1].

The main question arises: it that better to finance infrastructure from tax and stimulations or to finance it by government debt. That is undeniable that infrastructure investment always pays back as found by Aschauer (1989) in his study "Is Public Expenditure Productive?" [2]. below an empirical study and analysis will be show from which our main goal is to find the most efficient way to finance infrastructure spendings.

Fiscal policy remains a central tool for governments aiming to stimulate economic activity and boost employment. Two prominent instruments are debt-financed infrastructure spending and tax cuts.

Christina & David Romer examined the macroeconomic variables of GDP, inflation, government spending and employment he was studied how government spending and tax policies impact output and employment [3]. The result a significant impact of government spending exerts a strong multiplier effect on output and job creation, especially during downturns, whereas tax cuts tend to have a less immediate impact on employment.

Alan Auerbach tested macroeconomic determinants of the fiscal indicators like tax rates, government expenditures for India (1980-2009) [4]. The selected Variables were inflation rate, GDP growth, investment, and employment. The study employed OLS analysis, Granger Causality test and Cointegration procedures. The results of regression analysis showed significant impact of all the variables for the Indie. His work show that public debt spending has significant effect on compared to tax cuts, suggesting that direct spending is more effective in stimulating economic activity and job creation.

Olivier Blanchard analysed the relationship between how the government spending and tax policies impact output and employment by using OLS analysis for the period (1999-2010) [5]. The variables that they take GDP growth, labour productivity, labour market indicators (employment/unemployment rates), and the result show that government spending leading the significant effect in the short-run in job creation.

Ramey & Zubairy discussed the challenges of a comparison of debt-financed infrastructure projects vs. tax cuts in job creation, and the selected Variables were GDP, employment figures, and occasionally, Tax revenue, interest rate [6]. The results of regression analysis showed significant impact of all the variables for the GDP and Employment have positive relation

Roberto Perotti examined the macroeconomic variables of GDP and employment, with some studies also incorporating public, gross fixed capital formation, debt and interest rates [7]. The study employed OLS analysis and the results of regression analysis showed significant impact of all the variable generally conclude that the multipliers for government spending are higher than those for tax cuts, confirming that direct public expenditure is more effective for short-term job creation

In view of this background, this study aims to investigate the determinants of A comparison of debt-financed infrastructure projects vs. tax cuts in job creation. It examines empirically the impact of macroeconomic variables Central government debt, GDP growth, Gross fixed capital formation, Inflation, consumer prices, Tax revenue, FDI.

Table 1

Descriptive Statistics [done by author in Stata]

Variable	Obs	Mean	Std. Dev.	Min	Max
Employment	35	60.21934	1.814183	56.38	63.297
GDP_const	35	1.53e+13	3.63e+12	9.60e+12	2.18e+13
GDP_growth	35	2.496845	1.703412	-2.213469	5.800206
Gross_cap	35	21.11851	1.214805	18.31394	23.14628
Inflation	42	3.627199	2.423238	-0.3555463	8.0028
Interest_r~e	35	5.868619	2.374243	3.25	10.87333
Tax	35	10.65259	1.067166	7.903517	12.9708
FDI	42	1.441206	0.8848422	-0.6328269	3.619468

In the table 1 we can see information about some essential statistical measurements of variables. To be more accurate we rounded up in two decimal and based on this, there are overall 35 observations are consisted and according to dependent variable, macroeconomic variable is Employment which is measured in percentage and according this the mean value is 60.21 and while min and max are 56.38 and 63.2. Next macroeconomic determinant is Real GDP that are measured in thousands of USD and according the mean value is 1.53e3 while the lowest and heights values are 9.60e1 and 2. 18e.The following independent variable is Gross fixed capital that usually measured in USD dollar and according the mean value is 21.11 while the min and max value are 18.23 and 23.44. Next is the inflation that are measured in percentage and the mean value is 3.62 while lowest and highest value are -0.35 and 8.02.

Next macroeconomic variable is Leading interest rate which are measured as percentage according the mean is 5.86 while the min and max value 3.25 and 10.87. The following independent variable is Tax revenue which usually measured in percentage and according the mean is 10.65 while the min and max value are 7.70 and 12.97. The last macroeconomic variable is FDI which measured in USD dollar and the according the mean is 1.44 while the lowest and highest value are -0.63 and 3.61

Table 2

Correlation matrix [done by author in Stata]

	Employ~t	GDP_co~t	GDP_gr~h	Gross_~p	Intere~e	Tax	FDI
Employment	1.0000						
GDP_const	-0.5118	1.0000					
GDP_growth	0.4218	-0.1737	1.0000				
Gross_cap	0.7098	-0.0465	0.3369	1.0000			
Interest_r~e	0.7037	-0.6759	0.2968	0.5176	1.0000		
Tax	0.5506	-0.0826	0.4673	0.6553	0.4539	1.0000	
FDI	-0.4098	0.7672	-0.1490	-0.0408	-0.5997	-0.0774	1.0000

This part of the study is going to examine the correlation of variables with each other's. In empirical analysis, it is important to observe the degree of correlation between variables in order to determine whether they are correlated with each other [see table 2]. According to the correlation rule, variables can correlate between -1 and +1, meaning that there can be a negative 100% and positive 100% correlation between them. If the correlation is found to be more than or less than ±0.5, this indicates that the variables have a high degree of commonality and may cause multicollinearity in the model. This could lead to biased regression coefficients and inaccurate population estimates. To be not confuse we describe the correlation Employment and Real GDP they have negatively correlation with each other -0.51 and additionally correlation between the Employment and Gross fixed they are positively at 0.70 correlated with each other and another determinator is Leading interest rate are positively correlated at 0.70. Next is the Tax revenue is positively correlated at 0.55 with employment and the last variable FDI which are negatively correlated at -0.40 with employment and the correlation of other variables is also provided above.

The research study is going to be conducted on timeseries data, which consists of the data for USA from IMF and World Bank datasets. And time frame of 34 years has been chosen on a yearly basis to capture the effects of infrastructure investments fully as quarterly data is not appropriate to my study. From 1989 to 2023 for USA as this country implemented both Tax financed and Debt financed infrastructure investments. As there are no direct indicators for our independent variables we created ones:

We created two variables, to measure the portion of capital that is financed through changes in debt; (Infra_debt) represents the portion of infrastructure spending financed through governmental debt while (Infra_tax) measures the portion of capital financed through changes in taxation calculated in the bellows formuls:

$$Infra_debt = gross\ capital\ (\%\ of\ GDP) * (D.dovernment\ debt\ (\%\ of\ GDP) / (D.dovernment\ debt\ (\%\ of\ GDP) - D.Tax\ revenue\ (\%\ of\ GDP))$$

$$Infra_tax = gross\ capital\ (\%\ of\ GDP) * (-D.Tax\ revenue\ (\%\ of\ GDP) / (D.dovernment\ debt\ (\%\ of\ GDP) - D.Tax\ revenue\ (\%\ of\ GDP))$$

Then we adjusted our newly created variables (infra_debt) and (infra_tax) by multiplying them by GDP (constant 2015 $), which in result will represent real dollar invested in infrastructure through debt or tax so we can measure their precise impact on employment:

$$Infra_debt_real = infra_debt * GDP\ (constant\ US\$\ 2015)$$

$$Infra_tax_real = infra_tax * GDP\ (constant\ US\$\ 2015)$$

We adjustments scale debt and tax contributions in real terms relative to GDP it will help us to find the impact of one additional dollar investment in debt or tax on employment in USA.

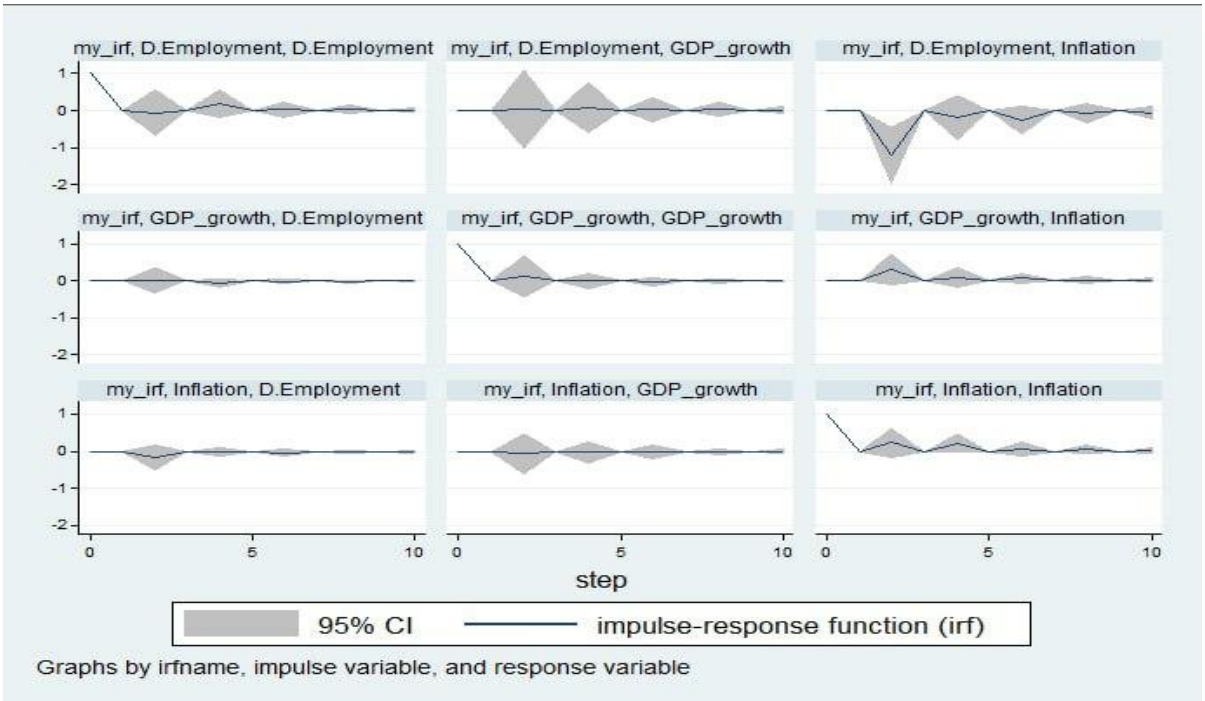

Figure 1. This time series graph [done by author in Stata]

In this time series graph we can see **dynamics over time**, GDP Growth (Blue Line) there was the noticeable dips around **2008–2010** duo to the Global **Financial Crisis** [see Figure 1].

And a sharp decline in 2020 duo to COVID – 19 pandemics. Inflation (Red Line) In periods of economic growth, inflation tends to increase, while in economic downturns, it declines A significant inflation spike is observed around **2020**, which may be linked to **pandemic-related economic disruptions and monetary policies.** Lending Interest Rate (Green Line) A downward trend in interest rates is noticeable before **2008**, which aligns with global monetary easing before the financial crisis. So, we created new dummy variable breaks those accounts for structural breaks in data.

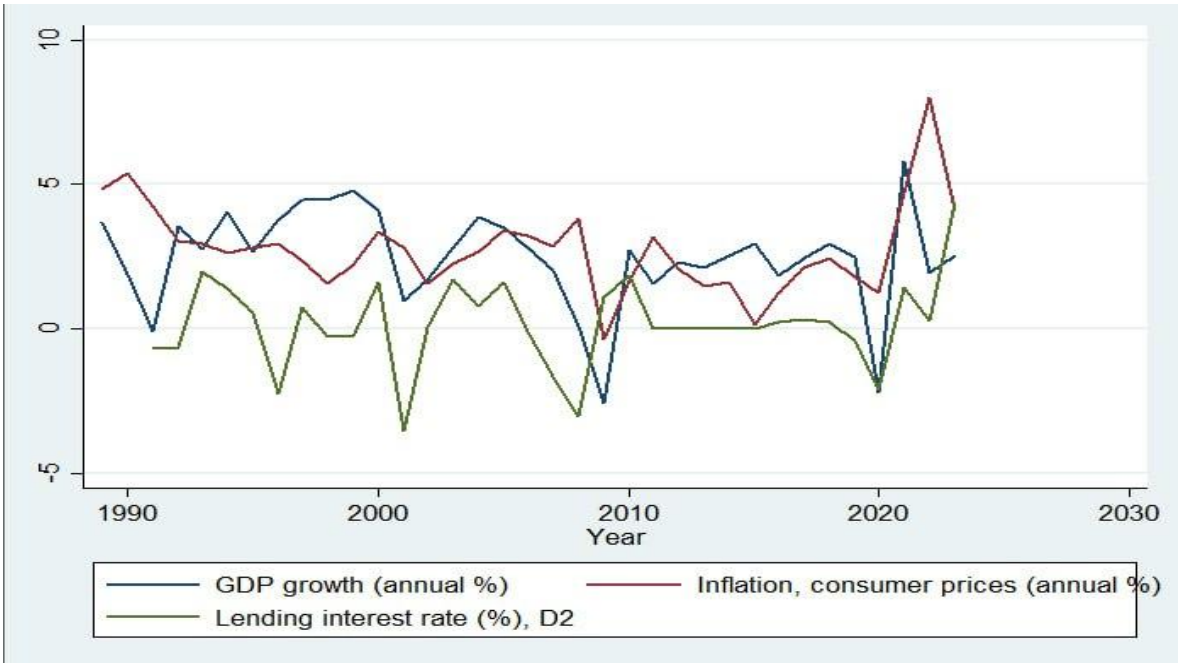

Figure 2. Impulse Response Function (IRF) [done by author in Stata]

Then we check the Impulse Response Function (IRF) Graphs as we can see the graphs above [see Figure 2]. The first row of the table examines the impact of a D.Employment shock on itself, GDP growth, and inflation. A shock to D.Employment initially affects itself positively, but then stabilizes. The effect on GDP growth and inflation is minimal and fluctuates slightly over time. Next the second row considers shocks to GDP growth and their impact on employment and inflation. A GDP growth shock initially has a negative effect on employment but eventually stabilizes. The impact on its own growth shows persistence, meaning that past growth influences future growth. Inflation has a mild response to GDP growth shocks. Last one the third row examines the effects of inflation shocks on employment, GDP growth, and inflation itself. A negative initial response to inflation shocks can be seen in employment, indicating that inflation may reduce employment in the short term. GDP growth reacts slightly, but remains mostly stable. Inflation itself shows a dampening effect, meaning that it stabilizes over time. So this test shows that GDP_growth and Inflation have no significant impact on D.Emplyment, which confirms that we can include them in our model and they will not distort our regression.

After deep research to find the most appropriate regression model regression analysis using Newey-West standard, this model used for correcting **heteroskedasticity and autocorrelation**

$$D.Employmentt = \beta 0 + \beta 1 L2.infra_debt_realt + \beta 2 GDP_growtht + \beta 3 Inflationt + \beta 4 D.L.Interest_ratet + \beta 5 breakst + \epsilon t$$

- D.Employment is a first difference of employment to population ratio in "percentage"
- L2.infra_debt_real is a second lag of a one dollar investment into infrastructure from debt.
- GDP_growth it is a simple growth rate of GDP in percentage.
- D.L.Interes_rate is a differentiated and lagged value of interest rate in a country.
- Breaks is a dummy variable of breaks in an economy where 1 is a downward trend and 0 is no crisis.

$$D.Employmentt = \beta 0 + \beta 1 L.infra_tax_realt + \beta 2 GDP_growtht + \beta 3 L.Inflationt + \beta 4 D.L.Interest_ratet + \epsilon t$$

There all variable are the same except from L.infra_tax_real which is a "real dollar from 2015" investment from tax into infrastructure. This model shows the impact of tax financed infrastructure to unemployment.

Table 3

Empirical Result [done by author in Stata]

Regression with Newey-West standard errors — Number of obs = 33
maximum lag: 3 — F(4, 27) = 19.49
Prob > F = 0.0000

D.Employment	Coef.	Newey-West Std. Err.	t	P>|t|	[95% Conf.	Interval]
infra_debt_real L2.	1.38e-15	4.97e-16	2.77	0.010	3.58e-16	2.40e-15
GDP_growth	.4446143	.077593	5.73	0.000	.2854066	.603822
Inflation	.1978823	.0606392	3.26	0.003	.0734609	.3223037
Interest_rate LD.	.0923225	.0515814	1.79	0.085	-.0135138	.1981588
breaks	.3092819	.220472	1.40	0.172	-.1430893	.761653
_cons	-2.05698	.4710346	-4.37	0.000	-3.023463	-1.090497

The table 3 presents the results of a regression analysis using Newey-West standard errors to correct for heteroskedasticity and autocorrelation. It was employed as this model is able to capture most of the fluctuation in employment given with independent variables. And appropriate lag of 3 was chosen due to the number of observations.

Based on the regression results, a **1% increase in GDP growth** is associated with an **approximately 0.44% increase in employment**, and this effect is statistically significant at the **1% level**.

Similarly, **a 1% increase in inflation** is linked to an **approximately 0.20% increase in employment**, also statistically significant at the **1% level**.

Infrastructure debt (lagged by two periods) also has a **positive and statistically significant** effect on employment, though the magnitude is extremely small. It is approximately 725 trillion dollars needed to invest from debt into infrastructure to increase employment by 1% from previous employment.

On the other hand, the **interest rate (lagged difference)** has a **positive but marginally insignificant** effect on employment, with a **p-value of 0.085** (above the 5% threshold).

The **breaks variable does not show a statistically significant impact**, suggesting structural changes may not be a key determinant in this model.

After then, there are another common issue with the model is the presence of multicollinearity between variables. The table 4 as we see we confidently say there is no a multicollinearity problem since the average value at 2.27 below than 5.

Table 4

VIF [done by author in Stata]

Variable	VIF	1/VIF
Inflation	3.87	0.258306
infra_debt~l L2.	2.65	0.377648
GDP_growth	2.57	0.389274
breaks	1.14	0.878900
Interest_r~e LD.	1.10	0.905242
Mean VIF	2.27	

In the table 5 we can see the summary statistics for the **regression error term,** since the mean is close to zero; this suggests the model does not have a significant bias in its predictions. Even more, below is the scatterplot that confirms that our model made a good prediction of employment.

Table 5

Error term description [done by author in Stata]

Variable	Obs	Mean	Std. Dev.	Min	Max
error	33	-.0157273	.8381715	-2.45135	1.196836

After than regression analysis, conducting a number of post estimation tests is important in order to make sure whether the inference of coefficients to population is reliable or not. One of the common issues is observing heteroskedasticity problem in

regression, we can check it by many ways one of them is the technical method or scatter plot as we can see the below graphic the three may still be slight non-constant variance in residuals [see Figure 3].

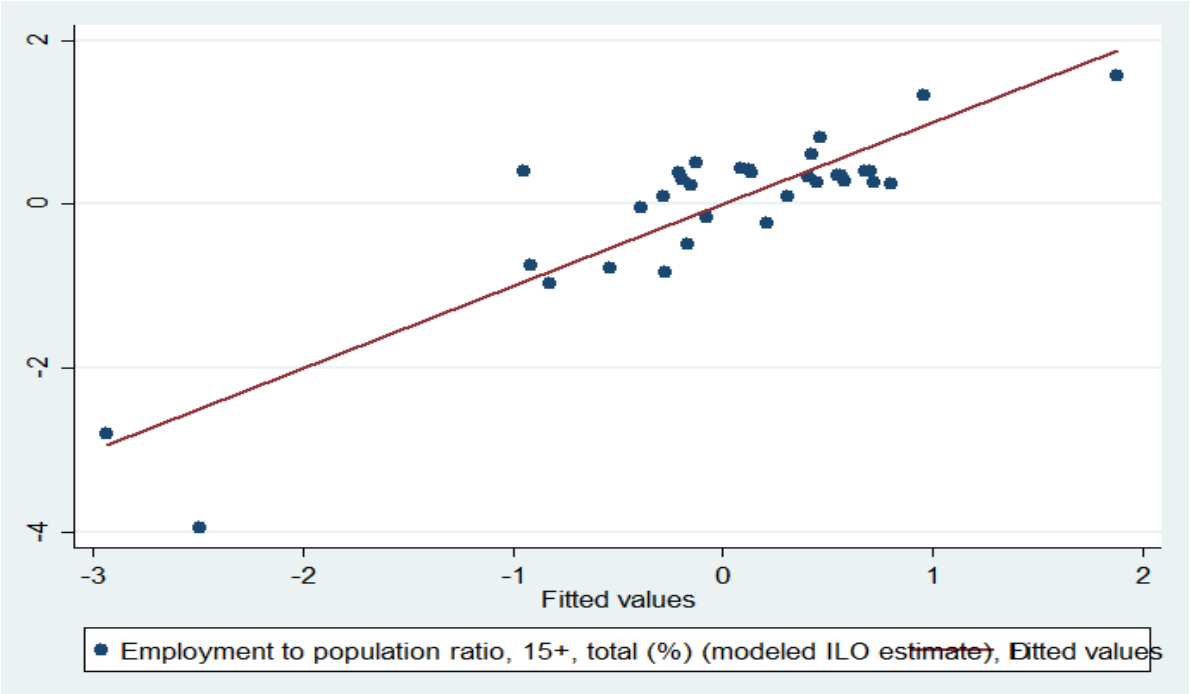

Figure 3. scatterplot of our model predictions [done by author in Stata]

If GDP growth increases by one unit, employment rises by **0.4778 units**, and this effect is found to be statistically significant at the **1% level**.

A one-unit increase in the interest rate leads to a **0.1349-unit increase in employment**, and this effect is statistically significant at the **5% level** [see Table 5].

Table 5. Model with tax effect on employment [done by author in Stata]

D.Employment	Coef.	Newey-West Std. Err.	t	P>|t|	[95% Conf.	Interval]
infra_tax_real L1.	-7.70e-16	3.14e-16	-2.46	0.020	-1.41e-15	-1.28e-16
GDP_growth	.4777823	.11741	4.07	0.000	.2372787	.7182859
Inflation L1.	.1457058	.075135	1.94	0.063	-.0082013	.2996129
Interest_rate LD.	.1349761	.0647968	2.08	0.046	.002246	.2677062
_cons	-1.523775	.4518266	-3.37	0.002	-2.4493	-.5982505

Inflation also has a positive impact on employment, with a **0.1451-unit increase per one-unit rise in inflation**, but this effect is **only marginally significant at the 10% level**.

On the other hand, a one-unit increase in infrastructure tax reduces employment by **7.70e-16 units**, and this negative effect is statistically significant at the **5% level**. It is negative but its coefficients are too small, which can suggest that tax financed infrastructure spending can of course create new jobs via foreign investment and national economic simulation, but the amount of tax increased also creates unpleasant environment for an operating enterprise.

After then, we one more time check the multicollinearity between variables. The table 6 as we see we confidently say there is no a multicollinearity problem since the average value at 1.46 below than 5

Table 6. VIF [done by author in Stata]

Variable	VIF	1/VIF
Inflation		
L1.	1.87	0.535930
GDP_growth	1.79	0.557560
infra_tax_~l		
L1.	1.12	0.889339
Interest_r~e		
LD.	1.05	0.956086
Mean VIF	1.46	

After than we again check, conducting a number of post estimation tests is important in order to make sure whether the inference of coefficients to population is reliable or not. One of the common issues is observing heteroskedasticity problem in regression, we can check it by many ways one of them is the technical method or scatter plot as we can see the above graphic the three may still be slight non-constant variance in residuals. But as we used Newey-West estimator model we can control for heteroscedasticity and autocorrelation [see Figure 4].

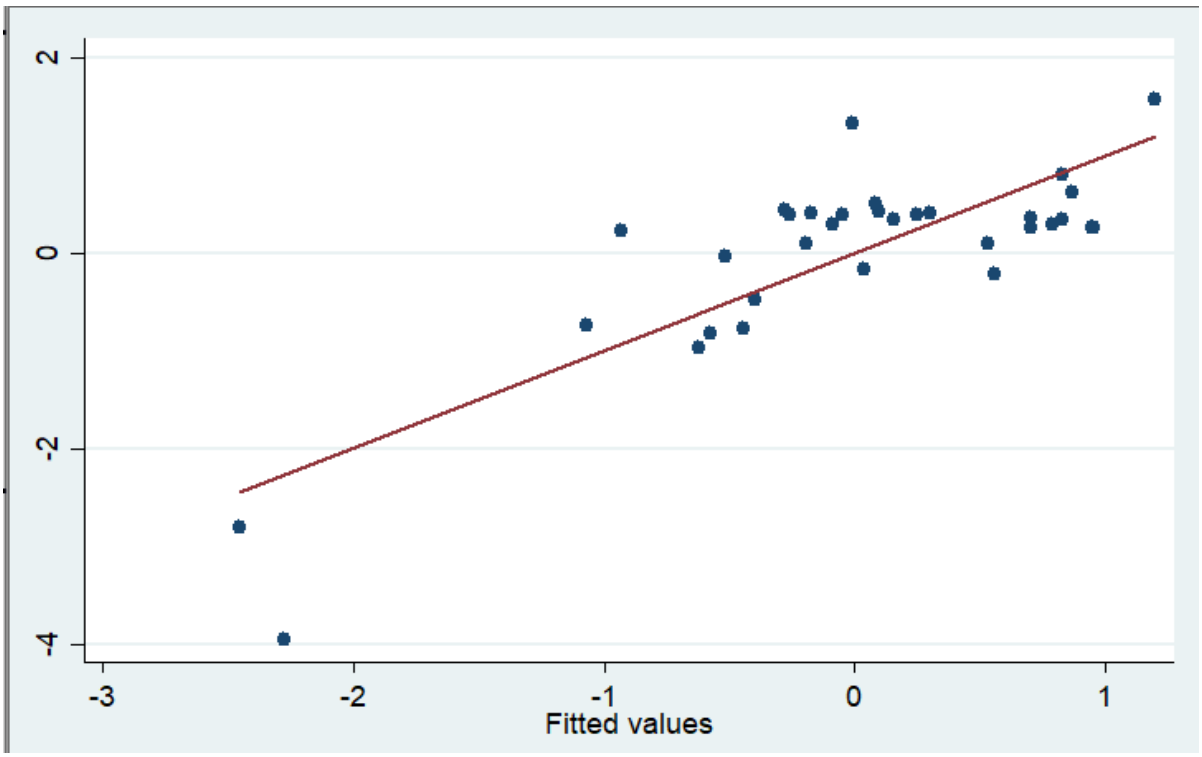

Figure 4. scatterplot of our model predictions [done by author in Stata]

Conclusion

The objective of this study is to explore which method of infrastructure investment is more preferable for employment to population ratio. Sustainable development is mainly determined by wellbeing of people and green energy needs certain level of infrastructure facilities and laws to be maintained. As empirical result revealed in the comparison of Tax and Debt investment methods, Debt has been found to be the most appropriate way to finance infrastructure for maintaining sustainable development and employment. The study examines the relationship between employment and the variables of Central government debt, GDP growth, Gross fixed capital formation, Inflation, consumer prices, Tax revenue, FDI. Employing Newey-West standard analysis results show that the mentioned variables are main determinants of employment. It is found that all variables have significantly as mentioned in the previse studies of Ramey & Zubairy and Alan Auerbach

Policy recommendation

Also, by checking models (1) and (2), we found infortune investment shows the negatively effect on job creation while intraturn debt have positively affect the job creation meaning that since higher taxes on infrastructure reduce employment,due to governments impose higher taxes to finance infrastructure projects, businesses may face **higher operating costs** which leads low investment and slower job creation more over lower demand may result in **businesses hiring fewer workers** or even laying off employees. That is why government need focus on the increase infrastructure debt positively to impacts employment ensuring that the project has high economic return such as the transportation, energy, and digital infrastructure. So final policy

recommendations of our study is that, it is better to relay on government debt financed infrastructure investments rather than on tax financed ones, as debt investment covers itself in the short run, while tax fascination can lead to unemployment. In the short run, tax increases can have a negative impact on employment due to the above reasons. However, in the long run, if the tax revenue is used effectively for high-quality infrastructure, it can boost economic activity and create jobs. So, it is important to consider the duration of policy to correctly implement our policy recommendation.

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YASHIL LOGISTIKA STRATEGIYASINI YARATISH VA TAKOMILLASHTIRISH YO‘LLARI

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So‘nggi bir necha yil ichida onlayn savdo va yetkazib berish xizmatlari ko’paydi, bu esa ko’proq odamlarni kundalik ehtiyojlarini onlayn sotib olishga majbur qilmoqda. Ba’zan bu xaridlarni bir mamlakatdan boshqasiga o’tkazish kerak, natijada ta’minot zanjiri va ko’proq logistika bo’ladi. Bu operatsiyalarning barchasi atrof-muhitga emissiya va ifloslanish darajasiga ta’sir qiladi. Natijada, atrof-muhitni muhofaza qilish va saqlash har qachongidan ham muhimroq bo’ldi, Yashil logistika buni qilishga harakat qilmoqda. Yashil logistika, shuningdek, eko-logistika sifatida ham tanilgan, mahsulotning butun hayotiy tsiklini qamrab oluvchi, ishlab chiqarishdan to mahsulotni utilizatsiya qilishgacha bo’lgan barcha operatsion jarayonlarda barqaror siyosatlarni qo’llash orqali logistika faoliyatining chiqindilari va atrof-muhitga ta’sirini kamaytirishni anglatadi.

Yashil logistika atrof-muhitga zarar etkazmasdan amalga oshiriladigan logistika xizmatlari sifatida tavsiflanadi. Ular uglerod izlarini minimallashtirish va logistika safari davomida barqaror amaliyotlarda ishtirok etishni maqsad qilgan.

Yashil logistikaning boshqa nomlari orasida gumanitar logistika, yaxshi logistika, eko-logistika, barqaror logistika va boshqalar kiradi.

An’anaviy logistika barqarorlik yoki ekologik toza choralarga e’tibor bermaydi. Ular juda ko’p energiya iste’mol qiladilar, ko’p chiqindilarni ishlab chiqaradilar va xizmatlaridan keyin katta uglerod izini qoldiradilar.

Bugungi kunda yashil logistika shunchaki so’z emas, balki har bir kompaniya tomonidan amalga oshirilishi kerak bo’lgan juda muhim tushunchadir. U kompaniyaning KIM (Korporativ ijtimoiy mas’uliyat - Corporate social responsibility (CSR)) tashabbusi sifatida harakat qilishi va raqobatchilardan farqlovchi omil bo’lishi mumkin. Dunyo bo’ylab kompaniyalar endi yashil logistika va barqaror amaliyotlar muhimligini anglab yetmoqda, bu nafaqat atrof-muhit uchun, balki ularning biznesi uchun ham foydalidir.

Logistikaning an’anaviy maqsadi mahsulotlar va ma’lumotlarni bir nuqtadan ikkinchisiga eng yaxshi tarzda ko’chirish edi. Ushbu maqsadga ekologik toza taktika hisoblangan ishlatilgan yoqilg’i miqdorini kamaytirish orqali erishish mumkin. Ammo buning o’zi etarli emas va yashil logistika atrof-muhit va iqtisodiy faoliyat o’rtasida muvozanat holatini yaratish orqali atrof-muhitni muhofaza qilish va resurslarni tejashga qaratilgan.

So’nggi yillarda ekologik muammolar va iqlim o’zgarishlari tufayli korxonalar nafaqat iqtisodiy samaradorlik, balki atrof-muhitga ta’sirni kamaytirish bo’yicha ham choralar ko’rmoqda. Shu munosabat bilan, yashil logistika tushunchasi global e’tiborni tortmoqda. U nafaqat yuk tashishning ekologik xavfsizligini ta’minlash, balki kompaniyalar raqobatbardoshligini oshirishga ham xizmat qiladi.

Yashil logistika — bu chiqindilarni kamaytirish, energiyani tejash, qayta tiklanuvchi resurslardan foydalanish va CO_2 chiqindilarini nazorat qilishga qaratilgan strategik tizimdir. Ushbu maqolaning maqsadi — yashil logistikani samarali joriy qilish strategiyalarini ishlab chiqish va ularni rivojlantirish yo’llarini ko’rsatishdan iborat.

Yashil logistika va yashil ta’minot zanjirini boshqarish amaliyotini qo’llash juda muhim, chunki bizning muhitimiz iqlim o’zgarishi va resurslarning tugashi kabi muammolarga moyil. Yashil logistikani qabul qilish sayyoramiz xavfsizligini ta’minlagan holda kundalik operatsiyalaringizni muammosiz amalga oshiradi [1].

Yashil logistika an’anaviy logistika jarayonlarini egallaydi. Uning ortib borayotgan joriy etilishi atrof-muhitga zarar etkazmasdan ta’minot zanjirini samarali boshqarish mumkinligini ko’rsatadi [2].

Logistika haqida gapirganda, biz xarid qilish, saqlash va tarqatishdan tortib, tashish, qadoqlash va xavflarni boshqarishgacha bo’lgan hamma narsani nazarda tutamiz. Yashil logistika (yoki “barqaror logistika”) bu jarayonlarning atrof-muhitga ta’sirini kamaytirishga qaratilgan [3].

Ta’minot zanjiri boshqaruvi assotsiatsiyasi (ASCM) lug’atiga ko’ra, ta’minot zanjiri ichidagi yashil logistika o’z faoliyatiga atrof-muhitga ta’sir ko’rsatadigan ta’minot zanjiri sifatida belgilanadi va ta’minot zanjiri bo’ylab ekologik xavfsizlik qoidalariga rioya qilish va buni mijozlar va hamkorlarga etkazish uchun choralar ko’radi. Bu yetkazib beruvchi qadoqlash materiallarini yoki og’ir metallar kabi ekologik jihatdan sezgir materiallarni utilizatsiya qilish uchun javobgar bo’lgan yashil teskari logistikaga taalluqlidir [4].

Yashil logistika kompaniyaning logistikasini tashkil qilishda uning ekologik izini hisobga olishni o’z ichiga oladi. U butun ta’minot zanjiriga qo’llaniladi va uning maqsadi kompaniyaning iqtisodiy faoliyatiga ta’sir qilmasdan, atrof-muhitga ta’sirini kamaytirishdir [5].

Yashil logistika logistika tarmog’i va yetkazib berishning atrof-muhitga ta’sirini kamaytiradigan har qanday biznes amaliyotini o’z ichiga oladi. Barqaror logistika yoki yashil logistika mijozlar qoniqishini yoki sayyoramiz farovonligini yo’qotmasdan kuchli natijani ta’minlaydi. Intellektual korxonalar sun’iy intellekt, mashina o’rganish va ilg’or tahlil kabi kuchli texnologiyalar tomonidan qo’llab-quvvatlanadigan barqaror logistika boshqaruvini tushunishga va qabul qilishga shoshilmoqda [6].

1-rasm. Yashil logistika tamoyillari [1]

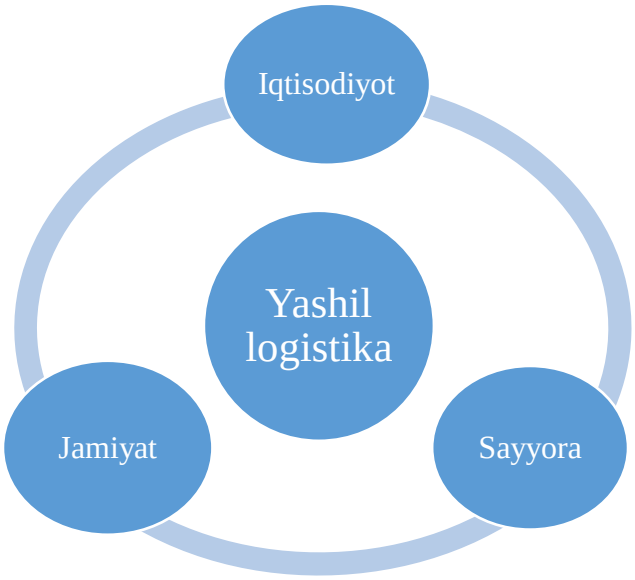
Yashil logistika bizning atrof-muhitga zarar etkazmasdan amalga oshiriladigan logistika operatsiyalari sifatida tavsiflanadi. Bu logistika va ta’minot zanjiri boshqaruvidagi barcha jarayonlarda kelib chiqish joyidan iste’mol nuqtasiga qadar atrof-muhitga zarar keltiradigan amaliyotlarni amalga oshirishni o’z ichiga oladi.

Yashil logistika tamoyillari:

- *Uglerod chiqindilarini kamaytirish*: transport va omborxonalar orqali issiqxona gazlari emissiyasini kamaytirish;
- *Isrofni kamaytirish*: kerak bo’lganda qadoqlash materiallaridan foydalaning va qayta foydalanish, qayta ishlash, qayta ishlash va qayta ishlab chiqarishni targ’ib qiling. Resurslarning ishlash muddatini oshiring;
- *Resurslardan optimallashtirilgan foydalanish*: energiya, materiallar va yoqilg’i kabi resurslardan to’liq foydalaning;
- *Barqaror manbalar*: atrof-muhitga zarar etkazmasdan xom ashyo manbalari;
- *Standart talablar va qoidalarga rioya qilish*: Atrof-muhit qoidalari va qoidalarini buzmang.
- Eng yirik transport vositasi sifatida logistika sezilarli ta’sir ko’rsatadi, bu esa yashil logistikaga o’tishni hal qiluvchi ahamiyatga ega qiladi.

Yashil logistikaning ekologik foydalari:

- *Uglerod chiqindilarini kamaytirish*: Yashil logistika zararli uglerod chiqindilarini kamaytirishga yordam beradi, bu esa transportning ekologik muammolarga ta’sirini kamaytiradi;
- *Resurslarni saqlash*: Yashil logistika orqali resurslardan optimallashtirilgan foydalanish tabiiy resurslarning saqlanishini ta’minlaydi, resurslardan ortiqcha foydalanish va atrof-muhitga zarar yetkazilishining oldini oladi;
- *Biologik xilma-xillikni himoya qiladi*: Ekologik toza manbalar turli o’simliklar va hayvonlarni himoya qilishga yordam beradi.



2-rasm. Yashil logistikaning ahamiyati [7]

Yashil logistikaning iqtisodiy foydalari:

- bu samaradorlikni oshirish va energiya sarfini va chiqindilarni ishlab chiqarishni kamaytirish orqali xarajatlarni tejashga yordam beradi;
- ekologik siyosatga rioya qilish jarimalar va huquqiy muammolardan qochishga yordam beradi;
- atrof-muhit haqida ongli bo'lgan va ekologik amaliyotni yaxshi ko'radigan mijozlarni jalb qilishga yordam beradi va shu bilan kompaniyaning sodiqligi va obro'sini oshiradi;
- resurslarning tugashi va ta'minot zanjiri boshqaruvidagi uzilishlar xavfini kamaytirishga yordam beradi;
- kompaniyaning bozordagi raqobatbardoshligini oshiradi, chunki yashil logistika yangi g'oyalar va texnologiyalarga yo'l ochadi;
- hozirgi vaqtda ekologik muammolar ko'payib borayotganligi sababli, barqarorlikni ta'minlash choralarini ko'radigan korxonalar uzoq muddatda davom etishi va muvaffaqiyat qozonishi ehtimoli ko'proq.

Yashil logistikaga logistika sanoatida ekologik toza va barqaror amaliyotlar orqali erishish mumkin.

Yashil transport. Samarali transportga erishish mumkin:

1. *Marshrutni optimallashtirish*: Kamroq to'qnashuvlar, qisqaroq masofalar va vaqt bilan marshrutni tanlash orqali transport marshrutini optimallashtirish. Bugungi kunda bu katta ish emas, chunki GPS va marshrutni optimallashtirish dasturlari mavjud. Bu eng tez va tejamkor yo'llarni topishga yordam beradi;

2. *Yoqilg'i tejaydigan transport vositalaridan foydalanish*: Yoqilg'i tejamkorligi uchun ishlab chiqarilgan transport vositalaridan foydalaning yoki uglerod chiqindilarini

kamaytiradigan elektr yoki gibrid transport vositalaridan foydalanishingiz mumkin;

3. *Bo'sh vaqtni kamaytirish*: Dvigatelning keraksiz ishlamay qolishini kamaytirish. Avtomobil uzoq vaqt to'xtab qolsa, dvigatelni o'chirish;

4. *Avtotransport vositalariga muntazam texnik xizmat ko'rsatish*: Avtotransport vositalariga muntazam texnik xizmat ko'rsatish kamroq yoqilg'i sarflashga yordam beradi va chiqindilarni kamaytiradi;

5. *Yukni optimallashtirish*: Bu transport vositalari tomonidan olib boriladigan yuklarni boshqarishni o'z ichiga oladi. Avtomobillarda ortiqcha yuk bo'lmasligi kerak, bu esa yoqilg'i sarfini oshiradi;

6. *Zamonaviy parklarni boshqarish tizimlari*: Avtomobil parklarining ishlashini kuzatish va yaxshilashga yordam beradigan zamonaviy parkni boshqarish tizimlari kabi ilg'or texnologiyalarga sarmoya kiritish. Bularga real vaqt rejimidagi ma'lumotlar, tahlillar va umumiy samaradorlikni oshirish uchun optimallashtirish kabi turli omillar kiradi.

Mas'uliyatli chiqindilarni boshqarish. Barqaror logistikada chiqindilarni samarali boshqarish ham muqarrar. Bu chiqindilarni ekologik jihatdan mas'uliyatli tarzda yo'q qilishni anglatadi; Bu nafaqat korxonalarga qoidalarga rioya qilishga yordam beradi, balki makonni optimallashtiradi va ularning atrof-muhitga ta'sirini kamaytiradi.

Buni amalga oshirishning eng yaxshi usuli bu vazifalarni Yashil qurtlarga o'xshash mas'uliyatli ommaviy chiqindilarni boshqarish xizmatlarini taklif qiluvchi ixtisoslashgan kompaniyalarga topshirishdir (Kerala shtatida joylashgan ijtimoiy innovatsiya va aylanma startap). Ular chiqindilarni boshqarish bo'yicha mas'uliyatli amaliyotlarni joriy qilish uchun 300 dan ortiq korxonalar bilan muvaffaqiyatli hamkorlik qildilar. Ularning mas'uliyatli ommaviy chiqindilarni boshqarish xizmatlariga chiqindilarni ilmiy jihatdan yo'q qilinishini yoki qayta ishlanishini ta'minlaydigan vaqt bilan bog'liq, talab bo'yicha to'liq kuzatilishi mumkin bo'lgan chiqindilarni yig'ish kiradi.

Barqarorlik va operatsion samaradorlikka hissa qo'shish uchun chiqindilarni boshqarish bo'yicha ushbu mas'uliyatli echimlarni o'z faoliyatingizga integratsiyalashni ko'rib chiqish.

Atrof-muhitni muhofaza qilish kunlarini nishonlash. Butunjahon ozon kuni, Butunjahon atrof-muhit kuni va Yer kuni kabi maxsus ekologik kunlarni nishonlash barqarorlikka bo'lgan sadoqatingizni ko'rsatishning ajoyib usuli hisoblanadi. Bu kunlar ekologik toza amaliyotlarni targ'ib qilish, jamoangizni o'qitish va jamoangiz bilan muloqot qilish imkoniyatini beradi. Yashil kelajakka sadoqatingizni mustahkamlash uchun tadbirlar o'tkazish, kampaniyalar o'tkazish yoki tegishli sabablarni qo'llab-quvvatlash orqali ishtirok etishdir.

Barja transportidan foydalanish. Barjalar yuqori yuk tashish qobiliyatiga ega,

bu ularni logistika uchun barqaror tanlovga aylantiradi. Barja transportini integratsiyalash yuk mashinalari sonini kamaytiradi va shu bilan transport va issiqxona gazlari chiqindilarini kamaytiradi.

Yashil ta'minot zanjirini boshqarish amaliyoti. Yashil ta'minot zanjirini boshqarish amaliyoti quyidagilarni o'z ichiga oladi:

Isrofgarchilikni kamaytirish: Resurslardan ortiqcha foydalanishni kamaytirishga e'tibor qarating va ishlatilganlarni qayta ishlatish va qayta ishlashni rag'batlantirish. Buni chiqindisiz jarayonga aylantirish zarur;

Energiya sarfini optimallashtirish: Bu quyidagilarni o'z ichiga oladi (kamroq energiya sarflaydigan mashinalar, transport vositalari va texnologiyalardan foydalanish; quyosh, shamol yoki gidroelektr energiyasi kabi qayta tiklanadigan manbalardan foydalanish atrof-muhitga ta'sir qiluvchi manbalardan foydalanishni kamaytiradi; real vaqtda talab asosida energiya sarfini sozlash, isrofgarchilikni kamaytirish va umumiy samaradorlikni oshirish uchun ma'lumotlar tahlili, sensorlar va avtomatlashtirishdan foydalanadigan ilg'or tizimlardan foydalanish).

Ekologik toza qadoqlash/Yashil qadoqlash. O'simlikka asoslangan, qayta ishlangan va biologik parchalanadigan kabi ekologik toza qadoqlash materiallaridan foydalanish kerak. Qadoqlash uchun hech qachon biologik parchalanmaydigan plastmassa yoki kartondan foydalanmaslik kerak. Qadoqlash sifatiga putur etkazmasdan, o'rash materiallaridan ortiqcha foydalanishni minimallashtirishga ishonch hosil qilish kerak.

Ekologik toza qadoqlash umumiy chiqindilarni va resurslarni tejashni kamaytiradi. Bu atrof-muhitning ifloslanishini oldini olishga yordam beradi, qayta ishlash jarayonlarini qo'llab-quvvatlaydi va atrof-muhit izini kamaytiradi.

Yashil omborxona. Yashil omborxona keraksiz operatsiyalarni kamaytiradigan va shu bilan uglerod chiqindilarini kamaytiradigan omborlarni saqlash joyi va mexanizmlardan optimallashtirilgan foydalanishni o'z ichiga oladi. Yashil omborxona saqlash joyining energiya tejamkorligini ta'minlaydi. LED yoritgichlardan foydalanish, energiya tejovchi HVAC tizimlari va foydalanilmaganda chiroqlar va mashinalarni o'chirish energiya samaradorligiga hissa qo'shadi va iqtisodiy foyda keltiradi.

Smart yuk tashish markaziga qo'shilish. Smart Freight Center (SFC) kompaniyalarni atrof-muhitga zarar etkazishda qo'llab-quvvatlaydi. Ular yuk tashish operatsiyalari natijasida issiqxona gazlari emissiyasini o'lchash va kamaytirish vositalarini taklif qiladi, shu jumladan okean va havo yuklari uchun tashabbuslar. SFC kompaniyalarga atrof-muhitga ta'sirini kamaytirish va barqarorlikka bo'lgan sadoqatini namoyish etishda yordam berish uchun yo'l-yo'riq va hamkorlik imkoniyatlarini taqdim etadi.

Bu muammoni hal qilish uchun: biodizel, siqilgan tabiiy gaz va boshqalar kabi muqobil yoqilg'idan foydalanish; elektr transport vositalaridan foydalanish; omborlarda

va zaryadlash stantsiyalarida quyosh, shamol energiyasi va boshqalar kabi qayta tiklanadigan energiya manbalaridan foydalanish; ikkinchisi esa atrof-muhitni muhofaza qilish qoidalari va qoidalariga rioya qilmayapti. Ushbu qoidalarga rioya qilish qo'shimcha xarajatlarni o'z ichiga olishi mumkin, ammo ularga rioya qilmaslik ekologik tahdidlarga, huquqiy va obro'ga xavf tug'diradi.

Bu muammoni hal qilish uchun: qoidalar va qoidalarga rioya qiling va xodimlarni shunga o'rgatish kerak; qoidalarga rioya qilinayotganligini tekshiradigan atrof-muhitni boshqarish dasturini joriy qilish kerak; atrof-muhit qoidalari va qoidalaridagi o'zgarishlar va yangilanishlar haqida xabardor bo'lish albatta lozimdir.

Teskari logistika: Oddiy logistikadan farqli o'laroq, teskari logistika tovarlarning oxirgi nuqtadan boshlang'ich nuqtasiga harakatlanishini o'z ichiga oladi. Bu jarayon, agar mijoz mahsulotni qaytarishni xohlasa yoki qayta ishlash, qayta ishlab chiqarish yoki utilizatsiya qilish kabi maqsadlarda sodir bo'ladi.

COVID-19 avj olgandan so'ng, odamlar asosan onlayn xarid qilishni boshladilar, bu esa mahsulotlarni qoniqtirmasa, qaytarishni osonlashtiradi. Odamlar mahsulotni xohlamasa, buyurtma berib, qaytarib berishadi. Bu qaytish jarayoni ko'plab uglerod chiqindilarini o'z ichiga oladi.

Xulosa. Yashil logistikaning kelajagi ta'minot zanjirini avtomatlashtirishga bog'liqligini inkor etib bo'lmaydi, bu tendentsiya so'nggi yillarda keng tarqalgan.

Logistics 4.0, sun'iy intellekt, ma'lumotni raqamlashtirish va AGV, AMR bilan robotlashtirish, robot qo'llari va avtomatlashtirilgan palletlar bilan jihozlangan AR Shuttle yechimimiz kabi robotlashtirish yordamida rivojlanishda davom etishi mumkin.

Ushbu avtomatlashtirilgan echimlarning barchasi ifloslantiruvchi energiyadan foydalanishni cheklash orqali yashil logistikani qo'llab-quvvatlaydi. Shu sababli, bugungi kunda allaqachon tashkil etilgan yashil logistika kelajakda logistika 4.0 ning rivojlanishi va hozirgi ekologik vaziyat bilan yanada ko'proq rivojlanishda davom etishi mumkin.

Yashil logistika zamonaviy logistika tizimining ajralmas bo'lagi bo'lib, uni yaratish va takomillashtirish bugungi kunning dolzarb masalasidir. Raqamli texnologiyalar, ekologik mas'uliyat, davlat va xususiy sektor o'rtasidagi hamkorlik bu yo'lda asosiy harakatlantiruvchi kuchlardir. Uzoq muddatli istiqbolda yashil logistika kompaniyalarga iqtisodiy foyda, ekologik barqarorlik va ijtimoiy obro' keltiradi.

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EKOLOGIK BARQAROR RIVOJLANISH SHAROITIDA “YASHIL” IQTISODIYOTNI SHAKLLANTIRISH OMILLARI

Yo‘ldosheva Oygul Zokir qizi
Jahon iqtisodiyoti va Diplomatiya universiteti magistratura bosqichi talabasi

Ekologik barqaror rivojlanishga o‘tish sharoitida “yashil” iqtisodiyotni shakllantirish dolzarb vazifa bo‘lib qaraladi. Bu holat ekologik barqaror rivojlanishni ta’minlash uchun zarurdir. Bu esa mamlakatning tabiiy kapitalidan uzoq muddatli samarali foydalanish va bir vaqtda inson salomatligiga ekologik tahdidlarning ta’sirini bartaraf etish bilan bog‘liq. Ekologik barqaror rivojlanish uchun hududlarni ekologik barqaror rivojlantirish, energiya samaradorligini oshirish, qayta tiklanadigan energiya manbalaridan foydalanish, chiqindilarni qayta ishlashni yanada rivojlantirish, “yashil” moliyaviy vositalardan samarali foydalanish, ekologik ta’lim va ekoko‘ngillilikni keng rivojlantirish hamda moliyaviy bo‘lmagan hisobotlardan foydalanish talab etiladi. Ushbu chora-tadbirlar bevosita “yashil” iqtisodiyotga o‘tish bilan belgilanadi.

“Yashil” iqtisodiyotga o‘tishning ahamiyati bir qator tadqiqotlarda o‘rganilgan. Masalan, “yashil” iqtisodiyot atamasi BMT ta’rifiga ko‘ra, aholi farovonligini oshirishga imkon beradi, ijtimoiy adolatni ta’minlaydi va atrof-muhit uchun xavflarni kamaytiradi. Uning asosiy yo‘nalishlari ekologik barqarorlikka erishish orqali ijtimoiy-iqtisodiy muammolarni hal qilish bilan bog‘liq bo‘ladi. Bu holatda energiya va resurslardan foydalanish samaradorligini oshirish, bioxilma-xillik va ekotizim xizmatlarini yo‘qotishning oldini olish hisobiga aholi bandligi va daromadlarining o‘sishi ta’minlanadi. “Yashil” iqtisodiyot sohalari yoki tarmoqlari tarkibiga energiya samaradorligini oshirish, ekologik loyihalarga investitsiyalar, ekologik toza transport, chiqindilarni qayta ishlash, o‘rmonlarni qayta tiklash va boshqalar kiradi.

Shu bilan birga, BMT tomonidan “yashil” iqtisodiyot ekologik barqaror rivojlanishga erishish uchun iqtisodiy konsepsiya sifatida qaraladi [1]. “Yashil” iqtisodiyot atamasi atrof-muhitni rivojlantirish bo‘yicha hujjatlarda ham o‘z aksini topadi. Ya’ni, bunday holatlarda davlat tomonidan ekologik barqaror rivojlanishga qaratilgan “yashil” iqtisodiyot uchun ma’lum tartib-qoidalarni yaratadi hamda jamiyat va biznes uchun qoidalar belgilanadi. Jamiyat hukumat harakatlarini qo‘llab-quvvatlashga tayyorligi va kishilarning ovoz berishiga asoslangan “ekologiya so‘rovi” shakllanadi.

Biznes nuqtai nazaridan jamiyat ekologik toza tovarlar va xizmatlarga bo‘lgan talabni ta’minlashi mumkin. Biznes tomonidan jamiyatning ekologik talablariga javob beradigan yoki javob bermaydigan ba’zi yechimlar, tovarlar va xizmatlarni taklif

qilinadi. Shundan kelib chiqib, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllanishi uchun quyidagi omillar xos bo‘ladi (1-jadval).

Mazkur jadvalga asosan, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllanishi jamiyat, davlat va biznes nuqtai nazaridan omillarga ajratiladi. Har bir omilni ta’siri bevosita asosiy sabablarni emas, balki “yashil” iqtisodiyot uchun muhim bo‘lgan tendensiyalarni aks ettiradi, ular o‘rtasidagi yaqin bog‘liqlikni ifodalaydi, kelajakda “yashil” iqtisodiyotga erishish jarayoniga kuchli va ijobiy ta’sir ko‘rsatadi hamda ularning ta’siri o‘rta muddatli istiqbol uchun xos bo‘ladi.

1-jadval

Ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllanish omillari

<table>
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<tr><td colspan="3">“Yashil” iqtisodiyotni targ‘ib qiluvchi yangi texnologiyalardan foydalanish</td></tr>
<tr><td colspan="3">Ekologik muammolarni yangilash</td></tr>
</table>

Shunday ekan, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllantirish omillari o‘z navbatida ushbu yangi sohasini barcha talablar asosida keng taraqqiy qildirish bilan belgilanadi. Bu borada mamlakatimizda “yashil” iqtisodiyotni rivojlantirishda birinchi navbatda quyidagi asosiy yo‘nalishlarga e’tibor qaratish lozim [3]:

- “yashil” iqtisodiyot sohasida qonunchilik bazasini yaratish;
- toza texnologiyalarni joriy etish;
- “yashil” investitsiyalarni qo‘llash.

Umuman olganda, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyot shakllanishini tahlil qilish jarayoni omillar bilan bog‘liq bo‘lgan quyidagi qoidalarga asoslanadi [3]:

- ekologik toza turmush tarzi madaniyatini shakllantirish. Shu nuqtai nazardan, ekologik toza turmush tarzi omil sifatida “yashil” iqtisodiyot yutuqlariga mos kelishi va ularni kundalik xatti-harakatlarga tatbiq etadigan faol qadriyatlar tizimi bo‘lib qaralishi lozim.

- ekologik faollikni rivojlantirish. Ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyot uchun asosiy ob’ekt sifatida atrof-muhitda bo‘ladigan o‘zgarishlar ta’sir qiluvchi omil bo‘lib tan olinadi.

- ekologik ko‘ngillilikni ommalashtirish. Ekoko‘ngillilik ekofaollik bilan bog‘liq bo‘lsa-da, u uzoq muddatli tizimli o‘zgarishlarga yo‘naltirilgan omil bo‘lib qaralishi va jamiyatning ekologik tashabbuslarda bepul ravishda faol ishtirok etishga nisbatan tayyorligini tavsiflaydi.

- iqtisodiyotni modernizatsiya qilish. Unda modernizatsiya yangi ta’sir qiluvchi omil sifatida ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyot sohasi bevosita iqtisodiyotni rivojlantirishning strategik maqsadlarini ta’minlab berishi kerak.

- barqaror rivojlanish sohasida xalqaro hamkorlikda ishtirok etish. Ekologik barqaror rivojlanish an’anaviy ravishda xalqaro darajada shakllanib, mamlakatimizning xalqaro hamkorlikdagi faol ishtiroki bilan belgilanadi hamda faollashtiruvchi omil sifatida iqtisodiy barqarorlik va “yashil” energiya sohasidagi amalga oshiriladigan o‘zaro hamkorlikni nazarda tutadi.

- xalqaro ahamiyatga molik davlat loyihalarini amalga oshirish. Unga asosan, xalqaro miqyosdagi loyihalar xalqaro ekologik talablarga javob berishi talab etiladi. Xususan, “yashil” qurilish va barqaror rejalashtirish, energiya tejamkor texnologiyalardan foydalanish, chiqindilarni boshqarish, atrof-muhitni muhofaza qilish va atrof-muhitga ta’sirini kamaytirish yuzasidan xalqaro talablar amalga oshiriladi.

- shaharlarni rivojlanishidagi ekologik barqarorlikka erishish. Unga ko‘ra, zamonaviy shahar “aqlli” va ekologik jihatdan qulay bo‘lishi kerak. O‘z navyuatida qulay shahar muhiti toza havo va suv, “yashil” hududlar va zararli ta’sirlarni kamaytirishni talab qiladi.

- tadbirkorlik faoliyatini ekologik tartibga solishni ishlab chiqish. Bu borada davlat tomonidan korxonalarning atrof-muhitni tartibga solish sohasida qator muhim tashabbuslarini qo‘llab-quvvatlashi lozim bo‘ladi.

- “yashil” biznes imkoniyatlarini paydo qilish. Yangi “yashil” biznes imkoniyatlari asosida daromad olish ta’minlanishi va natijada aholining turmush farovonligi yanada yaxshilanishi kerak.

- biznes yuritish uchun “barqaror” me’yor va standartlarni ishlab chiqish. Barqaror rivojlanish sohasidagi tendensiyalar ekologik barqaror rivojlanish uchun global biznes madaniyati va biznesning o‘zaro munosabatlari qoidalariga ta’sir qiladi.

- ekologik barqaror rivojlanish va “yashil” iqtisodiyotga imkon beruvchi yangi texnologiyalardan foydalanish. Ushbu texnologiyalar innovatsion omil sifatida o‘zlashtiriladi va “yashil” iqtisodiyot uchun keng tadbiq qilinadi.

- ekologik muammolarni dolzarblashtirish. Uning orqali eng muhim masala alohidalashtiriladi va atrof-muhit muammolari sifatida atrof-muhit sohalarini keng rivojlanishini ta’minlashga qaratilgan chora-tadbirlar ishlab chiqiladi.

Darhaqiqat, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllanish omillari unning samarali rivojlanishiga hissa qo‘shadi. Bu soha ekologik rivojlanishning mumkin bo‘lgan paradigmasi sifatida ekologik barqaror rivojlanish va iqtisodiy konsepsiya sifatida qaraladi. Biroq, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyot milliy yoki xalqaro siyosatni amalga oshirish masalasi bilan emas, ya’ni jamiyat va biznesni rivojlantirish sohasiga integratsiyalashgan tendensiyalar bilan bog‘liq bo‘ladi. Shu bois, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyot omillari jamiyat, davlat va biznesning o‘zaro ta’siriga asoslanishi lozim. Aniqroq qilib aytganda, bu borada ekologik barqaror rivojlanish va “yashil” iqtisodiyot jarayonlari alohida o‘rganilib, ularning yo‘nalishlari bir-biriga moslashtirilishi kerak.

Xulosa shuki, ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotni shakllantirish uchun unga ta’sir qiluvchi omillarni tadqiq qilish lozim. Bu esa kelajakda eng ko‘p qo‘llaniladigan miqdoriy va sifat usullaridan foydalangan holda unga ta’sir qiluvchi har bir omilni batafsil o‘rganishni talab etadi. Ushbu omillar ekologik barqaror rivojlanish sharoitida “yashil” iqtisodiyotga erishish uchun davlat siyosati amalga oshirishga imkon beradi. Shu orqali atrof-muhitni rivojlantirish masalalari ham o‘rganib boriladi.

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САНОАТ КООПЕРАЦИЯСИ ВА МАҲАЛЛИЙЛАШТИРИШНИНГ ҲУДУДЛАРНИ БАРҚАРОР ИҚТИСОДИЙ РИВОЖЛАНТИРИШДАГИ ЎРНИ

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Ўзбекистонда ҳудудларни барқарор ижтимоий-иқтисодий ривожланитириш имкониятлари саноат кооперацияси ва маҳаллийлаштиришга эътибор қаратган ҳолда кўриб чиқилган. Минтақавий ижтимоий-иқтисодий ўсишни рағбатлантириш механизмларини, шу жумладан тармоқлараро саноат ярмаркаларини ўтказиш, саноат кооперациясини ривожлантириш ва йирик корхоналар атрофида саноат кластерларини яратишни таҳлил қилинган. 2000-2022 йилларда мамлакатнинг турли ҳудудларда саноат ишлаб чиқариш динамикаси бўйича статистик маълумотлар келтирилган, шунингдек минтақалар ўртасидаги иқтисодий ўсиш суръатларидаги тафовутлар таҳлил қилинган. Йирик саноат корхоналарининг ҳудудий иқтисодиётига таъсири ҳамда янги ишлаб чиқариш қувватлари ва инвестицияларни жалб қилиш орқали диверсификация зарурияти кўриб чиқилган.

Шунингдек, мақолада глобал қўшилган қиймат занжирларига интеграция қилиш орқали ҳудудларни ривожлантириш бўйича халқаро тажрибага эътибор қаратилган. Турли давлатларда автомобилсозлик, кимё ва тўқимачилик саноатларида ишлаб чиқаришни маҳаллийлаштириш бўйича муваффақиятли стратегиялар мисол тариқасида келтирилган. Ҳудудлар салоҳиятни ривожлантириш Ўзбекистоннинг барқарор иқтисодий ривожлантиришнинг кейинги даврида асосий омилларидан бири бўлиши ҳамда ҳудудларда иқтисодий ўсишни мувозанатини таъминлаш учун маҳаллий кичик ва ўрта бизнесни рағбатлантириш, инвестициявий муҳитни яхшилаш ва маҳаллий бошқарув институтлари самарадорлигини ошириш зарурлиги ҳақида хулоса чиқарилган.

Калит сўзлар: ҳудудий иқтисодий ривожланиш, маҳаллийлаштириш, саноат кооперацияси, аҳоли жон бошига ялпи даромадлар

Халқаро майдонда барча қитьа ва мамлакатлар тенг ривожланмагандек, бир давлат ичидаги ҳудудларни ҳам бир ҳил даражада ривожлантириш имкониятлари чекланган. Деярли барча давлатлар ҳудудларни тенг ривожлантириш ва улардаги аҳоли даромадлари даражасидаги фарқни камайтиришга қаратилган ижтимоий-иқтисодий сиёсат олиб боради. Мамлакат даражасида кам ривожланган ҳудудларга инвестицияларни жалб қилиш ва саноатни ўсиши учун қўшимча шароитлар яратилсада, ҳудудий ижтимоий-

иқтисодий ривожланиш кўп жиҳатдан ушбу ҳудуддаги бошқарув институтлари самарадорлиги, инвестициявий муҳит ва тадбиркорларнинг фаоллигига боғлиқ.

Ўзбекистонда кооперация ва ишлаб чиқаришни маҳаллийлаштириш ҳудудий иқтисодий ўсиш ва модернизацияда муҳим рол ўйнайди. Хусусан, йирик ва кичик корхоналар орасида бевосита мулоқот ташкил қилиш мақсадида ҳар бир ҳудудда тармоқлараро саноат кўргазмалари ўтказилмоқда. 2022 йилда 13 та худудларда ўтказилган саноат ярмаркаларида 30 мингдан ортиқ саноат корхоналари иштирок этиб, тадбиркорлар томонидан ишлаб чиқарилган 25 мингдан зиёд турдаги маҳсулотлар кўргазмаси ташкил этилган. Йирик ва кичик саноат корхоналари ўртасида умумий қиймати 7,4 трлн сўмлик 11 мингдан ортиқ шартномалари имзоланган [1]. Ишлаб чиқаришни маҳаллийлаштириш дастурлари ҳудудий саноатни ривожлантиришга ўз ҳиссасини қўшмоқда. Мисол учун, “2020 йилги маҳаллийлаштириш дастурида 68,9 фоиз иш ўринлари ҳудудий корхоналар томонидан яратилган ва улар 67,3 фоиз лойиҳаларни амалга оширишда қатнашганлар. Тармоқлараро кооперация ишлаб чиқариш қувватлари ва ресурсларидан самарали фойдаланишга ёрдам беради, бу эса, айниқса, қишлоқ ва кичик шаҳарларда меҳнат самарадорлиги ва бандликни оширади” [2].

Ўзбекистон Республикаси Президенти Шавкат Мирзиёев мамлакатимиз тадбиркорлари билан 2019 йил 17 сентябрдаги нутқида бу борада қуйидагиларни такидлаган: ***“Жорий йилда ҳудудий импорт ўсиши тармоқлардагига нисбатан 2 баробар юқори бўлиши кузатилмоқда. Бу ҳудудларда ишлаб чиқаришни кескин кўпайтириш учун катта эҳтиёж борлигини яққол кўрсатади. Ҳудудларда маҳаллий ишлаб чиқаришни кенгайтириш учун тайёр ер майдонлари, бинолар ва имнфратузиомага эга бўлган кичик саноат зоналаридан самарали фойдаланиш зарур”*** [3].

Йирик тармоқ корхоналари атрофида саноат кооперацияси ва “шатакка олиш” механизмлари асосида ҳудудий корхоналар кластерларини яратиш [4] орқали ҳудудий саноатни ривожлантириш ва аҳолини иш ўринлари билан таъминлашга ўз ҳиссаларини қўшмоқдалар. Мисол учун, 2021 йилда автомобилсозлик соҳасининг улуши Андижон санотида 55 фоизни ва Хоразмда 37 фоизни, кимё саноатининг улуши Қорақалпоғистонда 60 фоизни, кон-металлургия санотининг улуши Навоийда 61 фоизни, тўқимачилик саноати улуши Фарғона ва Наманганда мос равишда 33 фоиз ва 37 фоизни ташкил қилган.

Мамлакатда ҳудудларнинг иқтисодий ривожланиши солиштирма таҳлил қилиниб, Ўзбекистон бўйича саноат маҳсулотлари ишлаб чиқариш ҳажми 2000-2022 йилларда 3,2 бараварга ўсган бўлса, Навоий (35 фоиз), Фарғона (59,3 фоиз), Бухоро (67,7 фоиз), Қашқадарё (145 фоиз), Сурхондарё (154,7 фоиз), Сирдарё (167,1 фоиз) ва Тошкент (197,3 фоиз) вилоятларида ўсиш сурати ўртача республика кўрсаткичларидан паст даражада ва Тошкент шаҳри (8,1 баравар),

Наманган (7,3 баравар), Жиззах (6,3 баравар), Андижон (6,2 баравар), Самарқанд (6,1 баравар), Хоразм (5.3 баравар) ва Қорқалпоғистон Республикаси (4,2 баравар) жами еттита ҳудудда ўртачадан юқори даражада кузатилгани аниқланди (1-жадвалга қаранг).

1-жадвал

2000-2022 йилларда ҳудудларда саноат маҳсулотлари ишлаб чиқаришнинг ўсиш суратлари таҳлили [5] [1]

Ҳудудлар	2000-2022 йиллар		2005-2010 йиллар		2011-2016 йиллар		2017-2022 йиллар	
	ўртача ўсиш сурати	жами ўсиш сурати	ўртача ўсиш сурати	жами ўсиш сурати	ўртача ўсиш сурати	жами ўсиш сурати	ўртача ўсиш сурати	жами ўсиш сурати
Ўзбекистон Республикаси	**5,2**	**319,1**	**6,2**	**143,8**	**5,5**	**137,6**	**6,0**	**141,5**
Юқори ўсиш сурати кузатилган ҳудудлар								
Тошкент шаҳар	9,7	810,7	13,4	210,9	12,3	201,0	8,4	160,8
Наманган	9,1	732,4	6,9	148,0	11,2	188,8	12,6	203,1
Жиззах	8,5	634,2	6,6	145,1	12,7	203,4	10,1	177,4
Андижон	9,1	619,5	15,3	233,9	-1,5	85,3	16,1	238,4
Самарқанд	8,3	606,8	11,3	189,3	10,5	181,1	7,5	153,7
Хоразм	7,9	527,9	6,5	144,2	11,9	190,6	12,0	196,2
ҚҚР	7,2	422,5	7,6	153,3	18,5	254,2	4,6	131,0
Паст ўсиш сурати кузатилган ҳудудлар								
Навоий	1,4	135,0	-0,5	96,7	1,5	109,5	4,3	128,2
Фарғона	2,1	159,3	0,3	101,5	3,8	124,9	3,5	122,3
Бухоро	2,4	167,7	0,8	104,7	6,1	142,3	2,8	117,2
Қашқадарё	4,1	245,0	6,3	142,8	1,0	105,7	5,3	134,6
Сурхондарё	4,3	254,7	4,7	131,2	6,8	148,4	5,3	135,6
Сирдарё	4,6	267,1	7,1	149,3	6,4	144,7	4,6	128,7
Тошкент	4,9	297,3	2,3	114,4	4,7	131,2	8,2	159,6

Наманган, Хоразм, Навоий ва Тошкент вилоятларида, яъни 4 та ҳудудда ўсиш суратлари учала олти йилликда тезлашиб бораётган бўлса, Тошкент шаҳри, Самарқанд ва Сирдарё вилоятларида, яъни 3 та ҳудудда иқтисодий ўсиш учала муддатда сусайиб бораётганини кўришимиз мумкин.

Иқтисодий ислоҳотларнинг янги босқичи жадал олиб борилаётган 2017-2022 йилларда Наманган (88,8 фоиздан 103,1 фоизгача), Андижон (- 14,7 фоиздан 138,4 фоизгача), Хоразм (90,6 фоиздан 96,2 фоизгача), Навоий (9,5 фоиздан 28,2 фоизгача), Қашқадарё (5,7 фоиздан 34,6 фоизгача) ва Тошкент вилояти (31,2 фоиздан 59,6 фоизгача) жами 6 та ҳудудда иқтисодий ўсиш жадаллашган бўлса, Тошкент шаҳри (101 фоиздан 60,8 фоизгача), Жиззах (103,4 фоиздан 77,4

[1] Ҳудудларда иқтисодий ўсиш кўрсаткичлари тўғрисидаги Расмий статистика маълумотлари асосида муаллиф томонидан тайёрланди. Манба: Iqtisodiy faoliyat turlari bo‘yicha sanoat mahsulotlari ishlab chiqarishning fizik hajm indeksi (yillik), Статистика агентлиги, https://stat.uz/uz/rasmiy-statistika/industry-2

фоизгача), Самарқанд (81,1 фоиздан 53,7 фоизгача), Қорақалпоғистон Республикаси (154,2 фоиздан 31 фоизгача), Фарғона (24,9 фоиздан 22,3 фоизгача), Бухоро (42,3 фоиздан 17,2 фоизгача), Сурхондарё (48,4 фоиздан 35,6 фоизгача), Сирдарё (44,7 фоиздан 27,7 фоизгача) 8 та ҳудудда иқтисодий ўсиш сурати секинлашган.

2000-2022 йилларда саноат ишлаб чиқариш энг жадал ривожланаётган Тошкент шаҳри ва нисбатан секин ривожланаётган Навоий вилояти ўсиш суратлари орасида фарқ 6 бараварни ташкил қилмоқда. Юқори ва паст ўсиш суратли еттитадан ҳудудларнинг ўртача кўрсаткичлари орасидаги узилиш эса 2,9 бараварни ташкил қилган.

2-жадвал

Аҳоли жон бошига ялпи даромадлар [5][1]**, минг сўмда**

Ҳудудлар	2000 йил		2010 йил		2016 йил		2022 йил	
	кўрсаткич	республика кўрсаткичид а улуши	кўрсаткич	республика кўрсаткичид а улуши	кўрсаткич	республика кўрсаткичид а улуши	кўрсаткич	республика кўрсаткичид а улуши
Ўзбекистон Республикаси	**96**	**100**	**2 193**	**100**	**6 216**	**100**	**17 807**	**100**
Қорақалпоғистон Республикаси	61	63	1 499	68	4 372	70	13 253	74
Андижон	111	115	1 838	84	5 637	91	15 727	88
Бухоро	88	91	2 524	115	7 354	118	21 382	120
Жиззах	54	56	1 811	83	5 459	88	15 221	85
Қашқадарё	72	75	1 896	86	5 498	88	14 679	82
Навоий	118	122	3 882	177	9 745	157	27 420	154
Наманган	65	68	1 567	71	4 745	76	13 881	78
Самарқанд	75	77	2 029	93	5 603	90	15 534	87
Сурхондарё	66	69	1 718	78	5 080	82	14 597	82
Сирдарё	75	78	2 215	101	6 772	109	15 124	85
Тошкент	91	95	2 433	111	6 750	109	18 129	102
Фарғона	105	109	1 723	79	4 994	80	13 608	76
Хоразм	74	76	2 105	96	5 840	94	19 644	110
Тошкент шаҳар	244	253	4 506	205	12 316	198	37 518	211

Албатта, ҳудудларда иқтисодий ривожланишдаги бу каби кескин фарқни текислаб бориш ижтимоий-иқтисодий сиёсатнинг бир қисми бўлиши керак. Шу билан бирга, ушбу иқтисодий ўсишнинг аҳоли жон бошига ялпи даромадлардаги фарқни текислашга таъсири ҳамда бошланғич кўрсаткичларнинг

[1] Ҳудудларда аҳоли жон бошига ялпи даромадлар тўғрисидаги Расмий статистика маълумотлари асосида муаллиф томонидан тайёрланди. Манба: Aholi jon boshiga umumiy daromadlar hajmi (hududlar kesimida), Статистика агентлиги, https://stat.uz/uz/rasmiy-statistika/living-standards-2

пастлиги нуқтаи назаридан таҳлил қиладиган бўлсак, ҳозирги ижтимоий-иқтисодий шароитда асосланган бўлиши мумкинлигини кўрамиз (2-жадвалга қаранг).

Саноатни жадал ривожлантириш ҳисобига аҳоли жон бошига ялпи даромадлар даражаси Хоразм вилоятида ўртача республика кўрсаткичидан ошган, яна 4 та ҳудудда ялпи даромадлар жадал ўсиб бориб, ўртача республика даражасига яқинлашган. Хусусан, Хоразм вилоятида аҳоли даромадлари 2000 йилда республика кўрсаткичининг атиги 76 фоизини ташкил қилган бўлса, 2016 йилда 94 фоизгача етган ва 2022 йилга келиб ўртача республика кўрсаткичларидан 15 фоизга ошган. Жиззах вилоятида аҳоли даромадлари 2000 йилдаги 56 фоиздан 29 фоиз ошган ва 2022 йилга келиб 85 фоизга етган. Шу билан бирга, Андижон вилоятида 2011-2016 йилларда иқтисодиётда юз берган кескин пасайиш натижасида аҳоли даромадлари республика кўрсаткичларидан 115 фоизидан 88 фоизигача камайган.

Аҳоли жон бошига даромадлар кўрсаткичларидаги ушбу номутаносиблик фақат Ўзбекистонга хос хусусият эмас, халқаро миқёсда таҳлил қиладиган бўлсак, сўнгги 20 йилда аҳоли жон бошига даромадлар орасида фарқлар камайганига қарамасдан, энг бой ва қашшоқ минтақалар ўртасидаги фарқ ўсмоқда. Мисол учун, 2022 йилда Европа иқтисодий ҳамкорлик ташкилотига аъзо 38 та мамлакат аҳолисининг 70% минтақавий даромадлар тенгсизлиги ўсиб бораётган ҳудудларга тўғри келади [6].

Энг кичик ўсиш сурати кузатилаётган Навоий вилоятини чуқур таҳлил қилиб, қуйидаги хулосаларга келишимиз мумкин, ушбу ҳудудда жойлашган йирик тармоқ корхоналари Навоий кон-металлургия комбинат, Навоийазот жамияти, Қизилқумцемент каби корхоналар ҳудуд саноатиниинг қарийб 80 фоизини ташкил қилади. Бир тарафдан йирик саноат корхоналари ҳудудда аҳоли даромадларини юқори даражада бўлишини таъминлайди. Иккинчи тарафдан, ушбу йирик корхоналар деярли тўлиқ қувватда ишлаб келмоқда ва уларда ишлаб чиқариш ҳажмини кескин ошириш имкониятлари чекланган. Мисол учун, Навоий вилоятидаги энг йирик саноат корхонаси бўлган Навоий КМКда ўсиш суратлари йиллик ўртача 1-3 фоиз атрофида бўлиши мумкин.

Ўтган беш йилда Навоийазот корхонаси негизида йирик кимё кластери фаолияти йўлга қўйилаётганлиги ҳисобига ҳудудда ўсиш сурати 2011-2016 йиллардаги 1,5 фоиздан, 2017-2022 йилларда 4,3 фоизгача тезлашди ва бу тенденция бир неча йил давомида сақланиб қолиши кутилмоқда.

Ҳудди шундай ҳолатни нефтгаз тармоғи улуши юқори бўлган Бухоро, Қашқадарё ва Фарғона вилоятларида кузатишимиз мумкин. Қашқадарё вилоятида йирик газ кимё компекси қуриш бошланганлиги ҳисобига ўсиш сурати 2011-2016 йиллардаги 1 фоиздан, 2017-2022 йилларда 5,3 фоизгача тезлашган. Бироқ, ушбу йирик корхоналарда доимий ўсиб бориш имконияти чекланган, яъни ўрта ҳисобда

5-7 йилда бир марта модернизация ёки қувватларни ошириш лойиҳалари амалга ошириладиган бўлса, ҳудуд барқарор ривожланиб бориши учун бу етарли эмас.

Шу билан бирга, Бухоро ва Қашқадарё каби хомашё ресурсларига бой ҳудудлар ривожланишининг қиёсий таҳлилида табиий қазилма хомашё ресурслари омилини чиқариб ташлаш, ишлаб чиқиладиган тавсияларнинг самарадорлигини оширишга хизмат қилади, бунинг сабаблари халқаро тажрибада табиий ресурслар омилининг иқтисодий ўсишга таъсир даражаси камайган ва табиий ресурслар омилига эндоген таъсир этиш имконияти чекланган.

Аксинча, юқоридаги жадвалларни таҳлил қилиб, хомашё ресурслари ва йирик корхоналар мавжудлиги ушбу ҳудудларда ўсиш суратларини секинроқ бўлишига олиб келмоқда. Ҳудудларни ривожланишини йирик тармоқ корхоналари таъсирини чиқариб ташлаган ҳолда кўриб чиқиш, ҳудудларнинг салоҳиятини тенг шароитларда қанчалик ишлатилаётганини кўрсатиб бериши мумкин. Бунинг учун, ушбу статистик ҳисоб-китобларни нефтгаз, металлургия, кон-металлургия, автомобилсозлик, телекоммуникация, гидро ва электр-энергетика каби соҳалардаги йирик корхоналарнинг кўрсаткичларини чиқариб юборган ҳолда қайта таҳлил қилиш кейинги таҳлиллар учун асос бўлиши мумкин.

Халқаро тажрибада, ҳудудларда саноат кооперациясини ривожлантиришнинг яна бир механизми – халқаро қўшилган қиймат занжирлари (Global Value Chains, GVCs) кам ривожланган ҳудудларни ривожлантириш ва технологияларни модернизация қилишда муҳим роль ўйнайди [7]. Экспорт занжирлари ва хорижий инвестициялар орқали GVCларга интеграция технологиялар ва билимларни ривожлантиришда ёрдам беради, бу эса ҳудуднинг рақобатбардошлигини оширади, юқори қўшилган қийматли маҳсулотлар яратиш салоҳиятини кучайтиради.

Мисол учун, Ўзбекистонда Андижон ва Жиззах вилоятлари (General Motors, BYD, KIA) ҳамда Мексиканинг Бахио (General Motors, Volkswagen, Mazda, Honda) ва Нуэво-Леоне (Tesla, KIA) штатлари дунёдаги йирик автомобиль ишлаб чиқарувчилари жалб қилиш орқали глобал қўшилган қиймат занжирларига интеграциялашуви ҳисобига автомобилсозлик саноатида маҳаллийлаштириш ва саноат кооперация имкониятларидан самарали фойдаланиб ривожланиб келмоқда. Ҳудди шундай, охирги йилларда Вьетнамнинг Бак Нинь, Тай Нгуен, Хошимин (Samsung, Xiaomi) ва Бакзянг (Foxconn, Apple) провинцияларида смартфонлар ва бошқа истеъмол қурилмалар глобал қўшилган қиймат занжирларининг муҳим қисмига айланди, Кениянинг Наиваша, Тика и Найроби гуллар ишлаб чиқаришда халқаро таъминот занжирлари билан фаол боғланган, Бангладеш дунёдаги энг йирик тўқимачилик маҳсулотлари экспорт қилувчилардан бири ҳисобланади. H&M, Zara, Primark каби компанияларнинг глобал қўшилган

қиймат занжирларига кириш унинг тўқимачилик саноатини ривожлантиришнинг калити бўлди.

Узоқ муддатда барқарор ривожланиш ва аҳоли даромадларини оширишнинг асосий манбалари (1) мавжуд хомашё ресурслари асосида қўшилган қиймат занжирини яратиш (2) халқаро қўшилган қиймат занжирларига кириб бориш орқали юқори технологик ишлаб чиқариш тармоқларини ривожлантириш (3) ҳудуддаги йирик саноат корхоналари билан саноат кооперациясини ривожлантириш [8], (4) йирик инвестиция лойиҳалари доирасида "маҳаллий контент"ни ошириш, яъни маҳаллий маҳсулотлар етказиб бериш бўйича тизимли ишлаш, (5) ҳудуднинг ички талабидан тўлиқ фойдаланиш, (6) инновацион фаолиятни фаоллаштириш, (7) саноат хизматлари кўрсатиш кўламини ошириш орқали иқтисодиётни диверсификация қилиш ҳисобланади.

Юқоридаги таҳлиллардан хулоса қилиб айтадиган бўлсак, йирик тармоқлар ҳисобига иқтисодий ўсишни давом эттириш тобора мураккаб ва йирик инвестициялар талаб қилиб бораётган шароитда, ҳудудларнинг салоҳиятини ривожлантириш Ўзбекистоннинг барқарор иқтисодий ривожлантиришнинг кейинги даврида асосий омилларидан бири бўлиш учун барча имкониятлар мавжуд. Ҳозирги вақтда ижтимоий-иқтисодий салоҳияти тўлиқ фойдаланилмаётган ҳудудлар мамлакатнинг узоқ муддатли истиқболда барқарор ривожланишини таъминлашда муҳим ўрин тутиши мумкин.

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MAHALLIY SANOAT KORXONALARIDA MARKETINGNING AHAMIYATI

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Annotatsiya. Mahalliy sanoat korxonalarining muvaffaqiyatli rivojlanishi va raqobatbardoshligini oshirishda marketing strategiyalarining roli juda muhimdir. Zamonaviy bozor sharoitida samarali marketing tadbirlari mahsulot va xizmatlarning iste’molchilarga yetkazib berilishida asosiy omil hisoblanadi. Marketing bozor talablarini tahlil qilish, iste’molchilarning ehtiyojlarini o‘rganish, samarali reklama va brend imidjini shakllantirish orqali korxonalarning savdo hajmini oshirishga yordam beradi. Bundan tashqari, mahalliy sanoat korxonalari uchun innovatsion marketing vositalaridan foydalanish, eksport salohiyatini kengaytirish va ichki bozorda mustahkam o‘rin egallash muhim ahamiyatga ega. Shu sababli, marketing tamoyillarini to‘g‘ri qo‘llash mahalliy sanoatni yanada rivojlantirish va uning iqtisodiy barqarorligini ta’minlashda muhim omillardan biridir.

Bugungi global iqtisodiyot sharoitida mahalliy sanoat korxonalarining raqobatbardoshligini oshirish va ularning barqaror rivojlanishini ta’minlash dolzarb masalalardan biri hisoblanadi. Raqobat kuchayib borayotgan sharoitda samarali marketing strategiyalarini ishlab chiqish va qo‘llash korxonalar uchun muhim omil bo‘lib, u mahsulot va xizmatlarning bozorga moslashuvi, iste’molchilarning ehtiyojlarini aniqlash va ularni qondirish imkonini beradi.

Mahalliy ishlab chiqaruvchilarning marketingga e’tibor qaratishi ularning eksport salohiyatini oshirish, ichki bozorni yuqori sifatli mahsulotlar bilan ta’minlash va iste’molchilarning ishonchini qozonishda muhim rol o‘ynaydi. Raqamli texnologiyalarning rivojlanishi va marketingning innovatsion yondashuvlari mahalliy sanoat korxonalariga yangi imkoniyatlar yaratmoqda. Shu sababli, marketing tamoyillarini samarali tatbiq etish nafaqat korxonalarning rivojlanishi, balki mamlakat iqtisodiyotining o‘sishiga ham xizmat qiladi.

Mahalliy sanoat korxonalarida marketingning ahamiyati ilmiy jihatdan keng o‘rganilgan bo‘lib, bu borada xorijiy va mahalliy olimlarning tadqiqotlari muhim ahamiyat kasb etadi. Xalqaro miqyosda marketing va sanoat korxonalarining rivojlanishi bo‘yicha ko‘plab tadqiqotlar olib borilgan. Jumladan: Philip Kotler – “Marketing Management” (Marketing boshqaruvi) asarida marketing strategiyalarining sanoat korxonalaridagi roli, iste’molchilarga yo‘naltirilgan yondashuvlar va bozor tadqiqotlari bo‘yicha asosiy tamoyillar bayon etilgan[1].

[1] Philip Kotler, Kevin Lane Keller – Marketing Management (15th Edition), Pearson, 2015.

Michael Porter – “Competitive Strategy” (Raqobat strategiyasi) asarida sanoat tarmoqlarining raqobatbardoshligini oshirish va marketing yondashuvlarining muhim jihatlari tahlil qilingan[1].

David A. Aaker – “Strategic Market Management” (Strategik marketing boshqaruvi) kitobida brend va marketing strategiyalarining sanoat korxonalari rivojlanishidagi o‘rni o‘rganilgan[2].

Jean-Jacques Lambin – “Market-Driven Management” (Bozor boshqaruvi) kitobida marketingning sanoat korxonalari rivojlanishiga ta’siri va ularning samarali faoliyat yuritish usullari tahlil qilingan.

Bu tadqiqotlar sanoat korxonalarining rivojlanishida marketing strategiyalarining ahamiyatini ko‘rsatib beradi va raqobatbardoshlikni ta’minlash bo‘yicha ilmiy yondashuvlarni taklif qiladi.

O‘zbekistonlik tadqiqotchilar tadqiqotlari

Mamlakatimizda ham marketing va sanoat korxonalari rivoji bo‘yicha ilmiy izlanishlar olib borilgan. Jumladan:

Shodmonov Sh.Sh. – “Marketing nazariyasi va amaliyoti” asarida marketingning nazariy asoslari va uning sanoat korxonalaridagi ahamiyati yoritilgan[3].Abdukarimov I.T. – “Marketing asoslari” kitobida O‘zbekiston sanoat korxonalarida marketingning strategik roli va innovatsion yondashuvlar o‘rganilgan[4].Qosimov S.Q. – “Sanoat tarmoqlarida marketingni rivojlantirish yo‘nalishlari” tadqiqotida mahalliy sanoat korxonalarida marketingning dolzarb masalalari tahlil qilingan[5].

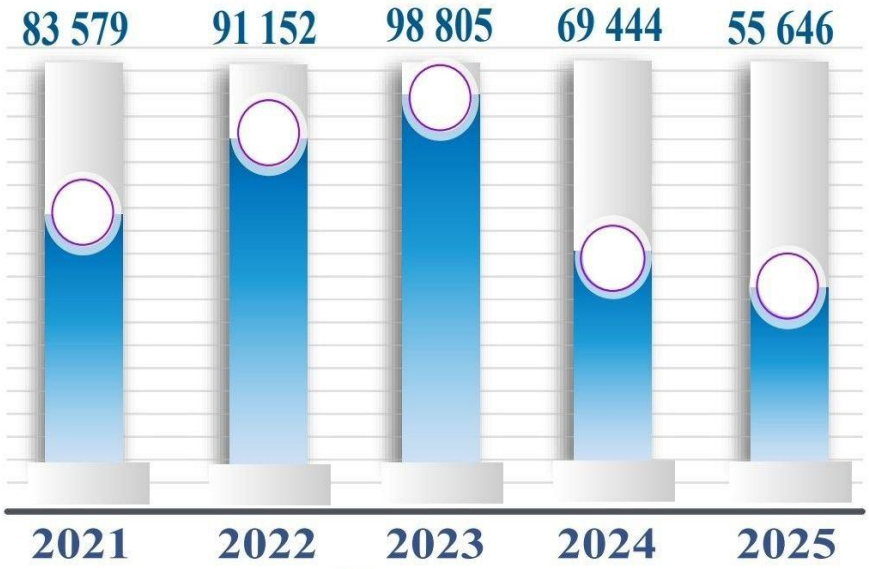
Ushbu tadqiqotlar mahalliy sanoat korxonalarining marketingga oid strategiyalarini ishlab chiqish, bozorda raqobatbardoshligini oshirish va innovatsion marketing vositalaridan foydalanish masalalariga e’tibor qaratadi.

Mamlakatimiz iqtisodiyotida boshqa sohalari qatori sanoat sohasi ham jadal sur’atlarda rivojlanishiga erishildi buni quyidagi 1-rasmdan ko’rishimiz mumkin unda yillar o’tgan sari korxonalari sonini o’sishi o’rganilgan.

Bundan tashqari, mahsulot sifatini oshirish, korxonalarda marketingni yo’lga qo’yishga katta e’tibor qaratilmoqda. Bu ishlarni amalga oshirilishi har bir sanoat korxonalarining samarali faoliyatida keng miqyosda foydalanishni va marketing orqali sanoat korxonalarining samarali faoliyatini amalga oshirish talab qiladi. korxonalarning marketing faoliyatini samaradorligini oshrishni taqozo etadi. Hozirgi davrda marketing

[1] Michael E. Porter – Competitive Strategy: Techniques for Analyzing Industries and Competitors, The Free Press, 1980.
[2] David A. Aaker – Strategic Market Management, Wiley, 1-nashr (1984) page 158
[3] Shodmonov Sh.Sh.ning "Marketing nazariyasi va amaliyoti"2017 54-bet
[4] Qosimov S.Q “sanoat korxonalarida marketingni rivojlantirish yo’nalishlari’’23-bet
[5].Abdukarimov I.T.ning "Marketing asoslari"2-nashr 48-bet

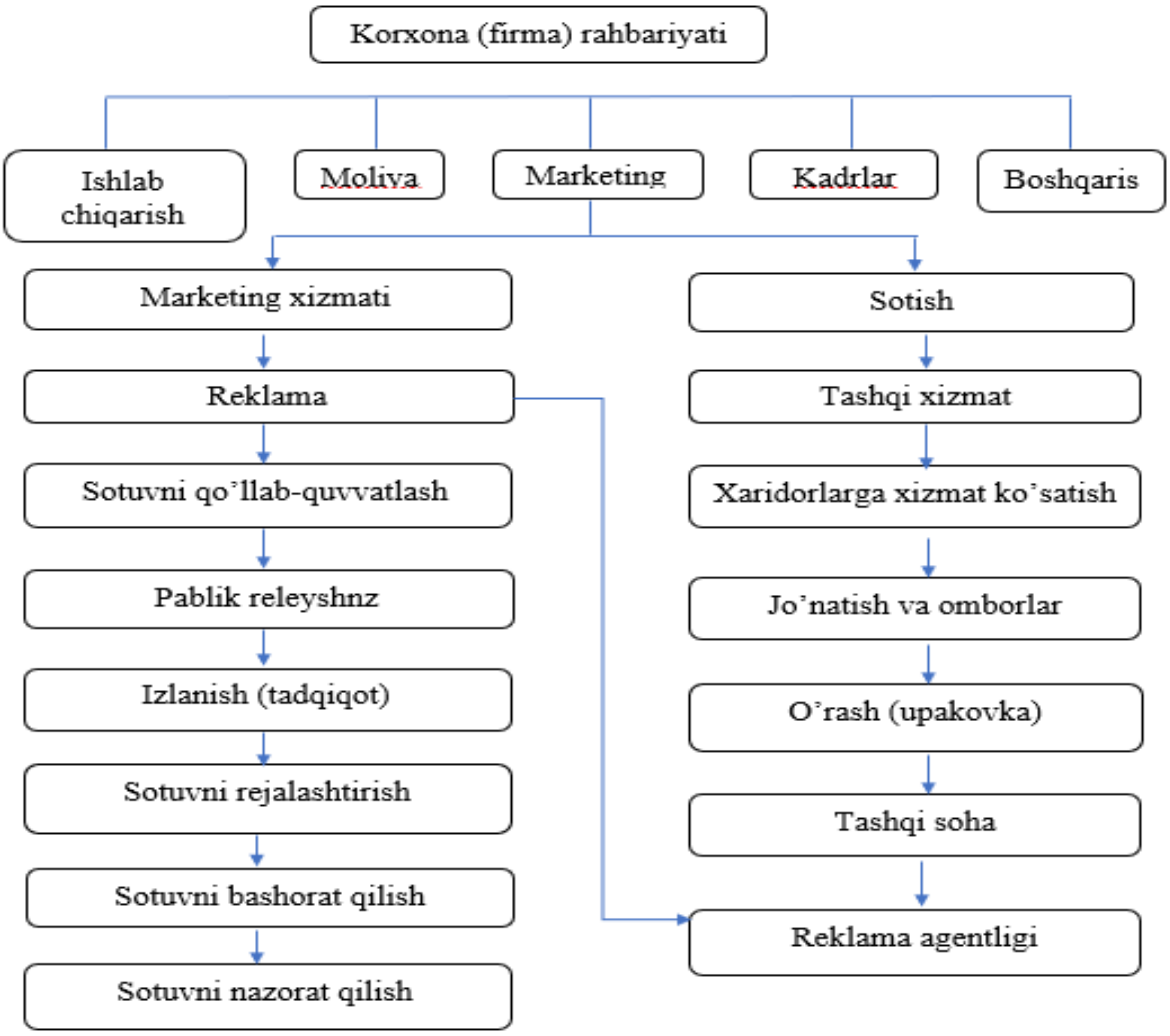
xizmati mavjud bo‘lmagan bozor tizimidagi biron-bir korxona normal faoliyat olib borolmaydi. Shunday ekan bozorda vaqt o‘tishi bilan marketingning foydalilik darajasi oshib bormoqda. Buning sababi shuki, hammaga ma’lum bo‘lgan inson ehtiyojlari cheksiz, koxonaning resurslari esa cheklangandir.



1-rasm. Korxonalari sonini o’sishi

Har bir subyektning o‘ziga xos ehtiyojlari mavjud, ularni qondirish esa har doim ham sifatli bo‘lmaydi. Har bir insonga o‘ziga xos individual yondashuv lozim. Shuning uchun yangi sharoitda didning xilma-xilligini aniq ajrata oladigan va ularni his eta oladigan korxonalargina yashay oladilar. Marketing esa bunga imkon beradi. Bozor sharoitida savdo tizimi mahsulotdan voz kechishi mumkin, davlat zararlarni qoplamaydi, kredit berishda banklar o‘zlarining shartlarini olga suradilar, bozorga xos bo‘lgan raqobat paydo bo‘ladi. Bozor iqtisodiyotiga moslashmagan korxonalar tez orada inqirozga uchrashi mumkin. Bunday hollardan omon qolish maqsadida, xo‘jalik faoliyati sohasidagi mutaxassislariga, bozor iqtisodiyoti sharoitida boshqarish texnikasini va uslublarini o‘rganishlari lozimdir. Korxona faoliyatida marketingning bo’lim sifatida o’rnini quyida ko’rishimiz mumkin (1-rasm).

Zamonaviy O‘zbekiston Respublikasida marketing endi rivojlana bormoqda, shuning uchun mamlakat korxonalarining marketing faoliyatidagi tajribalari juda ham cheklangan. Bunda «istalgan narxda, istalgan mahsulotni sotish» tamoyiliga amal qilinmoqda. Bu so‘zsiz marketing g‘oyasiga qarshidir. Zamonaviy marketing konsepsiyasi korxonaning barcha faoliyat turlari iste’mol talablarini va ularning kelajakdagi o‘zgarishini bilishga asoslanishidan iboratdir.



1-rasm. Korxona faoliyat sturukturasi

Bundan tashqari marketingning yana bir maqsadlaridan biri xaridorlarning qoniqtirilmagan talablarini aniqlash va bu bilan ishlab chiqarishni ushbu talablarni qoniqtirishga yo‘llantirishdan iboratdir. Marketing tizimi iste’molchilarga zarur bo‘lgan miqdor va assortimentdan kelib chiqqan holda, tovar ishlab chiqarishni ushbu omillarga bog‘liq bo‘lgan funksional qaramlikka yuz tutadi. Aynan shu sababdan marketing bozorni o‘rganish metodlari yig‘indisi bo‘lishidan tashqari, u o‘z urinishlarini samarali savdo kanallarini yaratish va reklama kompaniyalarini o‘tkazishga qaratadi.

Ta’kidlab o‘tilganidek, raqamli iqtisodiyot sharoitida va ayniqsa bozorga o‘tish davrida marketing iqtisodiy intizomlarning eng muhimlaridan biri hisoblanadi. Bundan butun iqtisodiy xo‘jalikning samarali ishlashi marketing tizimi qanchalik to‘g‘ri yo‘lga qo‘yilganliligiga bog‘liq. Marketing bu - korxonalarda ishlab chiqarishni tashkil etish va boshqarish, shuningdek, sotish faoliyatini tashkil qilish tizimidir, daromad olish maqsadida mahsulot va xizmatlarga bo‘lgan talablarni shakllantirish va qondirish.

Mutaxassislar «marketing» terminiga ikki xil ma’noni kiritishadi: bu boshqarishning funktsiyalaridan biri va bozor munosabatlari sharoitida to‘liq boshqaruv konsepsiyasidir. Boshqaruv funksiyasi sifatida marketing moliya, ishlab chiqarish, ilmiy

izlanishlar, moddiy-texnik ta’minot va boshqalar bilan bog‘liq bo‘lgan boshqa turdagi faoliyatlardan kam bo‘lmagan ahamiyatga egadir. Boshqaruv konsepsiyasi sifatida (biznes falsafasi) marketing korxonadan iste’molni «demokratik» jarayon sifatida tan olishlarini talab etadi va bu jarayonda iste’molchilar o‘zlari uchun zarur bo‘lgan mahsulotlarga o‘zlarining pul mablag‘lari bilan «ovoz» berish imkoniyatini yaratadi.Bu korxonaning muvaffaqiyatini aniqlaydi va iste’molchilarning talablarini optimal tarzda qondirish imkoniyatini beradi.

Marketing bu - ommani xarid qilishga undash uslubi bo‘lgani sababli, ko‘pchilik bu tushunchani rag‘batlantirish va sotish bilan tenglashtiradilar. Farqi shundan iboratki: sotish, asosan yuzma-yuz muomalani – sotuvchi potensial xaridorlar bilan muomalasini anglatadi. Marketing insonlar- ushbu sotuvchi korxona vakillarining birontasi bilan ham to‘g‘ridan-to‘g‘ri muomalada bo‘lmagan insonlar fikrini jalb etish va undash uchun ommaviy axborot vositalarini va boshqa uslublardan foydalanadi.

Boshqaruv muammolari bo‘yicha yetakchi nazariyotchilardan biri Peter Drukker bu haqida shunday deydi: Marketingning maqsadi - sotish borasidagi urinishlarni bekor qilish. Uning maqsadi - mijozni shunday o‘rganish va tushunish kerakki, tovar yoki xizmatlar unga aniq to‘g‘ri kelishi va o‘zini-o‘zi sotishlari mumkin bo‘ladi.

Marketing - ko‘p qirrali va dinamik bo‘lgan murakkab hodisadir. Bu bilan marketingni tamoyillariga va funksiyalariga, uning asosiga bir universal termin bilan to‘liq va adekvat tushuntirish berib bo‘lmasligi tushuntiriladi. «Marketing» termini AQSHda 20 asrning boshlarida paydo bo‘lib, yetakchi boshqaruv funksiyasi sifatida esa marketing 50-yillardan boshlab ko‘rila boshladi. Hozirgi davrda marketingning 2000 yaqin ta’riflari mavjud bo‘lib, ularning har biri marketingning u yoki bu tarafini yoritib berishga yoki uning kompleks tavsifini berishga harakat qiladi.

F.Kotler quyidagi ta’rifni taklif etadi: marketing - bu tovarlarni taqdim etish va almashtirish bilan alohida bir individlar va guruhlarning talab va ehtiyojlarini qondirishga yo‘naltirilgan ijtimoiy va boshqaruv jarayonidir. Ushbu ta’rifning asosiy tushunchalari - zarurat, ehtiyoj va talab; mahsulot; xarajatlar va qondirish; almashuv, transaksiyalar va o‘zaro munosabatlardir. Buyuk Britaniyaning marketing jamoa instituti marketingga «iste’molchining talablarini aniqlash, bashorat qilish va qondirishga shuningdek daromad olishga yo‘naltirilgan boshqaruv jarayoni» degan ta’rifni beradi.

Xulosa qilib aytganda, mahalliy sanoat korxonalarida marketing tizimini to‘g‘ri yo‘lga qo‘yish ularning raqobatbardoshligini oshirish va iqtisodiy samaradorligini ta’minlashga xizmat qiladi. Raqamli texnologiyalar va innovatsion yondashuvlardan foydalangan holda marketing strategiyalarini ishlab chiqish korxonalar uchun muvaffaqiyat kaliti bo‘lib xizmat qiladi. Shunday ekan, marketing tizimini to‘g‘ri tashkil etish va uni zamonaviy talablar asosida shakllantirish mahalliy sanoat orxonalarining global bozorga chiqishi uchun muhim ahamiyat kasb etadi.

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6. Abdukarimov I.T.ning "Marketing asoslari"2-nashr 48-bet

YASHIL IQTISODIYOT SHAROITIDA KICHIK BIZNES SUB'YEKTLARINING FAOLIYATINI RIVOJLANTIRISH MEXANIZMLARI

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Annotatsiya: Ushbu maqolada mamlakatimizda yashil iqtisodiyot tamoyillari asosida kichik biznes va xususiy tadbirkorlik subyektlarining faoliyatini rivojlantirishning zamonaviy mexanizmlari, ekologik barqarorlikni ta'minlashdagi o'rni va istiqbollari kompleks tahlil qilinadi. Shu bilan birga, yashil texnologiyalarni joriy etish, resurslardan samarali foydalanish, atrof-muhitga ta'sirni kamaytirish bo'yicha davlat siyosati va huquqiy-normativ baza holati tahlil etilib, takomillashtirish bo'yicha ilmiy asoslangan takliflar ishlab chiqiladi. Tadqiqot metodologiyasi sifatida iqtisodiy-statistik tahlil, tizimli va qiyosiy yondashuv, monografik tahlil, ekspert baholash kabi usullardan foydalanilgan. Tadqiqot natijalari asosida kichik biznes subyektlari faoliyatini yashil iqtisodiyotga moslashtirish bo'yicha institutsional, moliyaviy va tashkiliy-huquqiy mexanizmlarni takomillashtirishga qaratilgan amaliy tavsiyalar shakllantirilgan.

O'zbekistonda amalga oshirilayotgan iqtisodiy islohotlarning navbatdagi bosqichi nafaqat iqtisodiy o'sishni ta'minlash, balki ekologik barqarorlikni ham hisobga olgan holda yashil iqtisodiyotga o'tishni jadallashtirish bilan tavsiflanmoqda. Xususan, kichik biznes va xususiy tadbirkorlik subyektlarining ushbu jarayondagi o'rni tobora ortib bormoqda. Chunki aynan kichik biznes - innovatsion texnologiyalarni joriy qilish, resurslardan tejamkor foydalanish va ekologik xavfsizlikni ta'minlashda tezkor moslashuvchanlikka ega bo'lgan muhim iqtisodiy qatlamdir.

Bozor iqtisodiyoti sharoitida kichik biznes subyektlarining faoliyatini ekologik jihatdan barqaror modelga yo'naltirish, ularga yashil texnologiyalarni joriy etish uchun zarur shart-sharoitlarni yaratish, ularni davlat tomonidan qo'llab-quvvatlash va tartibga solish masalalari dolzarb ahamiyat kasb etmoqda. Dunyodagi ilg'or davlatlar tajribasi shuni ko'rsatadiki, yashil iqtisodiyotga o'tishda kichik tadbirkorlik subyektlarining o'rni strategik jihatdan muhim sanaladi.

O'zbekiston Respublikasi Prezidentining 2023-yil 14-sentyabrdagi PQ–306-sonli "Kichik biznesni rivojlantirishni moliyaviy va institutsional qo'llab-quvvatlash chora-tadbirlari to'g'risida"gi qarori hamda boshqa normativ-huquqiy hujjatlar asosida kichik biznes subyektlarini ekologik innovatsiyalar asosida rivojlantirish, ularning faoliyatini yashil iqtisodiyot tamoyillariga moslashtirishga alohida e'tibor qaratilmoqda.

Bu esa, kichik biznesni qo‘llab-quvvatlash siyosatini ekologik xavfsizlik bilan uyg‘unlashtirish zaruratini yuzaga keltirmoqda.

Ushbu ilmiy ishning asosiy maqsadi - O‘zbekistonda yashil iqtisodiyot tamoyillari asosida kichik biznes va xususiy tadbirkorlikni rivojlantirishning institutsional va iqtisodiy mexanizmlarini tahlil qilish, mavjud muammolarni aniqlash hamda ilmiy asoslangan amaliy takliflar ishlab chiqishdan iborat.

Ushbu maqsaddan kelib chiqib, quyidagi ilmiy vazifalar belgilandi:

- Yashil iqtisodiyot konsepsiyasining mazmun-mohiyati va uning kichik biznesga ta’sirini o‘rganish;
- Kichik biznes subyektlarining ekologik barqarorlikdagi o‘rnini nazariy va amaliy jihatdan asoslash;
- Yashil iqtisodiyot doirasida kichik biznesni rivojlantirishning xorijiy tajribalarini tahlil qilish;
- O‘zbekistonda yashil iqtisodiyotga o‘tish jarayonida kichik biznesga ta’sir ko‘rsatuvchi omillarni baholash;
- Mamlakatda yashil texnologiyalarni kichik biznes subyektlariga joriy etishdagi muammolar va ularni bartaraf etish yo‘llarini aniqlash;
- Davlat tomonidan ekologik jihatdan barqaror kichik tadbirkorlikni qo‘llab-quvvatlash mexanizmlarini takomillashtirish bo‘yicha ilmiy asoslangan takliflar ishlab chiqish;
- Kichik biznes subyektlariga soliq, kredit va investitsiya imtiyozlarini yashil iqtisodiyot tamoyillari asosida optimallashtirish.

Yuqoridagilardan kelib chiqib, mavzuning dolzarbligi bevosita mamlakatimizning uzoq muddatli barqaror rivojlanishi, atrof-muhit muhofazasi hamda iqtisodiy islohotlarning yangi bosqichi bilan uzviy bog‘liqdir. Shu sababli, bu yo‘nalish bo‘yicha ilmiy izlanishlar olib borish va real tavsiyalar ishlab chiqish, bo‘lajak iqtisodchilar oldida turgan muhim vazifalardan biridir.

Tadqiqotning metodologik asoslarini shakllantirish jarayonida kichik biznes va xususiy tadbirkorlikni davlat tomonidan tartibga solishning murakkab va ko‘p qirrali xususiyatlari inobatga olinib, kompleks yondashuv asosida turli metodologik vositalar qo‘llanildi.

Tadqiqot metodologiyasi quyidagi ustuvor yo‘nalishlar asosida shakllantirildi:

Birinchidan, mavzu doirasida chuqur nazariy tadqiqotlar olib borish maqsadida mahalliy va xorijiy olimlarning fundamental ilmiy ishlari, maqolalari va monografiyalari keng qamrovda o‘rganildi. Xususan, iqtisodiy islohotlar, kichik biznes va xususiy tadbirkorlikni tartibga solish masalalariga oid xalqaro ekspertlar tomonidan tayyorlangan tahliliy materiallar tahlil qilindi.

Ikkinchidan, empirik ma’lumotlar bazasini shakllantirish uchun O‘zbekiston Respublikasi Davlat statistika qo‘mitasi, Markaziy bank, Iqtisodiy taraqqiyot va

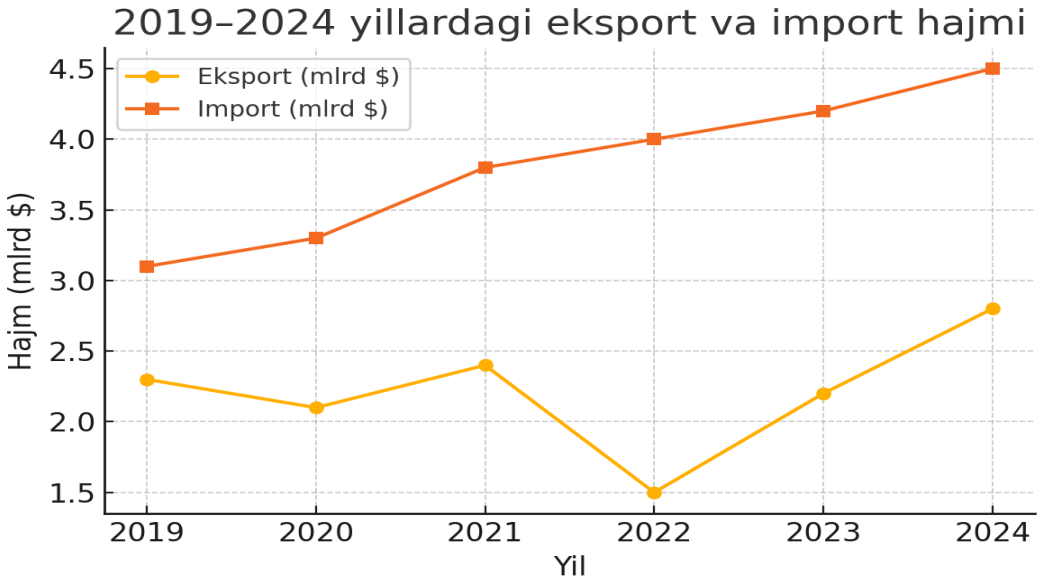
kambag‘allikni qisqartirish vazirligi hamda boshqa vakolatli tashkilotlarning statistik ma’lumotlari va rasmiy hisobotlaridan foydalanildi. Bu tadqiqot natijalarining ishonchliligini ta’minlashda muhim omil bo‘ldi.

Uchinchidan, mavjud muammolarni chuqur o‘rganish maqsadida kichik biznes sub’yektlari va davlat organlari vakillari o‘rtasida so‘rovnomalar o‘tkazildi hamda chuqurlashtirilgan intervyular tashkil etildi. Olingan ma’lumotlar ekspert baholash usuli yordamida tahlil qilindi.

To‘rtinchidan, xorijiy mamlakatlarning ilg‘or tajribasini o‘rganish uchun qiyosiy tahlil (comparative analysis) va benchmarking usullaridan foydalanildi. Bu esa O‘zbekistonda amaldagi normativ-huquqiy bazani takomillashtirish bo‘yicha asosli takliflar ishlab chiqish imkonini berdi.

Umuman olganda, yuqoridagi metodologik yondashuvlar asosida olingan natijalar kichik biznes va xususiy tadbirkorlikni davlat tomonidan tartibga solishning zamonaviy holatini xolisona baholash hamda uni takomillashtirish bo‘yicha ilmiy asoslangan amaliy takliflar ishlab chiqish imkonini yaratdi.

So‘nggi yillarda kichik biznes sub’yektlarining tashqi iqtisodiy faoliyati dinamikasi respublika iqtisodiyotidagi strukturaviy o‘zgarishlar, global iqtisodiy vaziyat, hamda yashil iqtisodiyot konsepsiyasining bosqichma-bosqich joriy qilinishi bilan bevosita bog‘liq bo‘lib bormoqda. Quyida 2019–2024 yillar davomida ushbu sub’yektlarning import va eksport faoliyati bo‘yicha statistik tendensiyalar asosida sabab-oqibatli tahlil o‘tkaziladi.



Chizma 1. 2019–2024 yillardagi kichik biznes eksport va import hajmi o‘zgarishi[1].

Yuqoridagi grafik 2019-2024 yillar mobaynida kichik biznes sub’yektlari tomonidan amalga oshirilgan **eksport** va **import** hajmining o‘zgarishini aks ettiradi.

[1] https://stat.uz/uz/default/choraklik-natijalar/53709-2024

Ushbu o‘zgarish dinamikasi tahlil qilinar ekan, import hajmining 3,1 mlrd AQSh dollaridan 4,5 mlrd dollargacha barqaror o‘sib borishi kuzatiladi, bu esa xorijdan texnologiyalar, xomashyo va xizmatlarga ehtiyoj ortib borayotganidan dalolat beradi; eksport esa davr mobaynida o‘zgaruvchanlikni ko‘rsatib, 2022 yilda 1,5 mlrd dollargacha pasaygan bo‘lsa-da, keyingi ikki yilda tiklanib, 2024 yilda 2,8 mlrd dollarga yetgan, bu holat kichik biznesning tashqi bozorlarga moslashayotganini anglatadi; shu bilan birga, har yili import hajmining eksportdan yuqori bo‘lib qolayotgani tashqi savdo balansining salbiyligini va ishlab chiqarishning hali to‘liq raqobatbardosh emasligini ko‘rsatmoqda, bu esa yashil iqtisodiyot tamoyillari asosida import o‘rnini bosuvchi, innovatsion va ekologik toza ishlab chiqarishni rivojlantirish zaruratini yanada dolzarb qiladi.

2019 yilda kichik biznes eksporti 2,6 mlrd AQSH dollarini tashkil etgan bo‘lsa, 2022 yilga kelib bu ko‘rsatkich 1,5 mlrd dollargacha kamaydi. Ushbu salbiy dinamikaning asosiy sabablarini quyidagicha guruhlash mumkin. Birinchidan, makroiqtisodiy va geoiqtisodiy omillar: 2020–2022 yillarda global pandemiya oqibatida tashqi talabning qisqarishi, logistika zanjirlaridagi uzilishlar va protektsion siyosatlarning kuchayishi kichik biznes sub’yektlarining xalqaro bozor bilan integratsiyasini izdan chiqardi. Ikkinchidan, Mahsulot raqobatbardoshligining pastligi: Eksportga yo‘naltirilgan mahsulotlar asosan xomashyo va yarim tayyor holatda bo‘lib, ularning qo‘shimcha qiymat darajasi pastligi xalqaro bozorda narx tebranishlariga nisbatan zaifligini oshirgan. Uchinchidan, Ekologik standartlarning yetarli darajada joriy qilinmaganligi: Yashil iqtisodiyot sharoitida organik, ekologik toza mahsulotlarga talab oshayotgan bir paytda, kichik biznes korxonalarining eksportga mo‘ljallangan mahsulotlari ko‘p hollarda ekologik sertifikatsiyadan o‘tmagan.

2023–2024 yillardagi eksport hajmining tiklanishi (2,4 mlrd $) esa Sohaviy diversifikatsiya, ya’ni mahalliy qayta ishlash sanoati (ayniqsa qishloq xo‘jaligi mahsulotlarini chuqur qayta ishlash, to‘qimachilik, farmatsevtika) rivojlanishi kichik biznes eksport salohiyatini oshirdi, Bundan tashqari, iqtisodiy diplomatiya va yangi bozorlarni yaratib MDH va Osiyo davlatlari bilan imzolangan kelishuvlar eksport geografiyasini kengayishi kabi omillar bilan bog‘liqlgini ko’rishimiz mumkin.

Yuqoridagi ma’lumotdan kelib chiqgan holda, eksport hajmidagi beqarorlikning asosiy sababi – uning tarkibida xomashyo va past qayta ishlov darajasiga ega mahsulotlar ulushining yuqoriligidir, bu esa jahon bozoridagi narxlar va tashqi talab o‘zgarishlariga yuqori darajadagi sezuvchanlikni keltirib chiqarmoqda. So‘nggi yillarda kuzatilgan tiklanish esa mahsulot strukturasi ichida ekologik toza, innovatsion va qayta ishlangan mahsulotlar ulushining ortishi bilan bog‘liq bo‘lib, bu holat kichik biznes sub’yektlarining tashqi bozorlarga barqaror moslashuvini va yashil iqtisodiyot tamoyillariga sodiqligini ko‘rsatadi.

Import hajmi 2019 yildagi 2,9 mlrd dollardan 2024 yilda 4,5 mlrd dollarga yetdi. Bu, bir tomondan, kichik biznesning texnologik modernizatsiyaga intilayotganini, ikkinchi tomondan esa ichki ishlab chiqarishda yetarli resurs va texnologiya yo‘qligini ko‘rsatadi. Xususan: texnologik qaramlik(asbob-uskunalar, energiya samarador uskunalar, ishlab chiqarish texnologiyalarining katta qismi importga bog‘liq), yashil texnologiyalarning olib kirilishi (2023 yildan boshlab energiya tejovchi texnologiyalar va ekologik toza ishlab chiqarish liniyalariga talab ortdi)ni ko‘rishimiz mumkin

Agar hududlar kesimida faoliyatni tahlil qilib, quyida keltirilgan statistik ma’lumotlar asosida 2024 yil 1-choragida kichik biznesning eksport-import faoliyati quyidagicha shakllandi:

1-jadval

O’zbekiston Respublikasida ayrim hududlardagi 2024 yil 1-choragida kichik biznesning eksport-import faoliyati

Toshkent shahrida	Import hajmining 46,0% qismini egallab, iqtisodiy va logistika markazi sifatida ustuvorlikni saqlab qoldi. Biroq eksport hajmi hamon nisbatan past, bu texnologik mahsulotlar ishlab chiqarishdagi cheklovlarni bildiradi
Surxondaryo, Farg‘ona, Xorazm viloyatlarida	Eksport ulushi yuqori bo‘lib, bu hududlarda mahalliy xomashyo bazasi va agroklasterlarning nisbatan yaxshi rivojlanganligini ko‘rsatadi.
Qoraqalpog‘iston va Qashqadaryo	Faoliyat past bo‘lib, bu yerda infratuzilma, ekologik resurslar va logistika zanjirlarining zaifligi kuzatilmoqda.

Hududlar o‘rtasidagi iqtisodiy faollik va yashil rivojlanish darajasidagi farqlar, avvalo, ularning tabiiy resurs salohiyati, ishlab chiqarish infratuzilmasi hamda ekologik infratuzilmalarning mavjudligi yoki yetishmovchiligi bilan bevosita bog‘liqdir. Ayniqsa, ekologik texnologiyalar, chiqindilarni qayta ishlash tizimi va muqobil energiya manbalariga kirish imkoniyatining notekis taqsimlangani hududlar kesimida kichik biznesning yashil iqtisodiyotga integratsiyalashuv darajasida sezilarli tafovutlarni yuzaga keltirmoqda.

Tahlil ko‘rsatadiki, kichik biznes sub’yektlarining ekologik transformatsiyasi hali ham bosqichma-bosqich amalga oshmoqda. Tashqi iqtisodiy faoliyatda ekologik sertifikatlash, yashil standartlarga javob beruvchi ishlab chiqarish, va yashil texnologiyalarning importi - barqaror rivojlanishning asosiy tayanchlari bo‘lib qolmoqda.

Yashil iqtisodiyot tamoyillariga asoslangan holda kichik biznes sub’yektlarining faoliyatini rivojlantirish bugungi kunda iqtisodiy taraqqiyot va ekologik muvozanatni birgalikda ta’minlashning ustuvor yo‘nalishlaridan biri hisoblanadi. O‘tkazilgan tahlillar asosida aniqlanishicha, kichik biznesni ekologik jihatdan barqaror yo‘nalishga

yo‘naltirish nafaqat atrof-muhitni muhofaza qilishga, balki innovatsion texnologiyalarni keng joriy qilish, yangi ish o‘rinlari yaratish va xalqaro hamkorlikni kengaytirishga xizmat qiladi.

Yashil iqtisodiyotda kichik biznesning muvaffaqiyatli faoliyat yuritishi uchun davlat tomonidan kompleks yondashuv talab etiladi. Bunda quyidagi mexanizmlar alohida ahamiyat kasb etadi: soliq imtiyozlari, ekologik toza ishlab chiqarish texnologiyalariga subsidiyalar ajratish, “yashil kreditlar” va grantlar ajratish, ekologik standartlarga mos sertifikatlash tizimini yaratish, hamda ekologik tadbirkorlikni rag‘batlantiruvchi qonunchilik bazasini shakllantirish.

Shuningdek, xalqaro tajriba shuni ko‘rsatmoqdaki, ekologik jihatdan barqaror bozor infratuzilmasini yaratishda kichik biznes sub’yektlari hal qiluvchi rol o‘ynaydi. Shu sababli, ularning faoliyatini davlat tomonidan tizimli tartibga solish va strategik qo‘llab-quvvatlash nafaqat iqtisodiy samaradorlikni oshiradi, balki yashil taraqqiyot maqsadlariga erishishda muhim bosqich bo‘lib xizmat qiladi.

Xulosa qilib aytganda, yashil iqtisodiyot sharoitida kichik biznes sub’yektlarini rivojlantirish — bu innovatsion yondashuvlar, davlat siyosati, moliyaviy rag‘batlantirish va ekologik mas’uliyat o‘rtasidagi barqaror muvozanatga asoslangan murakkab, ammo istiqbolli yo‘nalishdir. Shu asosda, bu yo‘nalishda ishlab chiqiladigan mexanizmlar va siyosat choralarining izchil va bosqichma-bosqich amalga oshirilishi iqtisodiy taraqqiyotning ekologik xavfsiz shaklini shakllantirishga zamin yaratadi.

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TARMOQ INFRATUZILMASIDA XUSUSIY KAPITALDAN FOYDALANISH MEXANIZMLARINI TAKOMILLASHTIRISH

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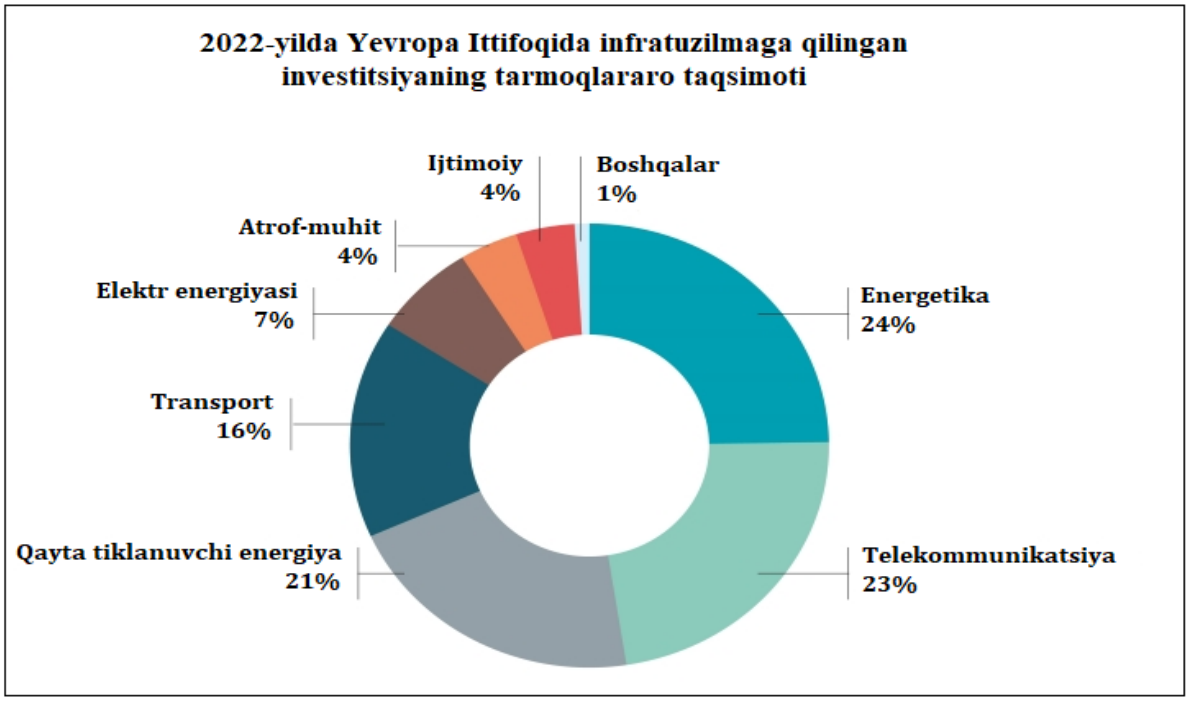
XXI asrda insoniyat oldida turgan ekologiya muammolari va raqamli tizimga o'tish sharoitida yangi tarmoq infratuzilmalarini barpo qilish hamda mavjud bo'lgan tarmoq infratuzilmalari faolyatini ta'minlash borasida investitsiyaga bo'lgan ehtiyoj oshib borayapti. Dunyodagi aksariyat davlatlarga nazar tashganimizda innovatsion energiya tizimlari, aqilli shaharlar qurilishi, transport xizmatlari va yo'l-qurilish tizimlariga investitsiya kiritilayotganini kuzatishimiz mumkin. Hozirgi kun iqtisodiy tizimi urbanizatsiyaning eng yuqori bo'lgan va infratuzilmaga juda katta ehtiyoj sezilayotgan davrdan o'tmoqda. Jahon bo'ylab qilinayotgan investitsiyalarning katta qismi telekommunikatsiya hamda ekologik jihatdan toza va zararsiz energetika sohalarida qo'llanilnmoqda. Quyidagi diagrammani kuzatganimizda, 2022 yilda Yevropa Ittifoqida qilingan investitsiyaning 23 foizi telekommunikatsiya sohasiga, 21 foizi esa qayta tiklanadigan energiya sohasiga to'gri kelishini kuzatishimiz mumkin.



Manba : Global Infrastructure Index, 2022 yil.

Tarmoq infratuzilmasiga bo'lgan ehtiyojning kun sayin ortib borishiga sabab bo'layotgan boshqa omil esa xalqaro tijotat va aloqalarning yuqori sur'atlarda oshib borishi. 2030-yilga qadar yuk portlari va havo yo'llari kargo transportiga bo'lgan ehtiyojning uch barobar ortishi hamda havo yo'llari yo'lchi transportiga bo'lgan

ehtiyojning ikki barobar ortishi taxmin qilinmoqda. Dunyodagi rivojlanish tarzining bu shaklda davom etishi natijasida 2030-yilgacha bo'lgan davr ichida 50 trillion dollar atrofida infratuzilma investitsiyasiga ehtiyoj tug'ilishi nazarda tutilmoqda.[1] GI Hubning (Global Infrastructure Hub) tadqiqotlariga ko'ra 2040-yilga qadar global infratuzilmaning 97 trillion dollar investitsiyaga ehtiyoji bor.[2] McKinsey&Company tarafidan 2017 yilda qilingan tadqiqotlarga ko'ra hozirgi kunda transport, energetika va telekommunikatsiya sohalari infratuzilmasi uchun jahon miqiyosida har yil 2.5 trilliyon dollar hajmida investitsiya qilinmoqda, ammo bu mablag' yetarli emas. Chunki, bu sohalarning 2035 yilgacha har yil 3,7 trillion dollar investitsiyaga ehtiyoji bor va bu miqdor dunyo yalpi milliy mahsulotining 4,1 foiziga to'g'ri keladi.[3]

Butun dunyo bo'ylab infratuzilmaga bo'lgan ehiyojning keskin ortib borayotgan bu davrda Yangi O'zbekistonimizda ham infratuzilmani tubdan islohot qilish jarayoni yuqori sur'atlarda davom etmoqda. Mamlakatimizning har qarich tuprog'ida kundan-kunga yangi infratuzilmalar barpo qilinmoqda va mavjud infratuzilmalar islohot qilinib davr talabiga javob beradigan darajaga keltirilmoqda. Yo'l-qurilish, temir-yo'l, uy-joy, sog'liqni saqlash, ta'lim-tarbiya, sport va qator sohalarda qilinayotgan ulkan bunyodkorliklar bunga yaqqol misol bo'la oladi. Shaharlarning kengayishi, urbanizatsiyaning tezlashishi va insonlar hayot darajasining ko'tarilishi bilan mutanosib tarzda yo'l-qurilish, transport, ichimlik suv va energetika tarmoqlari infratuzilmasiga bo'lgan ehtiyoj ham keskin ortib bormoqda. Bu jarayonda byudjet imkoniyatlari bilan ayni zamonda muqobil moliyalashtirish usullaridan ham foydalanilmoqda.

Insonlarnig hayot faolyatlari uchun muhim hisoblanadigan iste'mol, harakatlanish, yoritish, isitish, va axborot almashish kabi birinchi darajadagi muhim ehtiyojlarini qondirish borasida tarmoq infratuzilmasi asosiy rolni o'ynaydi. Tarmoq iqtisodiyotining negizini tashkil qiluvchi transport, energetika va telekommunikatsiya sektorlarining o'zaro bog'liq umumiy xususiyatlaridan biri tashish va yetkazib berish hisoblanadi. Tarmoq infratuzilmasining markazida transport turadi ; ya'ni, odamlarni, mahsulotlarni, energiyani, xabarlarni, axborotlarni va ma'lumotlarni tashish va yetkazib berish xizmatlari. Davlatning rivojlanganlik hamda xalqning farovonlik darajasi bevosita transport xizmatlariga va bu xizmatlar faoliyatini ta'minlovchi tarmoq infratuzilmasiga bog'liq.

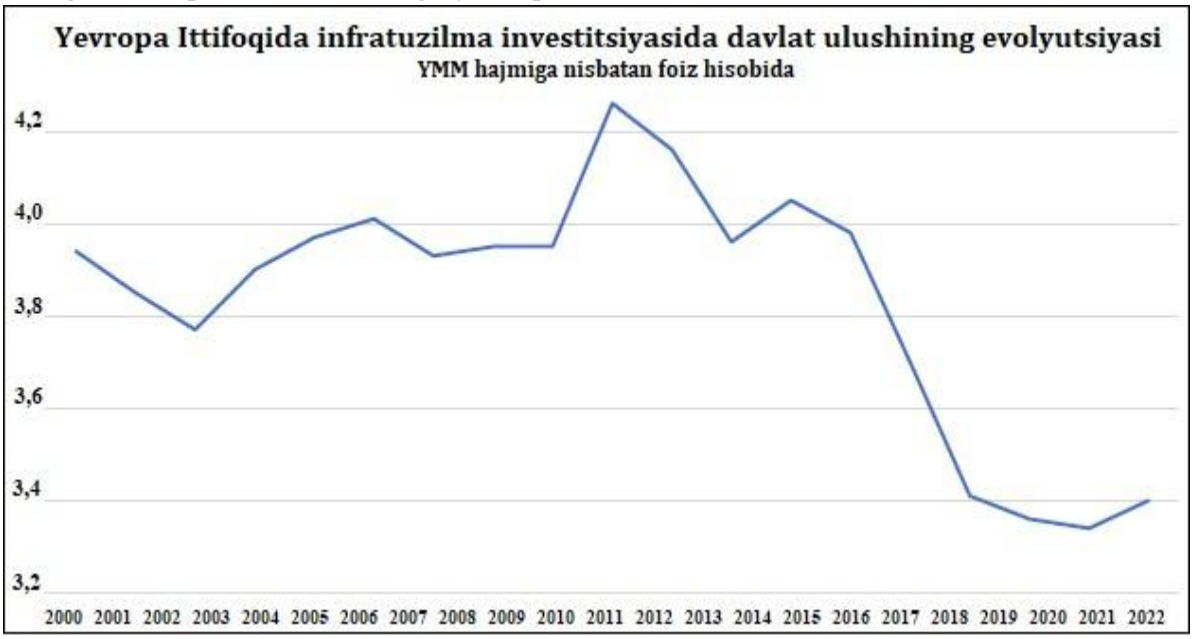
Sobit qurilmalar sistemasidan tuzilgan transport yo'llari, havo yo'llari, temir yo'llari, energetika tarmoqlari, telekommunikatsiya va mobil tarmoqlar majmuasidan iborat bo'lgan tarmoq infratuzilmalarining uzluksiz faolyat ko'rsatishi uchun doimiy ravishda ta'mirga, islohotga va modernizatsiyaga ehtiyoji bor. Klassik iqtisodiy tizimda

[1] David Thodey. "Roadblocks to Global Growth", The Australian. 2014

[2] 2014 yilda G20 mandati bilan tuzilgan tashkilot bo'lib, 50 ta davlatning infratuzilmaga bo'lgan investitsiya ehtiyojlarini aniqlaydi.

[3] McKinsey Global Institute analysis. New York, 2017

tarmoq infratuzilmalari davlat organlari tarafidan moliyalashtiriladi va insonlarning xizmatiga taqdim qilinadi. So’nggi davr iqtisodiy tizimida esa infratuzilmaga qilingan investitsiyaning samaradorligini oshirish va byudjet xarajatlarini optimallashtirish maqsadida, infratuzilmalarni moliyalashtirishda xususiy sarmoyadan ham foydalanilmoqda. Asosan 1990-yillardan boshlab ba’zi yirik infratuzilmalarni moliyalashtirishda tadbiq qilingan davlat-xususiy sheriklik modeli so’nggi yillarda shaharlarning kengayishi, aholi ehtiyojlarining radikal o’zgarishi va iqtisodiy o’sish strategiyalari kabi qator sabablar tufayli keng ko’lamda tadbiq qilinmoqda. So’nggi yillarda Yevropa Ittifoqida infratuzilmaga qilinayotgan investitsiyalar miqdorining oshishiga qaramasdan, bu investitsiyalarda davlat ulushining tobora pasayib borayotganini quyidagi grafikda kuzatishimiz mumkin. Buning asosiy sababi, xususiy sarmoyaning tarmoq infratuzilmasiga jalb qilinishi bilan izohlanadi.



Manba : Global Infrastructure Index, 2000-2022 yilllar.

Tarmoq infratuzilmasini davlat-xususiy hamkorlik modellari asosida moliyalashtirisning ijobiy tomoni shundaki, tarmoq xususiylashtirilmaydi, balki shartoma muddati tugashi bilan davlat mulkiga aylanadi. Investitsiya bilan bog’liq risklar kamayadi, chunki qurilish risklari, ekspluatatsiya risklari va moliyaviy risklarning bir qismi xususiy kapital sektorining zimmasiga o’tadi. Davlat-xususiy hamkorligida loyihaning bir qismi yoki hammasi xususiy sarmoya tarafidan moliyalashtiriladi va loyiha amalga oshiriladi. Barpo qilingan loyihaning ekspluatatsiya jarayonida faoliyatni davlat, xususiy hamkor yoki uchunchi yuridik shaxs o’z zimmasiga olishi mumkin. Loyiha faoliyatidan qilingan daromad shartnomaga binoan davlat va xususiy hamkor orasida bo’linadi. Davlat va xususiy hamkor orasidagi sheriklik muddati yo’l tarmoqlari sohasida 20-50 yilgacha davom qiladi ; Strasburg A355 avtomagistrali shartnoma muddati 50 yil, Markaziy-Yevropa Atlantika avtomagistrali (RCEA) shartnoma muddati 48 yil. Havo yo’llari, temir yo’llari, tunel va viyaduklar uchun

hamkorlik muddati 50-100 yilgacha davom etadi ; Parij Sharl de Goll aeroporti (APCG) shartnoma muddati 70 yil, La Manshe Yevrotuneli shartnoma muddati 99 yil, Millau viyadugi shartnoma muddati 78 yil.

Samaradorlik, moslashuvchanlik va risklar nazaridan tahlil qilinganida, investitsiya uchun tadbiq qilinadigan barcha usullarning o'ziga xos afzalliklari va kamchiliklari mavjud. Tarmoq infratuzilmalariga investitsiya qilishda davlat va xususiy sarmoya orasidagi hamkorlik muddatinig juda uzunligiga ba'zi iqtisodchi olimlar ijobiy qaramaydilar. Yevropa Auditorlar Departamentining hisobotlariga ko'ra, davlat-xususiy hamkorligi asosida amalga oshirilgan infratuzilma loyihalarida samaradorlikning ko'zlangan darajada emasligi, qurilish jarayonlarida kechikishlar va xarajatlarning keckin ortish hollari mavjud.[1] Davrimizning ekologiya muammolari va raqamli tizimga o'tish sharoitida, xususiy sarmoya hamkorligida infratuzilmaga investitsiya qilinayotganida birinchi navbatda davlatning milliy manfaat va strategiyalari ko'zda tutilishi hamda quyidagi tamoillarga alohida e'tibor qaratilishi lozim :

- ✓ tarmoq infratuzilmalarining milliy suverenitetini davlat tarafidan kafolatlash;
- ✓ loyihani iqtisodiy, ijtimoiy va ekologik jihatdan ijobiy va salbiy oqibatlarini keng va chuqur tahlil qilish ;
- ✓ iste'molchilarning energetika, transport va telekommunikatsiya hizmatlaridan adekvat (muvofiq) narxlarda foydalanish huquqlarini kafolatlash ;
- ✓ iste'molchilarga taqdim qilinadigan mahsulot va xizmatlarning sifat darajasini hamda infratuzilmani modernizatsiya qilish majburiyatlarini belgilash va kafolatlash.

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ОСНОВНЫЕ НАПРАВЛЕНИЯ УСТОЙЧИВОГО РАЗВИТИЯ ПЛОДООВОЩНОГО ХОЗЯЙСТВА В УСЛОВИЯХ ЗЕЛЁНОЙ ТРАНСФОРМАЦИИ

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Аннотация. В данной статье обосновывается необходимость к зелёным технологиям в плодоовощном хозяйстве. Раскрывается суть и подходы к «зелёным технологиям» для повышения эффективности и продуктивности всей цепочки создания стоимости в плодоовощном хозяйстве. “Зелёная трансформация”, подразумевающая системный и всеобъемливающий перевод отраслей, сфер деятельности, бизнес процессов и всей системы управления на так называемый “зелённый формат экономики”. Следовательно, переход отраслей на зелёный путь развитие подразумевает прежде всего исследование и применение зелёных технологий, адекватных условиям зелёной экономики и для достижения Целей устойчивого развития.

Процессный подход, позволивший по-новому, то есть бережливого относиться к производственным процессам (англ. Lean production) еще раз потребовал пристально исследовать каждый этапы производственных систем и цепочку создания ценности. Использование безотходных-зелёных технологий и неустанная забота о сохранении чистоты окружающей среды в 1970-х годах позволили формировать новый взгляд к формированию «экологической этики» ведения бизнеса.

Ззелёные технологии, которых часто принято отожествлять с экологическими технологиями (по англ. green technology- greentech, environmental technology) представляющих технологии или производственные процессы и цепочки поставок, отличающих от традиционных технологий экологической полностью или менее безвредностью по сравнению с традиционными способами производства. Иногда эти технологии называют еще «чистыми технологиями» или же «полностью замкнутые технологии», в которых производственные циклы исключают выбросы отходов, полностью перерабатывают используемые ресурсы (воду, газы, масло, химические реактивы и другие вредные вещества).

Эти технологии отличаются своей уникальностью, безотходностью и в то же время сравнительно высокой стоимости по сравнению с традиционными массовыми технологиями. К их числу можно отнести биологическая очистка воды, очистка выделяемого газа в результате производственных процессов, утилизация отходов, рекуперация органических отходов и т.д., Наращивание

производства и укрепление конкурентоспособности плодоовощного комплекса имеет особое значение для Узбекистана.

Произведенный анализ учебно-информационных ресурсов и программ повышения квалификации в области международной торговли и развитию предпринимательства в рамках ВТО, МТЦ, ЮНКТАД, ЮНИДО позволили выработать следующие рекомендации.

1. Активное применение ресурсно-аналитической базы международных организаций в учебном и исследовательском процессе подготовки специалистов.

2. Обязательное включение в планы повышения квалификации специалистов плодоовощного хозяйства разработка зелёных технологий и проектов на основе обсуждение кейсов проектных работ и материалов международных организаций.

3. Разработать систему поощрения творческих групп молодых специалистов за разработки зелёных технологий и бизнес проектов в рамках участия на тренингах и сертифицированных программах повышения квалификации на платформах МТЦ, ЮНИДО и других международных организаций.

4. Высшей школе бизнеса в кооперации с университетами организовать междисциплинарные мастер классы для повышения квалификации специалистов в области зелёных технологий с применением ресурсно-информационной базы международных организаций и повысить исследовательскую направленность научных работ специалистов и соискателей в этой области.

5. Под эгидой Торгово-промышленной палате и Министерства инвестиции, промышленности и торговли и необходимо усилить работу по созданию Национальной поисковой и консультационной системы, с использованием Trade map, Product map- разработанной и представляемой МТЦ, позволяющей оперативно обеспечивать экспортеров необходимой информацией о процедурах экспорта, транспортировки, упаковки.

Сравнительный анализ и группировка Сопоставление форм и методов обучения специалистов в области международной торговли, сравнения применяемых учебных материалов и обоснование новых форм организации занятий, методы кейсов для обсуждения и принятия решений, метод группировок.

Необходимость применения информационных, обучающих, учебных и статистических материалов международных организаций для повышения практических навыков специалистов в области разработки и реализации зелёных технологий в плодоовощном хозяйстве.

Статья направлена на обсуждение сущности и содержания зелёных технологий с применением учебно-информационных ресурсов международных

организаций, вовлечение специалистов и соискателей для перевода плодоовощного комплекса на «зелёный путь развития.

В условиях глобализации и интернационализации производства обеспечение устойчивого развития в сельском хозяйстве становится одним из важных направлений экономической политики практически всех стран мира. Наряду с тем, что в большинстве стран приняты комплексные меры по достижению Целей устойчивого развития, основной проблемой остается вопрос об искоренении голода и создание условий к добротному питанию. Как подчёркнуто в Докладе о Положении дел в мире Продовольственной и сельскохозяйственной организации Объединенных Наций (Foods and Agricultural Organisation of UN- FAO) за 2024 год отмечается: “В 2023 году от голода страдали от 713 до 757 млн человек – каждый одиннадцатый человек в мире и каждый пятый житель Африки. В Африке масштабы голода продолжают расти, в Азии остаются практически без изменений”[1].

Прошедшие события COVID- 19 и принятые меры по преодолению её последствий за последние 3 года свидетельствует, что необходимы новые подходы к дальнейшему развитию отечественного производства, создание «прочной цепочки создания ценности» по всему виду сельскохозяйственной продукции. Современное развитие науки и технологии вносят мощный импульс для стран, которые ставят в качестве основных мер развитие внутреннего производства на закрытом грунте, использую новые агротехнические приемы, новые формы кооперации и переработки продуктов питания. Создаются интенсивные сады, «овощные фабрики» для сокращения зависимости от поставки сельхозпродукции из мирового рынка. Ставка на «самообеспечение сельхозпродукцией» опят становится актуальной в связи с увеличением региональных конфликтов и войн. Ярким примером это можно отметить изменение мировых поставок пшеницы, растительного масла, химических удобрений и других продуктов на фоне продолжающей войны на Украине. Большинство стран Ближнего Востока, Азии и Африки уже начали ощущать негативные последствия изменения системы мировых поставок.

Анализ состояния дел в области продовольственной безопасности показывает, что в мире около 2,8 млрд человек – более трети жителей планеты – в 2022 году не могли позволить себе здоровый рацион. Но вместе с тем, проблема неравенства в области рационального питания не решена и это составляет 71,5 процента населения. Под здоровым рационом подразумевается наличие возможности к покупке добротного питания населения и это особо выражается в

[1] Докладе о Положении дел в мире Продовольственной и сельскохозяйственной организации Объединенных Наций за 2024 г. https://doi.org/10.4060/cd1254ru С. 18.

странах с низким уровнем дохода, 52,6 процента – в странах с уровнем дохода ниже среднего, 21,5 процента – в странах с уровнем дохода выше среднего, а в странах с высоким уровнем дохода этот показатель составляет 6,3 процента[1].

Обеспечение устойчивого развития неразрывно связано с внедрением «зелёных инноваций», способствующих переходу отраслей сельского хозяйства на новые условия хозяйствования, адекватных требованиям охраны окружающей среды и цифровой экономики. Все больше оказывают вызовы, связанные с сокращением выбросов парниковых газов, использования химических удобрений, использование влияние на вопросы всемерной адаптации отраслевой структуры экономики стран, испытывающих определенные проблемы для обеспечения устойчивого роста и сохранения конкурентоспособности экономики.

Несмотря на то что, углубление специализации и стратегия экспортоориентирующего производства принесли больше выгоды для стран в условиях автоматизации производства и перехода на международную промышленной кооперацию и интернационализации, сохранение превосходства в конкурентоспособности в краткосрочной перспективе невозможно. Вызовы цифровой экономики, новые подходы к организации бизнес процессов и коренным образом меняют сохранившие представления о формах организации производства и создания цепочки ценностей.

Клаус Шваб - основатель и Президент Международного Экономического Форума в своей книге «Четвертая промышленная революция», отмечает: «Цифровые технологии, основанные на аппаратном и программном обеспечении и сетях, не являются новшеством, но с каждым годом уходя все дальше от третьей промышленной революции, становятся более усовершенствованными и интегрированными, вызывая трансформацию общества и глобальной экономики»[2].

Произведённый анализ мнений учёных и экспертов по устойчивому развитию и перехода на “зелёную экономику” показывает, что необходим своего рода этап- переход “на рельсы” этой экономики. Поэтому, большинство учёных используют термин “эелённая трансформация”, подразумевающая системныи всеобъемливающий перевод отраслей, сфер деятельности, бизнес процессов и всей системы управления на так называемый “зелённый формат экономики”. Следовательно, переход отраслей на зелёный путь развитие подразумевает прежде всего исследование и применение зелёных технологий,

[1] Докладе о Положении дел в мире Продовольственной и сельскохозяйственной организации Объединенных Наций за 2024 г. https://doi.org/10.4060/cd1254ru С. 18.

2 Шваб К. Четвертая промышленная революция. World Economic Forum. Пер. с англ. АНО «Корпоративный университет Сбербанка», 2016. С.37.

адекватных условиям зелёной экономики и для достижения Целей устойчивого развития.

Прежде всего следует отметить о значимости зелёных технологий, которых часто принято отожествлять с экологическими технологиями (по англ. green technology- greentech, environmental technology) представляющих технологии или производственные процессы и цепочки поставок, отличающих от традиционных технологий экологической полностью или менее безвредностью по сравнению с традиционными способами производства. Иногда эти технологии называют еще «чистыми технологиями» или же «полностью замкнутые технологии», в которых производственные циклы исключают выбросы отходов, полностью перерабатывают используемые ресурсы (воду, газы, масло, химические реактивы и другие вредные вещества). Эти технологии отличаются своей уникальностью, безотходностью и в то же время сравнительно высокой стоимости по сравнению с традиционными массовыми технологиями. К их числу можно отнести биологическая очистка воды, очистка выделяемого газа в результате производственных процессов, утилизация отходов, рекуперация органических отходов и т.д.

Как отмечают большинства учёных, появление зелёных технологий начинают свой этап с применением альтернативных источников электроэнергии и поиском новых, альтернативных источников, позволяющих значительно сократить использование ископаемых топливных ресурсов. Процессный подход, позволивший по-новому, то есть бережливого относиться к производственным процессам (англ. Lean production) еще раз потребовал пристально исследовать каждый этапы производственных систем и цепочку создания ценности. Использование безотходных-зелёных технологий и неустанная забота о сохранении чистоты окружающей среды в 1970-х годах позволили формировать новый взгляд к формированию «экологической этики» ведения бизнеса.

В последствии, усиление значимости сохранения чистоты окружающей природной среды, сокращение выбросов парниковых газов и борьба с истощением полезных ископаемых, лесного фонда, перстной воды и других не возобновляемых ресурсов в мире привели к тому, что будущее развитие невозможно без учёта экологических норм и требований в промышленном производстве, в сельском хозяйстве и в других сферах жизнедеятельности.

Что касается «зелёных инноваций», то это по сути разработка более современных и новых технологий, бизнес процессов, методов, которые являются экологически чистыми и устойчивыми. К их числу можно отнести новые способы и методы создания и использования материалов, сырья, новых ископаемых ресурсов, металлов и других веществ, которые являются «дружелюбными к окружающей среде».

Сравнительный анализ мнений учёных и экспертов показывает, что зелёные инновации дополняют «зелёные технологии» и отличаются тем, что они направлены на решение комплекса экологических, социальных и управленческих (по англ. Environmental, Social, and Governance- ESG) задач. Зачастую данный подход ESG в последствии ставший стратегией стал неотъемлемой частью формирования и развития компаний, фирм в различных сферах деятельности. Это относительно новый подход к развитию как фирмы, так и отрасли в целом. Но основании этого подхода строится будущее развитие отраслевых кластеров, регионов различных стран.

Как известно, наиболее значимыми зелеными технологиями и процессами, способствующими формировать сельское хозяйство более экологически устойчивым, являются: возобновляемые источники энергии, нулевая обработка почвы, биотехнологии, органическое земледелие, вертикальное земледелие, орошение, интегрированная борьба с вредителями, дроны и цифровые датчики.

Одним из таких отраслей является, плодоовощной комплекс, который охватывает производство, заготовки, переработку и организацию торговли этими товарами. Важность пристального поиска и глубокого анализа вопросам дальнейшего развития плодоовощного комплекса продиктовано тем, что большинство стран становятся более зависимыми от импорта важнейших видов продовольствия и неуклонно снижается уровень самообеспеченности стран свежими плодами и овощами.

24 октября 2019 года утверждена «Стратегия развития сельского хозяйства Республики Узбекистан на 2020- 2030 годы», в котором определены стратегические приоритеты: обеспечение продовольственной безопасности населения; создание благоприятного агробизнес-климата и цепочек добавленной стоимости; снижение роли государства в управлении сферой и повышение инвестиционной привлекательности; обеспечение рационального использования природных ресурсов и охрана окружающей среды; развитие современных систем государственного управления; поэтапная диверсификация государственных расходов в поддержку сектора; развитие науки, образования, систем информационных и консультационных услуг в сельском хозяйстве; развитие сельской местности; разработка прозрачной системы отраслевой статистики1. В соответствии со Стратегией развития сельского хозяйства Узбекистана предусматривается довести к 2030 году объем переработанной продукции на 30% и объемы экспорта до 20 млрд. долларов.

[1] УП Республики Узбекистан. Об утверждении Стратегии развития Узбекистан на 2020-2030 годы. https://lex.uz/ru/docs/4567337

Если учесть требования продовольственной безопасности стран в условиях изменчивой мировой конъюнктуры и перехода всей цепочки создания ценности на зелёные технологии, то становится очевидным необходимость пристального анализа текущей ситуации на международном плодоовощном рынке.

С появлением новых методов создания интенсивных садов, «овощных фабрик» на закрытом грунте и формирования надлежащей инфраструктуры хранения, логистики, плодоовощной комплекс испытывает серьёзные преобразования во многих странах. В этом отношении страны Европейского Союза добились больших успехов в формировании и реализации долгосрочной стратегии развития производства и рынка многих отраслей экономики в целях обеспечения конкурентоспособности[1].

Опыт большинство стран Европейского Союза (ЕС) показывает, что использование зеленых технологий в сельском хозяйстве очень важно, поскольку они уменьшают ущерб окружающей среде, производят меньше ископаемого топлива в качестве побочных продуктов и помогают в устойчивом сельскохозяйственном развитии. Поэтому, со стороны ЕС созданы специальные фонды, составляются разнообразные инновационные программы, проекты по применению зелёных технологий.

Наращивание производства и укрепление конкурентоспособности плодоовощного комплекса имеет особое значение для Узбекистана. В условиях перехода всех бизнес-процессов на адекватные условия цифровой экономики, требуется более комплексно рассмотреть основные тенденции, побуждающие к переходу плодоовощного комплекса на новые условия взаимоотношений с партнерами по формату B2B.

Узбекистан последовательно продолжает повышение экспортного потенциала плодоовощного комплекса. По результатам за 2024 год Узбекистан экспортировал плодоовощную продукцию на сумму более 1,5 млрд.$, в физическом выражении более 2,0 млн. тыс. тонн., что на 31,2 % больше чем за 2023 год в денежном выражении. Объем экспорта плодов и овощей составляет в среднем за год около 5-8% общего объема экспорта. Произведенный анализ мировых цен на плоды и овощи показывает, что цены на органическую продукцию в 2-3 раза выше чем на традиционную продукцию. Следовательно, предстоит увеличить экологическую и органическую плодоовощную продукцию на основе зелёных технологий, методов выращивания и подготовки их к экспорту.

Итоги анализа экспортного плодовощной приходится на Россию, на долю которой пришлось 42,1% от общего объема экспорта. Далее следуют Казахстан

[1] Европейский союз в мировом хозяйстве: проблемы конкурентоспособности. Под общей редакцией Е.С. Хесина / Отв. ред. – Ю.Д. Квашнин, М.В. Клинова, А.А. Невская, Е.С. Хесин. – М.: ИМЭМО РАН, 2020.

(12,7%), Пакистан (12,6%), и Афганистан (8%). Самыми продаваемыми оказались виноград ($186,2 млн), персики ($96,9 млн), черешня ($70,3 млн), абрикосы ($62,2 млн), лук ($76,3). Среди востребованной плодоовощной продукции также капуста ($49,8 млн), виноград сушеный ($79,5 млн), чернослив ($39 млн), морковь ($31,7 млн) и другие фрукты и овощи[1].

В ноябре 2024 года состоялось совещание по анализу состояния дел по организации и поддержки экспорта плодоовощной продукции с участием Президента Республики Узбекистан. Было отмечено, что в Узбекистане имеется 3,2 млн гектаров орошаемых земель, которые используются как для выращивания продовольствия, так и для получения сырья для промышленности. В последние годы 260 тысяч гектаров земель, ранее занятых под хлопок и зерно, были выделены для возделывания населением, а в будущем планируется выделение еще 104 тысяч гектаров.

Изученный анализ состояния дел в области данных перехода к зелёным инновация в плодоовощном хозяйстве показывает, что нужны системные меры по поддержке производителей по получению сертификатов «Organic», «Global Gap», «Halal» и других международных стандартов для расширения географии и структуры экспорта. Это позволить в ближайшем будущем занять достойное место в создании цепочки ценности на мировом рынке плодоовощей.

Международные организации в лице WTO, UNCTAD, ITC, WB group всячески усиливают предоставления информационных и справочных услуг на цифровом и диалоговом формате. Так, например, на веб-странице Международного Торгового Центра функционирует специальные инструменты для анализа данных, собранная аналитическая информация о состоянии торговли по многим товарным группам и регионам мира, а также программы обучения для молодых фермеров, трейдеров и специалистов в области логистики, поставок. В отчете ITC за 2024 год подчеркивается стратегия организации- ITC Next: «ITC Next фокусируется на построении структурной конкурентоспособности посредством гибких, устойчивых и эффективных цепочек поставок. Бренды ITC мирового класса получают конкурентную силу не только за счет высококачественных и дифференцированных предложений, но и за счет обширных сельскохозяйственных цепочек создания стоимости ITC, которые приносят пользу миллионам фермеров, а так же современной, цифровой обогощенной производственной и распределительной инфраструктуры»[2].

Для комплексного решения вопросов формирования деловой среды для всех участников плодоовощного рынка стран Восточной Европы, Центральной

[1] По данным https://agroworld.uz
[2] ITC Limited Report and Accounts. 2024 p.5.

Азии и Кавказа создана платформа EastFruit.Com, предоставляющая информацию о рынке плодов, овощей, ягод и орехов на 4 языках, включая и узбекский язык. Информационные потоки распространяются и на социальных сетях Twitter, Instagram, Facebook, Youtube, что позволяет быстро распространять важную информацию всем участникам рынка плодоовощей. Помимо этого, на платформе можно размещать рекламу, предложения по продвижению продукции и нахождение партнеров по осуществлению различных проектов, включая экспортно-импортные операции.

На наш взгляд, необходимо совершенствовать подготовку и переподготовку специалистов плодоовощного комплекса с учетом освоения новых, зелёных и цифровых технологий, направленный на создание эффективных бизнес-процессов. Особенно это относится к специалистам занимающихся разработкой и внедрением зелёных технологий и старт-апов в регионах для повышения заинтересованности всех участников плодоовощного кластера Республики Узбекистан. Внедрение современных зелёных технологий становится междисциплинарной сферой деятельности, который охватывает всю систему производства, торговли, транспорта, оптовой торговли и продвижения на мировые рынки на основе цифровых технологий. Подготовка специалистов должно быть направлено на углубление не только теоретических знаний, но и навыков в области сбора и группировки данных, подготовки аналитических материалов, отчетов с использование банка данных международных организаций.

Произведенный анализ учебно-информационных ресурсов и программ повышения квалификации в области международной торговли и развитию предпринимательства в рамках ВТО, МТЦ, ЮНКТАД, ЮНИДО позволили выработать следующие рекомендации.

1. Активное применение ресурсно-аналитической базы международных организаций в учебном и исследовательском процессе подготовки специалистов.
2. Обязательное включение в планы повышения квалификации специалистов плодоовощного хозяйства разработка зелёных технологий и проектов на основе обсуждение кейсов проектных работ и материалов международных организаций.
3. Разработать систему поощрения творческих групп молодых специалистов за разработки зелёных технологий и бизнес проектов в рамках участия на тренингах и сертифицированных программах повышения квалификации на платформах МТЦ, ЮНИДО и других международных организаций.
4. Высшей школе бизнеса в кооперации с университетами организовать междисциплинарные мастер классы для повышения квалификации специалистов в области зелёных технологий с применением ресурсно-информационной базы

международных организаций и повысить исследовательскую направленность научных работ специалистов и соискателей в этой области.

5. Под эгидой Торгово-промышленной палате и Министерства инвестиции, промышленности и торговли и необходимо усилить работу по созданию Национальной поисковой и консультационной системы, с использованием Trade map, Product map- разработанной и представляемой МТЦ, позволяющей оперативно обеспечивать экспортеров необходимой информацией о процедурах экспорта, транспортировки, упаковки. Особое значение следует придавать развития экспорта малых предприятий.

Таким образом, эффективное использование информационно-ресурсной базы ВТО и МТЦ для развития экспортного потенциала отечественных предприятий является одним из важных факторов, определяющих эффективные пути вступления Республики Узбекистан в ВТО.

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ЎЗБЕКИСТОНДА ЯШИЛ ИҚТИСОДИЁТГА ЎТИШНИНГ ЗАРУРАТИ

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Аннотатция. Ушбу мақолададЕр шари аҳолисига таҳдид солаётган глобал экологик инқироз Ўзбекистонни ҳам четлаб ўтмаётганлиги, яшил иқтисодиётга ўтиш зарурати ва бунга сабаб бўлган омиллар, ушбу глобал экологик инқирознинг атроф- муҳитга салбий таъсирлари, ундан келиб чиқадиган хавф-хатарлар кўрсатиб ўтилган.Бунинг оқибатида иқтисодиётимиздаги кўрсаткичлар даражасини пасайиши ва уни олдини олиш борасида жаҳон ҳамжамиятидаги барча халқаро ташкилотларнинг “яшил иқтисодиёт” ўтишнинг афзалликлари бўйича келтирилган иқтибослар мамлакатимизда ҳам яшил иқтисодиётга ўтишдаги зарур омиллари ўрганиб чиқилди.

Шунингдек, мақолада жаҳон амалиётида яшил иқтисодиётни ривожланиш эволюциясида тўрт босқичдан иборат эканлигиилмий жиҳатдан асослабберилган ва муаллиф уларни бир тизимга келтирган. Марказий Осиёда ҳам миллоддан аввалги уч минг йилликдан бошлаб атроф-муҳитни муҳофаза қилишга, табиий ресурслардан самарали фойдаланиш, она тупроқни, сувни, ҳавони, табиатни асраб авайлаш, мусаффо ҳолда авлодларга қолдириш, аҳолида экологик маданиятни шакллантириш борасидаги назарий қарашлар ҳам таҳлил қилинган. Тадқиқотнинг асосий мазмуни шундан иборатки, Ўзбекистонда яшил иқтисодиётни ривожлантиришни юқори кўрсаткичларга олиб чиқишда фуқаролик жамиятининг энг кичик бўғини ҳисобланган оилаларга “яшил оила” мақомини бериш, яшил оила механизмини амалга ошириш учун “яшил оила концепцияси”ни ишлаб чиқиш масаласи экологик муаммоларни ҳал қилишни бош мезони қилиб олинган.Ушбу концепцияда яшил оилани кундалик турмуш тарзи муайян тизим шаклига эга бўлган категориялар: яшил бюджет; яшил ландшафт, яшил фитобар; яшил овқатланиш; яшил тарбия; яшил технология; яшил спортнинг аҳамияти ва моҳияти илмий жиҳатдан чуқур таҳлил қилинган.

Калит сўзлар: яшил иқтисодиёт, экологик инқироз,яшил оила концепцияси, яшил бюджет,яшил фитобар,яшил ландшафт,яшил овқатланиш,яшил технология, яшил миллий тарбия, яшил спорт.

Кириш. Табиат билан иқтисодиёт ўртасида боғлиқлик кишилик жамиятининг илк босқичларидан маълум.Табиат инсонни озиқ-овқат кийим–кечак жой ва бошқа зарурий моддий неъматлар билан таъминлайди .Инсон табиатдан эстетик завқ олади, унинг таъсиридамеҳнат қилади, маҳсулот яратади,

хизмат кўрсатади,соғлигини тиклайди, улғаяди, хуллас ҳаёт учун барча зарурий неъматлардан баҳраманд бўлади.Шундай экан иқтисодиёт тараққиёти бевосита табиий ресурсларига боғлиқ.Аммо жаҳонда сўнги йилларда ривожланаётган мамлакатлар ўртасида саноат, қишлоқ хўжалиги маҳсулотларини ишлаб чиқариш ҳажмини ошириш борасида олиб борилган мусобақалар натижасида, табиий ресурслардан оқилона фойдаланилмади, оқибатида ҳаддан зиёд чиқиндилар ҳажми ошиб борди. Булар ўз навбатида атроф муҳитга, инсонлар саломатлигига салбий таъсир қила бошлади.Экстенсив ривожланиш иқтисодиётни (хўжалик юритувчи субъектларни) табиат қонунларига зидравишда фаолият юритишини тақозо этади. Бундай усулнинг жадал ривожланиши глобал даражадаги экологик инқирозга сабаб бўлди. Буларнинг барчаси жаҳон миқёсида яшил иқтисодиётга ўтиш заруратини келтириб чиқарди.

Ер шари аҳолисига таҳдид солаётган глобал экологик инқироз Ўзбекистонни ҳам четлаб ўтмади.Охирги ўн йилликда аҳолисаломатлигига салбий таъсирларини кўрсата бошлади. Айримиқлимшунос экспертларимиз мамлакатимизга ўз таъсир кучини кўрсатган иқлим ўзгаришларини қуйидаги хавф-хатарлар асослаб бердилар:

- 191 мамлакатлар орасида иқлим ўзгариши таъсири даражаси бўйича 96-ўринни, INFORM 2022 хавф индексида-табиий офатлар хавфи бўйича 111-ўринни эгаллайди;
- Сув тошқинлари ҳар йили 61 000 кишига таъсир қилади, ЯИМга йиллик таъсири 181 мил.АҚШ.долл. тенг, ҳамда иқлим ўзгариш натижасида ушбу кўрсаткичлар 130 000 кишига ва ЯИМ 143 мил.АҚШ.долл. ошади;
- 2021-йилда атмосфера ҳавосига ифлослантирувчи моддалар эмиссияси ҳажми 909 минг тоннани ташкил этди;
- Қурғоқчиликкамойилаҳолиулуши 76,3%ни ташкилэтилган.
- Ушбу экологик хавф-хатарларнинг олди олинмаса, уларга бирон-бир ечим топилмаса 2030 йилда қуйидаги хавфларни солиши мумкин:
- Аномал иссиқлик туфайли аҳоли соғлигини сақлаш ва ижтимоий ҳимоя бўйича ЯИМнинг 6% миқдорида қўшимча харажат юзага келтиради;
- 2100-йилда ишчикучигатаклиф 1,5°Сценарийси бўйича 2 фоизпунктга, 2.0°C - 5 фоизпунктигава 3.0°C - 10 фоизпунктигакамаяди;
- Иқлим ўзгаришининг бевосита (жисмоний) таъсирининг иқтисодий қиймати ЯИМнинг 1 фоизиниташкил этади;
- Ер деградацияси ЯИМнинг 4%га тенгиқтисодий йўқотишларга олибкелади.

Анъанавий иқтисодиётдан тубдан фарқ қилувчи “яшил иқтисодиёт” тушунчасини моҳиятини тубдан ўрганиш, илмий тадқиқотчиларнинг берган таърифлари,“яшил иқтисодиёт”нинг афзалликлари,” яшил иқтисодиёт”га ўтиш

зарурати, тарихий эволюцияси борасидаги бир-бирига зид бўлган қарашлар, олимлар ўртасидаги илмий мунозалар “яшил иқтисодиёт” категориясини чуқур тадқиқ этишга эҳтиёж пайдо бўлди.

“Яшил иқтисодиёт” категориясини жуда кўп олимлар томонидан тадқиқ этилган. Масалан, А.В.Вахабов, Ш.Х.Хажибакиевлар қуйидаги таърифни берган: **“**мамлакат табиатини яхшилашга кўмаклашувчи иқтисодиётнинг янги тармоқлари”[1]. Шунингдек ушбу ватандош олимларимиз яшил иқтисодиёт тушунчасини кенг тадқиқ этиб, экологик тоза махсулот яратишда янги босқичга ўтиш ҳисобланиб, уларнинг асосини яшил технологиялар ташкил тишини асослаб беришган[2]. Яшил иқтисодиёт табиат қонунлари билан боғлиқ томонларини хорижий олимлардан А.Штайнер, Р.Айрис, С.Бессалар тадқиқотида ўрганилган[3].Яшил иқтисодиёт категориясига бу каби ёндашувларни янакўплаб давом эттириш мумкин. Бироқ, биз уларни мазмун моҳиятини, торвакенг маънодаги таърифларга асосланган назарияларни илгари суришни таклиф қиламиз. “Яшилиқтисодиёт” тушунчасинингкенгтарқалган, бошқаларга нисбатан тўлиқ таърифи UNEP томонидан ишлаб чиқилган бўлиб, “яшилиқтисодиёт” –бу “инсонлар фаровонлиги ва ижтимоий тенглигининг яхшиланиши, экологик рисклар ва экологик тақчилликни сезиларли даражада камайтириш”га олиб келувчи иқтисодиётдир.

БизларЎзбекистонда “Яшил иқтисодиёт”га ўтишнинг долзарблиги ва зарурлиги қуйидагиларга боғлиқ деб, ҳисоблаймиз:

1.Атроф-муҳитнинг ифлосланиши ва табиий ресурслар тугашининг салбий оқибатларини камайтириш мақсадида иқтисодиётда технологик модернизациялашни амалга оширишни зарурлиги;

2.Углеводород хом-ашёси ва унинг пировард маҳсулот қийматидаги улушига боғлиқлигини қисқартириш асосида иқтисодиёт рақобат бардошлигини ошириш;

3.Катта мультипликатив самарага эга бўлган юқори технологияли тармоқларни янгилаш имконини берувчи яшил инновацияларни қўллаш;

4.Паст углеродли иқтисодиётга ўтиш жараёнида углеводородга боғлиқликни қисқартириш.

Аммо шуни ҳам таъкидлаб ўтиш ўринлики, “яшил иқтисодиёт”га ўтиш зарурлигини илмий асослашнинг мураккаблиги, экологик муаммоларни прогнозлашнинг юқори даражада ноаниқлиги ушбу концепцияни тушунарли, содда тарзда тушунтиришда қийинчиликлар туғдиради. Жумладан, иссиқхона газларини атмосферага чиқариш муддати ва даражасини пасайтириш бўйича ягона келишув мавжуд эмас. Бу масалада баъзи тадқиқот ишларида қуйидаги фикрлар билдирилган: “Иссиқхона газларини атмосферага чиқариш ҳажми эса ортиб бормоқда;[4].

Тадқиқот методологияси. Мақолада мантиқий фикрлаш,мантиқий таҳлил усулларидан фойдаланилган бўлиб ,тадқиқот мавзусига оид илмий-методологик адабиётлар , ахборот базаси сифатида миллий яшил платформалардаги 3 йиллик ҳисоботлардан хорижий ташкилотларнинг маълумотларидан фойдаланилди.

Таҳлил ва натижалар.Юқоридаги адабиётлар таҳлили ва хорижий ташкилотларнинг маълумотларида Ўзбекистоннинг яшил иқтисодиётга ўтиш заруратининг омилларидан бири бўлган атроф-муҳитнинг ифлосланиши ва табиий ресурслар тугашининг салбий оқибатларини камайтириш мақсадида иқтисодиётда технологик модернизациялашни амалга оширишни зарурлиги ва бу экологик муҳит қонуниятларга амал қилиш лозимлиги мисоллар орқали кўрсатилган бўлиб яшил иқтисодиётни ривожлантириш концепцияси ўз ривожланиш тарихий босқичларга эга эканлиги билан белгиланади. “ Яшил иқтисодиёт” ривожланиш босқичлари қуйидаи тўрт босқични ташкил қилади:

- Биринчи босқич -1950-1960 йиллар;
- Иккинчи босқич-1960-1970 йиллар;
- Учинчи босқич - 1980-1990 йиллар;
- Тўртинчи босқич – 2000-2010 йиллар.

Ўзбекистон тажрибасида эса яшил қитисодиётни туб негизини ўрганиш аждодларимизнинг қадимги милоддан аввалги уч минг йилликда бой экологик маданият соҳасида қолдирган меросини чуқур ўрганиш, она тупроқни, сувни, ҳавони, табиатни асраб авайлаш, мусаффо ҳолда авлодларга қолдириш, аҳолида экологик маданиятни диний қадриятларимиз асосида шакллантиришни миллий концепциясини ишлаб чиқишни даврнинг ўзи тақозо қилмоқда.Шу нарса аёнки,Ўрта Осиё халқлари тарихида “табиат-жамият-инсон” муносабатларининг экологик маданий хусусиятлари, уларнинг яшаш шароитлари билан боғлиқ диний қарашларда ўз ифодасини топган. Хусусан, зардуштийликнинг муқаддас китоби саналмиш “Авесто” китобида табиатга бўлган муносабатнинг ўзига хос томонларини кўриш мумкин[4].

Масалан, коинотнинг тўрт элементи – ер, сув, олов, ҳавони улуғлаш диққатга сазовордир. Чунки бугунги кунда мамлакатимизни яшил иқтисодиётга ўтиш заруратида бу элементларни муҳофаза қилиш ва сақлаб қолиш ва келажак авлодга қолдириш жаҳон миқёсида долзарб масала бўлиб турган ҳеч кимга сир эмас. Инсон тараққиётининг турли босқичларида табиатга у турлича таъсир кўрсатаётган ва бу жараён кишилик жамияти тараққий этган сари кучая борган, янги сифат даражаларига кўтарилган.Ўрта Осиёда яшаб ижод этган Улуғ бобокалонимиз Имом ал-Бухорий (810-870) —”Ал-жомиъ ас-сахих” асарларида эса табиат ҳақида бундай деб ёэган эдилар: —Дунё ям-яшил ва гўзалдир. Кимкиунданҳақлиравишдаҳалолликбиланолса, ундан барака топади[5]. Ислом

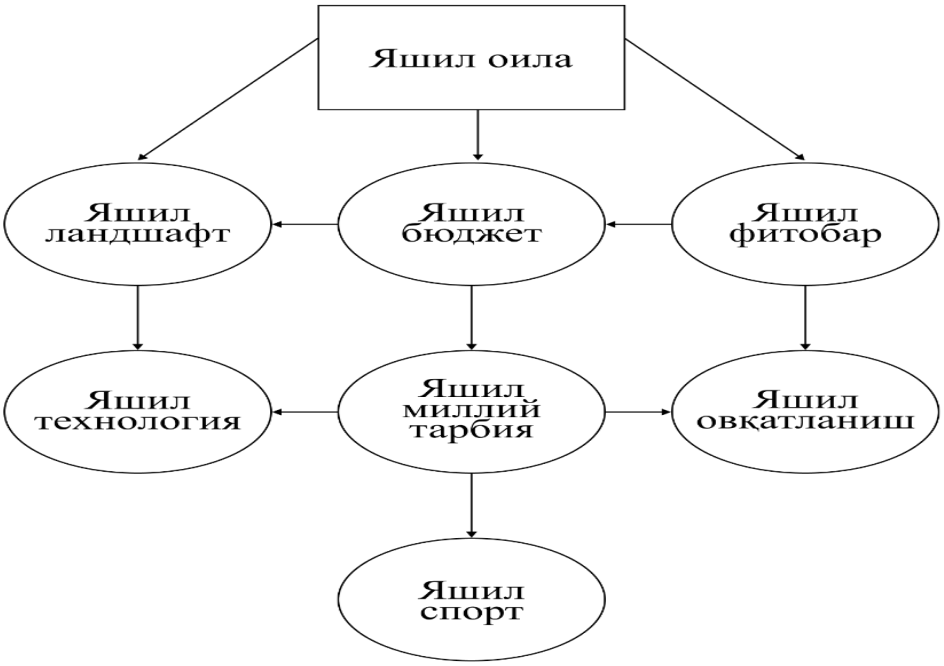
динининг муқаддас китоби саналмиш Қуръони Каримнинг 750 га яқин оятлари бизни табиат ҳодисалари ҳақида мулоҳаза юритишга ва Аллоҳ таолонинг яратиқлари ўртасидаги муносабатларни ўрганишга ундайди. Инсонга беҳисоб неъматлар: ер, тоғлар, сув, ҳаво, гуллар, сабзавот, мевалар, ҳайвонлар, ҳашаротлар, қушлар ва бошқа кўп нарсаларни ато этилиб, буларнинг барчаси вақтинчалик фойдаланиш учун берилганлигини Қуръон таъкидлайди.

Шуниси эътиборга лойиқки, Марказий Осиё ҳудудидаги халқлар, шу жумладан, ўзбек халқи орасида яна бир авлоддан авлодга ўтиб келган бир қоида мавжуд. Бу ҳар қандай шароитда ҳам: энг кам миқдорда хом ашё, вақт ҳамда куч сарфлаб, кўпроқ маҳсулот олиш қоидасидир. Бунинг тежамкорлик, экологик жиҳати халқ орасида “увол” деган сўзнинг жуда кенг тарқалганлиги ва унга амал қилишдан иборат. Бу эса ҳозирги авлод орасида, афсуски, жуда кам ишлатилади. Бугун ушбу ноёб ижтимоий сифат аҳоли ўртасида унутилиб бормоқда. Дарҳақиқат, табиат унсурлари бўлмиш сув, тупроқ, ўсимликлардан бемақсад фойдаланиш увол ҳисобланган. Ахлоқсиз ҳаракатлар, яъни одамнинг меъёридан ортиқ еб-ичиши, жонли ёки жонсиз табиатга путур етказиши гуноҳ саналган. Табиатга нисбатан увол ёки гуноҳ ҳақидаги қоида одамларнинг бой ёки камбағаллигига қарамасдан ҳамма учун бап -баробар ҳаёт нормаси бўлган яъни, уларни увол қилмаслик, тежамлик бўлиш, баъзи замондошларимиз ўйлаганларидек, ҳасислик белгиси эмас.

Бу юксак маданият, шу жумладан, экологик маданият белгисидир. Агар тўла маънода олиб қарайдиган бўлсак, ишлаб чиқариш маданияти, истеъмол маданияти, турмуш маданияти, ўзаро муносабат маданияти ва ҳакозолар экологик маданият билан боғланиб кетади. Умуман олганда, ўзбек халқи юқори даражада ривожланган экологик маданиятга эга бўлган. Бу мерос халқимиз миллат бўлиб шаклланишидавомида сайқалланиб бизгача етиб келган ва шу ҳудудда яшаб турган халқларнинг экологик маданий эҳтиёжига жавоб беради.Қадимги авлоду аждодларимиздан сақланиб қолган бой,диний, илмий экологик қадриятларни таҳлил қилганимизда буюк бир ҳақиқатни англаб етдикки, бу ҳақиқатлар замирида коинотнинг ажралмас зарраси ҳисобланмиш инсон ётибди. Президентимиз ушбу ҳақиқатлар замирини кенг мушоҳада қилган ҳолда “Ўзбекистон-2030” стратегиясини “Атроф муҳитни асраш ва “яшил” иқтисодиёт йилида амалга оширишга оид давлат дастури тўғрисида”ги ПФ-16-сон Фармони қабул қилинди.Ушбу йилда давлат дастурида амалга ошириладиган ишларни бош мезони инсонларнинг экологик салоҳиятини ривожлантириш деб белгиламоқда.

Хусусан «Экофаол фуқаро» ҳаёт тарзини кенг тарғиб қилишга қаратилган «Бир миллион яшил оила» умуммиллий ҳаракати йўлга қўйилади. Умуммиллий ҳаракат бугунги глобал даврда Ўзбекистонда фуқароларимизга хавфсиз экологик соғлом муҳит, хавфсиз озиқ-овқат, хуллас кундалик турмушида барча эколик

тамойилларга риоя қилишга ундайди ва кенг имкониятлар шарт-шароитлар яратиб беради.Шунигдек ҳар бир “яшил оила” мақомига эришмоқчи бўлган оилалар учун “яшил оила концепцияси”ни ишлаб чиқиш бугунги давр учун жуда муҳимдир (2 чизма).



1-чизма. Яшил оила концепцияси.

Биз юқоридаги чизмага эътибор берадиган бўлсак, яшил оилани кундалик турмуш тарзи муайян тизим шаклида мана шундай категорияларга асосланиши керак деб тахмин қиляпмиз.Чунки ҳар бир оиланинг соғлом ва тежамкор муҳитда яшаш тарзи мана шу омилларга боғлиқ.Ушбу концепцияни батафсил таҳлил қилиш учун ҳар бир категорияларини изоҳлаб чиқамиз.

Яшил бюджет - Биз биламизки, ҳар бир оилани ўз хўжалигини юритиш учун даромад ва харажатлардан иборат бўлган оилавий бюджети бўлади, молиявий саводхонлиги юқори бўлган тежамкор режали оилаларда бу бюджет тўғри тақсимланади, буни натижасида оила фаравонлиги янада ошади ва жамиятга фойдаси тегадиган, уни ривожланишига ўз ҳиссасини қўшадиган ҳар томонлама соғлом оила шаклланади, аксинча пала-партиш хўжалик юритадиган, яъни молиявий саводхонлиги паст шу билан биргаликда дунёқарашлари ҳам бир-бирига тўғри келмайдиган носоғлом оилаларда даромад ва харажатлар ҳисоб китоб қилинмай, оила борган сайин таназзулга юз тутгандан кейин ўртада оилавий келишмовчиликлар юзага келади. Бугун биз мана шу оилавий бюджетни оилада янада тежамкор соғлом муҳит яратиш учун уй хўжалигини юритиш учун харажатлар; товар маҳсулотлар,хизматлар, кундалик озиқ-овқатлар истеъмол саватчасидан тортиб чиқиндиларни ҳам саралаб ундан тежамкор фойдаланиш,

даволаниш,оилавий дам олиш, турли оилавий тўй-тадбирларни ўтказишда ҳам тежамкор соглом муҳит яратишда яшил бюджетдан фойдаланишни муҳим деб санадик.

Яшил ландшафт - Оила аъзоларин тоза кислород билан нафас олиши, табиий эстетик завқ олиши кўтаринки кайфиятда бўлиши учун ҳаттоки соғлом овқатланиши ва оила бюджетини тежаб қолиш шу билан биргаликда қўшимча даромад топишида муҳим роль ўйнайди.Яшил ландшафтни яратиш кўп қаватли уйларда яшайдиган хонадонларда,балконларда оддий гултувакларда хонаки гулларни кўпайтириш, ҳаттоки уй шароитида гултувакларда ҳосил берадиган цитрусли мевалар, сабзавотлар, кўкатларгача парваришлаб етиштириш мумкин.Томорқаси бор хонадонларда эса рўзғор учун керакли бўлган сабзавотлар, кўчатлар экиб боғ яратиш мумкин.

Яшил фитобар Ушбу қисмни халқ табобати асосида даволаниш учун яшил тиббиёт бурчаги деб атаса ҳам бўлади.Кўп қаватли уйлардан тортиб томорқаси бор уйларнинг асосан ошхона жихозларининг унча катта бўлмаган масалан 50х50 см ўлчамли бир кичик қисмида (оила эгаси ҳоҳишига қараб) асосий доривор гиёҳларнинг 25 хил туридан тайёрланган қайнатмалар, дамламалар,суртмалардан оила аъзоларини соғломлаштириш, даволаниш учун кундалик турмуш тарзида мунтазам фойдаланишдир.Яшил фитобардан фойдаланишни мунтазам йўлга қўйиш, оила аъзолариниг тиббий даволаниш психологиясига кўпроқ таъсирини ўрганиш бугунги кунда билиб-билмай шифокорларнинг тавсиясисиз оила бюджетининг энг катта харажат қисмини эгаллайдиган том маънода “зарарли тиббий харажат” деб ном олган қанчадан қанча “билимсиз даволанишлар”ни олдини олган бўлардик.

Яшил овқатланиш ЖССТ маълумотига кўра тўғри овқатланиш инсон саломатлигининг 70%ни кафолатлар экан, кўпчилик оилалар овқатланишда ўзимизни арзон ва табиий мевалар ва сабзавотлар, миллий овқатларимиз, табиий шарбатлардан воз кечиб кўпроқ истеъмолга яроқли ёки яроқсиз бўлган озиқ-овқат маҳсулотларни ичимликларни ижтимоий тармоқларда берган тавсияларига қараб сотиб олишга (кўп реклама қилинган) ва уни истеъмол қилишга ўрганиб қоляпмиз.Буни олдини олиш учун эса овқатланиш рационини мутлақо тубдан ихтиёриё-мажбурий тарзда ўзгартириб “Яшил таомнома” менюсини тузиб ҳам соғлигимизга ҳам оилавий бюджетимизга зарар қилмаслигимиз керак.

Яшил тарбия Ҳозирги пайтда оилада экологик омил ва талабларга асосланиб соғлом турмуш тарзини шакллантириш масалалари долзарб бўлиб бормоқда, чунки ҳар бир экологик қадриятларимизни таҳлил қилмай “эскилик сарқити, урф одати “ деб қараган ота-оналар ўз фарзанларини она заминдан,табиатдан, экологик қадриятлардан узоқда экологик онгини ривожлантирмасдан вояга еткизмоқда.Натижада бугунги кунга келиб она табиат,

уни севиш ва асраш унга ўз ҳиссани қўшиш, ҳайвонот дунёсини севиш каби фазилатларга эга бўлган мултфилм, кинофильм қахрамонлари, ҳужжатли фильмларни хонадонларда кўпроқ тарғиб қилиш оила аъзоларининг муносабатларида, дам олиш,ҳордиқ чиқариш,гаджетларда оиланинг муҳим қадриятлари сифатида фарзандлар тарбиясида акс этиши долзарб бўлиб қолмоқда.

Яшил технология - Ҳар бир замонавий оила бугунги рақамли дунёда ижтимоий-маиший ҳаётида кундалик турмуш тарзида инновацион ақлли технологиялардан фойдаланишни ҳоҳлайди, аммо бу технологияларни ишлатганда электр энергия, табиий газ, ичимлик суви, атрофга муҳитга таъсири, экологияга зарари уман олганда тежамкорлиги ҳақида умуман бош ҳам қотириб ўтирмайди. Яшил технологияларга ўтган оилаларда оила учун керак бўлган ҳар бир техника, жиҳоз, буюмларни тежамкорлик даражаси қандай, мана шу омиллар ҳисоб- китоб қилиниб сотиб олинади.

Яшил спорт - Оилада яшил спортни шакллантириш учун эрталабки бадантарбия машқи,ҳар куни 2кмдан 5 кмгача пиёда юришни одат қилиш (иловалар орқали) узоқ масофаларга яшил транспортда (велосипед) бориш фарзандларга спорт билан шуғулланиши учун спорт анжомлари олиб бериш, оилалар ўртасида спорт тадбирларини мусобақаларини ташкил этишда фаол қатнашиш, оилада соғлом муҳитни шакллантиришда муҳим роль ўйнайди.

Тадқиқотлардан маълум бўлишича, Ўзбекистон углеводород энергияси – нефть, газ, кўмирдан фойдаланиш ҳисобига ҳар йили ялпи ички маҳсулотнинг камида 4,5 фоизини йўқотмоқда. Қолаверса, мамлакатдаги энергия ишлаб чиқарувчи қувватларнинг салкам ярми эскирган. Уларни тиклаш ёки модернизациялаш катта маблағни талаб қилади. Бунинг ўрнига ҳам иқтисодий, ҳам экологик жиҳатдан самарали ҳисобланган “яшил энергетика”га ўтиш минг чандон афзал. Чунки “Яшил иқтисодиёт”нинг муҳим компоненти қайта тикланадиган энергия манбаларини яратиш ва фойдаланиш ҳисобланади. Бу жиҳатдан Ўзбекистоннинг салоҳияти анча юқори. Халқаро молиявий институтларнинг ҳисоб-китобига қараганда, республикада муқобил энергия (айниқса, қуёш энергияси)нинг йиллик захираси 270 миллион тонна шартли ёқилғи эквивалентига тенг. Бу реал эҳтиёжимиздан уч карра кўп. “яшил энергетика” соҳасидаги лойиҳаларни амалга ошириш Ўзбекистонда яқин ўн йилда қайта тикланадиган энергия манбалари улушини 3 баробардан зиёдга кўпайтириш имконини беради. Бу иқтисодиёт учун мислсиз фойдадир.

Хулоса ва таклифлар. Ўзбекистонда яшил иқтисодиётга ўтиш заруратида мамлакатнинг глобал ҳамжамият олдида олган мажбуриятларини бажариш, халқаро ташкилотларнинг муносабатлари, улар томонидан қабул қилинаётган стандартлар, атроф-муҳитни асраш юзасидан ҳамкорликда имзоланган меморандумлар, битимлар, халқаро конференциялар, форумлар, яшил платформа

доирасида ўтказилган учрашувлар, анжуманлар,семинарлар мамлакатимизда яшил иқтисодиётнинг ривожланишида катта аҳамият касб этаётган бўлса, фуқароларимиз дунёқарашларида яшил ўзгаришлар, хавфсиз экологик соғлом муҳит, хавфсиз озиқ-овқат, хуллас кундалик турмушида барча эколик тамойилларга риоя қилиш, экологик маданиятни шакллантиришда эса ҳар бир “яшил оила” мақомига эришмоқчи бўлган оилалар учун “яшил оила концепцияси”ни ишлаб чиқиш, ушбу концепцияни ҳар бир оилаларга татбиқ этиш,экологик соғлом тежамкор турмуш тарзини мақсад қилган оилаларда экологик таҳлиллар ўтказиб, ижобий натижаларга эришган яшил оилаларни махаллаларга намуна қилиб ушбу концепцияни босқичма босқич ўтилса мақсадга мувофиқ бўлар эди.

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KO’MIR QAZIB OLISH SANOATIDA YASHIL IQTISODIYOTNING AHAMIYATI

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So’ngi yillarda dunyoning ko’plab mamlakatlarida tabiy resurslardan foydalanishda atrof muhitga nojo’ya tasirini otkazmasdan farovonlikni yaratuvchi “yashil” iqtisodiyot tendensiyasi va qolaversa “yashil” iqtisodiyot kontseptsiyasi strategik vazifa tarzida vujudga kelmoqda. “Yashil” iqtisodiyot - barqarorlik va resurslardan samarali foydalanish, shuningdek, atrof-muhitga salbiy ta'sirlarni minimallashtirishga qaratilgan iqtisodiy rivojlanish kontseptsiyasi bo’lib, asosiy g'oyasi jamiyatning hozirgi ehtiyojlarini qondirish, tabiiy resurslarning tugashiga va kelajak avlodlar uchun ekologik barqarorlikning buzilishiga olib kelmaydigan muvozanatli rivojlanishga intilishdir. “Yashil” iqtisodiyot tushunchasi sayyora resurslaridan samarali foydalanish, tabiiy resurslarni ko'paytirish, ifloslanish darajasini pasaytirish, biologik xilma-xillikni saqlash, aholi turmush sifatini yaxshilashni nazarda tutadi.

Konsepsiyaning maqsadi - hozirgi va kelajak avlodlar manfaatlarini hisobga oladigan, shuningdek, tabiat bilan uyg‘unlikka intiladigan barqaror va farovon iqtisodiyotni yaratishdan iborat. Dunyoning ko’plab rivojlangan mamlakatlari singari yurtimizda ham “yashil” iqtisodiyotni rivoj topdirish uchun ko’plab ishlar bajarilmoqda. Jumladan, O’zbekiston Respublikasi Prezidentining 2019-yil 4-oktyabrdagi PQ-4477-son qarori bilan 2019-2030-yillarda O’zbekiston Respublikasining “yashil” iqtisodiyotga o’tish strategiyasi[1] yaqqol misol bo’la oladi.

Unga ko’ra:

- iqtisodiyotning bazaviy tarmoqlari energiya samaradorligini ko’paytirish;
- energiya resurslari istemolini deversifikasiyalash va qayta tiklanuvchi energiya manbalaridan foydalanishni rivojlantirish;
- iqlim o’zgarishi oqibatlariga moslashish va ularni yumshatish, ta’biiy resurslardan foydalanish samaradorligini oshirish va ta’biiy ekotizimlarni asrash belgilandi.

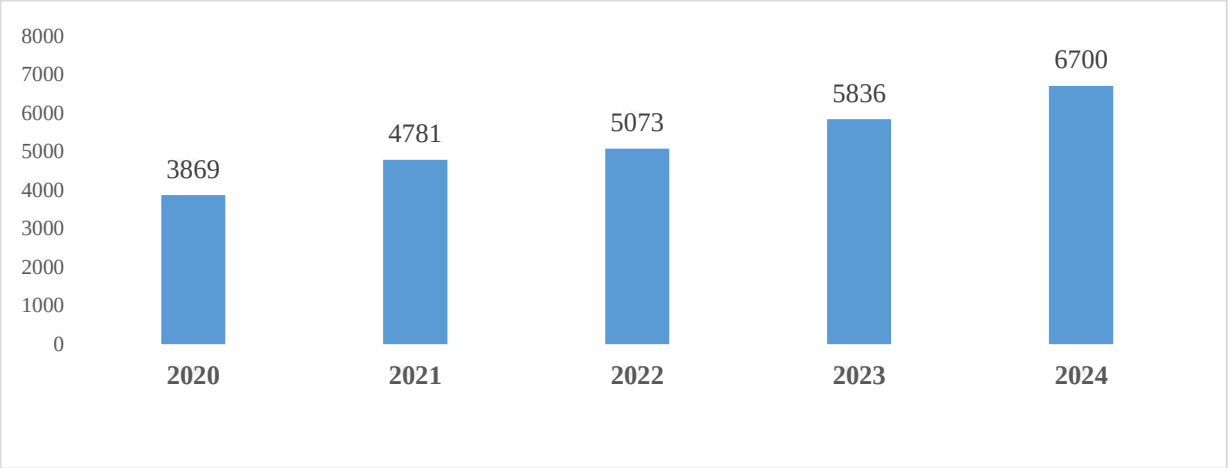
Shuningdek mamlakatimizda qayta tiklanuvchi energiya manbalaridan foydalanish hisobiga energetika salohiyatini oshirishga katta e’tibor qaratilmoqda. Bu jarayon 2023-yilning yanvar oyida g‘ayritabiiy sovuq ob-havo ta’sirida respublika iqtisodiyoti va aholisi boshdan kechirgan energetik zarbadan so‘ng faollashdi. Kelajakda energiya inqirozining oldini olish maqsadida keng ko‘lamli qarorlar qabul qilindi. O‘zbekiston Respublikasi Prezidentining 2023-yil 16-fevraldagi PQ-57-son qarori bilan qayta

[1] O’zbekiston Respublikasi Prezidentining qarori, 04.10.2019 yildagi PQ-4477-son

tiklanadigan energiya manbalarini keng joriy etish maqsadida iqtisodiyot tarmoqlarida ko‘mirdan foydalanishni vaqtincha kengaytirish to‘g‘risida qaror qabul qilindi va shu bilan birgalikda mamlakatimiz bo‘ylab ijtimoiy soha obyektlari, jumladan, bolalar bog‘chalari, maktablar, sog‘liqni saqlash muassasalari, shuningdek, issiqxonalar va qurilish materiallari ishlab chiqaruvchi korxonalarda mahalliy isitish tizimini ko‘mir yoqilg‘isiga o‘tkazish rejasi[1] tasdiqlandi.

Respublikamiz ham “yashil” iqtisodiyot tendensiyasi sari ildamlik bilan yuqori suratlarda bosqichma- bosqich qadam tashlar ekan, yurtimiz aholisini ko’payishi hisobiga elektro-energiyaga bo’lgan ta’lab oshib borishi natijasida ko’mirga bo’lgan ehtiyoj hali hamon saqlanib qolmoqda. Worldpopulationreview.com internet-resursiga ma'lumotiga ko'ra, O‘zbekistonda 1,5 milliard tonna ko'mir zaxiralari[2] mavjud. Yana boshqa ma'lumotlarga ko'ra, respublikada qo'ng'ir ko'mirning aniqlangan zaxiralari taxminan 1,8 milliard tonna, toshko'mir esa 46,3 million tonnani[3] tashkil etadi.

Mamlakatni energiya mahsulotlari bilan ta’minlovchi yirikdan yirik bo’lgan «Yangi Angren IES» AJ va “Angren IES” AJlarni va umumiy olganda respublika ko’mir sanoatining 85 foiz ulushi egasi bo’lgan birgina “O’zbekko’mir” aksiyadorlik jamiyatining (qo’ng’ir) ko’mir qazib olish ko’rsatgichlariga nazar solsak; so’ngi yillarda qazib olish ishlari(1-rasm)da jadal o’sib borishini ko’rishimiz mumkin.



1-rasm “O’zbekko’mir” AJning ko’mir qazib olish ko’rsatkicnlari[4] (tonnada)

A. Voronin, D.X. Musabekov, S.Yu. Arzumanyan, T.A. Dergacheva va F.M. Azimovalarning takidlashlaricha; ko‘mirni qazib olish, qayta ishlash va yoqish jarayonida odamlar uchun zararli bo‘lgan ko‘plab moddalar paydo bo‘lishini, fan hali

[1]O‘zbekiston Respublikasi Prezidentining 2023-yil 16-fevraldagi 2023 yilda qayta tiklanuvchi energiya manbalarini va energiya tejovchi texnologiyalarni joriy etishni jadallashtirish chora-tadbirlari to’g’risidagi PQ-57-son qarori

[2] Coal Reserves by Country 2025. Worldpopulationreview.com

[3] Развитие угольной отрасли Узбекистана в условиях современных вызовов . УДК 338.45: 622.3(575.1): 622.85 © С.А. Воронин, Д.Х. Мусабеков, С Ю. Арзуманян, Т.А. Дергачева, Ф.М. Азимова, 2024. DOI: http://dx.doi.org/10.18796/0041-5790-2024-2-89-92.

[4] “O‘zbekko‘mir” AJ 2024-yilda ko‘mir qazib chiqarish hajmi 6,7 million tonnadan ortib ketdi. O’zbekiston Respublikasi Hukumati portali.https://gov.uz/mingeo/news/view/31710

undan xavfsiz foydalanish texnologiyalarini taklif qilmaganligini inobatga olib, uzoq muddatda uning xalq xo‘jaligida va kundalik hayotda keng qo‘llanilishini kuchaytirmaslik maqsadga muvofiqdir[1]. Hozirgi zamonaviy sharoitda ko'mirdan faqat respublikaning aholi kam istiqomat qiladigan, boshqa energiya turlari mavjud bo'lmagan chekka hududlarida va faqat cheklangan miqdorda, atrof-muhitga xavf tug'dirmaydigan joylarda foydalanish maqsadga muvofiqdir.

Naala Oleynikovaning Rossiya xalqaro ishlar kengashining “Ko'mir va yashil kun tartibi” maqolasidagi malumotlari bo’yicha: ohirgi vaqtlarda jahon energetika sektorida katta o‘zgarishlar ro‘y berdi: Buyuk Britaniya og‘ir sanoat va energetikaga soliqlarni oshirmoqda, Germaniya CO2 chiqindilari uchun milliy kvotalar o‘rnatmoqda, Fransiya va Shvetsiya ko‘mirda ishlaydigan elektr stansiyalarining yaqin kunlarda yopilishini e’lon qilmoqda[2]. Shu bilan birgalikda ko’plab rivojlangan davlatlar qayta tiklanadigan energiya texnologiyalari va faol yashil energiya loyihalari uchun davlat subsidiyalari va yirik xalqaro banklardan yordam olmoqda.

Albatta ko'mir sanoati energiya resurslarini ta'minlashda muhim rol o'ynaydi, ayniqsa yurtimizda lekin uning faoliyati atrof-muhitga salbiy ta'sir ko'rsatish bilan bog'liq. Shunday ekan “O’zbekko’mir” AJning ko’mir qazib olish ishlari ko’rsatgichlari qanchalik zalvorli bo’lgani sari atrof muhitga ulkan miqdorda zarar etadi, qolaversa ko’mir qazib olish uchun kon usti ochish ishlari vaqtidayoq er qatlamlarining degradatsiyasi yuz beradi.

So’nggi yillarda CO2 chiqindilarini atrofga tasirini kamaytirish uchun dunyo bo‘ylab rivojlangan davlatlarda turli loyihalar asosida ko’plab texnologiyalar ishlab chiqilmoqda, jumladan CCUS (Carbon Capture, Utilization and Storage) uglerodni ushlash va saqlash, ko‘mir o‘rniga suyultirilgan gazdan foydalanish, chiqindilarni yanada samarali qayta ishlash tizimlaridan foydalanish va issiqxona gazlari emissiyasini tartibga solish kabilar. Ekohavfsiz CCUS loyihari soni kun sayin ortib borayotgan davlatlarni 2- rasmda guvohi bo’lamiz. 2024 yilda AQSH, Buyuk Britaniya, Kanada, va qolaversa hatto Xitoyni ortda qoldirgan Norvegiyani ko’rishimiz mumkin. Takidlash joizki; 2017 yil Osaki CoolGen pilot loyihasini amalga oshirib, uning doirasida ko'mir yoqilg'i elektr stantsiyasida kislorodli muhitda yondirilib, keyinchalik CO2 tutiladigan zavodi, rejalashtirilgan 90% quvvatdan foydalanish samaradorligining 40% koeffitsientiga erishgan Yaponiya[3] ham ozining samarali yurishini davom etmoqda.

[1] Воронин С.А., Мусабеков Д.Х., Арзуманян С Ю., Т.А. Дергачева, Азимова Ф.М., Развитие угольной отрасли Узбекистана в условиях современных вызовов. 2024. DOI: http://dx.doi.org/10.18796/0041-5790-2024-2-89-92.
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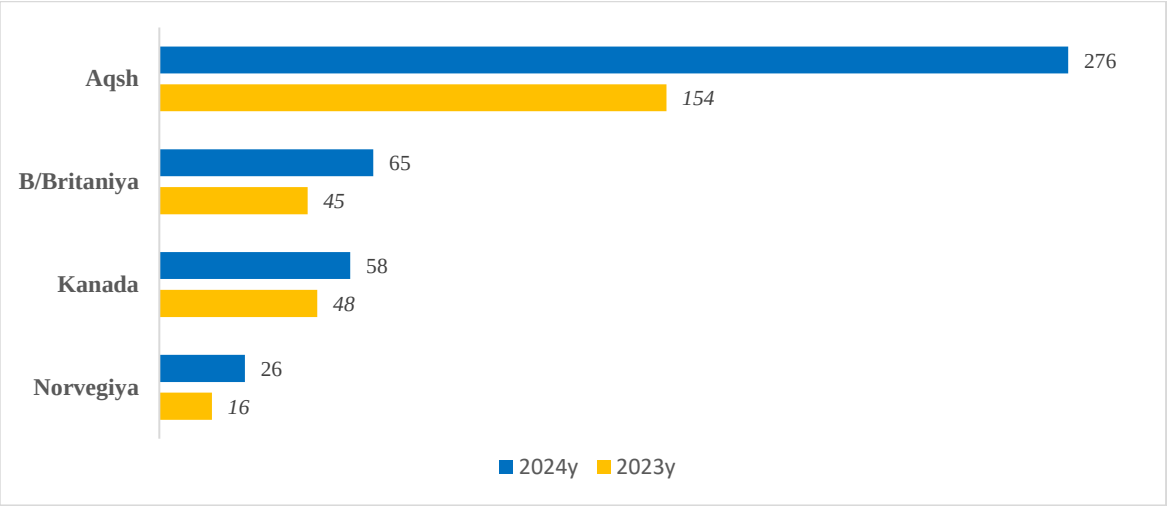
[3] Технологии по улавливанию, хранению и использованию углерода (CCUS) – технологическая основа декарбонизации тяжелой промышленности в РФ. CCUS-Skolteh-2022-11-10.pdf



2-rasm. CCUS loyihari o’sish surati

Fikrimizcha birinchidan zamonaviy dunyo sanoati rivojlanishi singari yurtimizda ham an'anaviy ishlab chiqarish usullarini qayta ko'rib chiqish va ekologik barqaror echimlarga o'tishni talab qiladi. Bu bir vaqtning o'zida iqtisodiy o'sishga erishish bilan birga atrof-muhitga etkazilgan zararni kamaytirishga qaratilgan turtki bo’ladi. Uning tamoyillarini ko‘mir sanoatiga tatbiq etish barqaror rivojlanishga erishish yo‘lidagi dolzarb qadamga aylanadi. Ikkinchidan esa “yashil” iqtisodiyotning ko’mir qazib olish sanoatida to’g’ri qo’llanishi va uning rivojlanishi ko’plab imkoniyatlar eshigini ochadi va albatta nafaqat atrof muhitga balki ko’mir sanoati orqali yurtimiz iqtisodiyotiga o’z hissasini qo’shadi. Uchinchidan, CCUS texnologiyasi uglerod neytralligi bo'yicha majburiyatlarini, energiya xavfsizligini ta'minlash, ekologik sivilizatsiyani shakllantirish va barqaror rivojlanishning muhim maqsadlariga erishishni bajara oladigan mamlakatlarning kelajagi bo'lib hizmat qiladi.

Shunday ekan, taklif sifatida quyudagilarni taklif qilish mumkin:

qaysi hududlarda ko‘mirni qanday hajmlarda inson va atrof-muhit uchun zararsiz bo‘lishini belgilovchi ekologik xaritani ishlab chiqish va tasdiqlash (ko‘mir yoqish uchun issiqlik elektr stansiyalariga kvotalar ishlab chiqish);

ko'mirdan issiqlik elektr stansiyalari uchun yoqilg'i sifatida foydalanish holatlarini belgilovchi nizomni ishlab chiqish;

CCUS (Carbon Capture, Utilization and Storage) loyiha va texnologiyasini qo’llash, rivojlantirishni rag'batlantirish mexanizmlarini yaratish;

mustaqil ravishda va xorijiy kompaniyalar bilan hamkorlikda turli sohalarda CCUS loyihalarini yaratishni taklif etamiz.

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ЎЗБЕКИСТОН РЕСПУБЛИКАСИНИНГ “ЯШИЛ” ИҚТИСОДИЁТГА ЎТИШ СТРАТЕГИЯСИ: МУАММО ВА ЗАМОНАВИЙ ЕЧИМЛАР

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Аннотация: Ушбу мақолада Ўзбекистон Республикасининг «яшил» иқтисодиётга ўтиш стратегияига оид муаммолар ва замонавий ечимлар таҳлил қилинади. «Яшил» иқтисодиёт экологияни муҳофаза қилиш, ресурсларни тежаш ва барқарор ривожланишни таъминлашга қаратилган ва бу мақсаддаги стратегиялар мамлакатнинг узоқ муддатли иқтисодий тараққиётига хизмат қилади. Ўзбекистондаги «яшил» иқтисодиётга ўтишнинг асосий мақсади - энергия самарадорлигини ошириш, қайта тикланадиган энергия манбаларига инвестиция киритиш ва экологик жиҳатдан барқарор ишлаб чиқариш соҳаларини яратишдан иборат.

Ўзбекистон ҳозирги даврга келиб ижобий даражадаги иқтисодий ривожланишга эришди ва Республика Президентининг 2019 йил 4 октябрдаги ПҚ-4477-сонли қарори билан “2019-2030 йиллар даврида Ўзбекистон Республикасининг “яшил” иқтисодиётга ўтиш стратегия”си ва Ўзбекистон Республикаси Президентининг 2023 йил 11 сентябрдаги “Ўзбекистон - 2030” стратегияси тўғрисида”ги ПФ-158-сон Фармони каби узоқ муддатга мўлжалланган меъёрий ҳужжатларда экологик хавфсизликка эришишга доир вазифалар тасдиқланиб, бир қатор эришилиши мумкин бўлган режалар белгиланди.

Қарорда қайд этилишича, жадаллашаётган саноатлаштириш ва аҳоли сонининг йилдан йилга ўсиши иқтисодиётнинг турли хилдаги ресурсларга бўлган эҳтиёжини сезиларли даражада оширмоқда, шунингдек, атроф муҳитга салбий антропоген таъсирни кучайтирмоқда ва иссиқхона газлари ажратмаларининг ортишига олиб келмоқда. Иқтисодиёт энергия самарадорлигини ошириш учун, табиий ресурслардан оқилона фойдаланиш, замонавий технологияларни жорий қилиш, «яшил иқтисодиёт»ни ривожлантириш учун инновацион ечимларни тақдим этишда кичик бизнес иштирокини кенгайтириш мамлакатни барқарор ривожлантириш соҳасидаги устувор миллий мақсадлар ва вазифаларга эришишда муҳим қадамлардан асосийси ҳисобланади. «Яшил» технологияларни жорий этиш ва «яшил» иқтисодиётга ўтиш бўйича тизимли механизмга асосланган чора-тадбирлар «яшил» иқтисодиётга ўтишини таъминлаб беради ва булар сирасига:

технологик модернизациялаш ва молиявий механизмларни ривожлантириш орқали иқтисодиётнинг энергия самарадорлигини ошириш ва табиий ресурслардан оқилона фойдаланиш;

давлат инвестициялари ва харажатларининг устувор йўналишларига илғор халқаро стандартларга асосланган «яшил» мезонларни киритиш;

давлат томонидан рағбатлантириш механизмларини, давлат-хусусий шерикчиликни ривожлантириш ҳамда халқаро молиявий институтлар билан ҳамкорликни фаоллаштириш орқали «яшил» иқтисодиётга ўтиш йўналишлари бўйича тажриба-синов лойиҳаларини амалга оширишга кўмаклашиш;

таълимга инвестициялар киритишни рағбатлантириш, етакчи хорижий таълим муассасалари ва илмий-тадқиқот марказлари билан ҳамкорликни ривожлантириш ҳисобига «яшил» иқтисодиётдаги меҳнат бозори билан боғлиқ кадрларни тайёрлаш ва қайта тайёрлаш тизимини ривожлантириш;

оролбўйидаги экологик инқирознинг салбий таъсирини юмшатиш чораларини кўриш;

энергия ресурслари истеъмолини диверсификациялаш ва қайта тикланувчи энергия манбаларидан фойдаланишни ривожлантириш;

иқлим ўзгариши оқибатларига мослашиш ва уларни юмшатиш, табиий ресурслардан фойдаланиш самарадорлигини ошириш ва табиий экотизимларни асраш;

«яшил» иқтисодиётни қўллаб-қувватлашнинг молиявий ва номолиявий механизмларини ишлаб чиқиш.

Глобаллашув жараёнида дунёдаги табиий ресурслар захираси камайиб бориши, улардаги ўзгаришларни баҳолаш бўйича тизим ишлаб чиқилишини тақозо қилмоқда. Бирлашган Миллатлар Ташкилотининг Иқлим ўзгариши тўғрисидаги асосий конвенцияси Киото протоколи ва Париж битими қабул қилинган шартномаларда белгиланган тамойилларни амалга оширишда турли давлатлардаги қарашлар хилма хил бўлганлиги учун жаҳон бўйича ушбу соҳа бўйича баъзи муаммолар юзага келмоқда.

Табиатга ижобий муносабатда бўлган давлатлар ҳозирда иқтисодиётини янги босқичга кўтариш ва “яшил” иқтисодиётни барпо этиш йўли танлашмоқда. Яшил иқтисодиётни асосий мақсади сайёрамизнинг экологияси ва уни сақлаб қолиш билан бирга иқтисодиётнинг барча соҳаларини ривожлантиришга қаратилган. Яшил иқтисодиётга инсон ҳаёти ва соғлиғи учун зарур бўлган ресурсларни, атроф-муҳит ва экологияни бир бутун ҳолда сақлаб қолиб ишлаб чиқариш ва хизмат кўрсатиш соҳалари билан боғлиқ иқтисодиётни янада ривожлантиришни амалга оширишга асосланган иқтисодий фаолиятнинг янги йўналиши сифатида қаралмоқда.

2015 йил 25 сентябрда Бирлашган Миллатлар Ташкилоти аъзолари 17 та мақсадларга мўлжалланган 2030 йилгача барқарор ривожланиш бўйича ҳужжат қабул қилиниб, барқарор ривожланиш ва қашшоқликни бартараф этиш,

фаровонликка эришиш бўйича сайёрамиз ресурсларини тежаш ва таъминлашга қаратилган 169 та вазифалар қўйилган.

Ҳозирга қадар Ўзбекистон ҳам атроф-муҳитни муҳофаза қилиш соҳасидаги ўн битта халқаро конвенция, битим ва улар доирасидаги еттита кўп томонлама халқаро шартномага қўшилди. Ўзбекистон Республикасида “яшил” иқтисодиётни барпо этиш бўйича ўтказилган таҳлил иқлимнинг ўзгариши шароитида самарали, ресурс тежамкор ва экологик хавфсиз иқтисодиётни таъминлашда ўзаро боғлиқ муаммолар ва эҳтиёжлар мавжудлигини кўрсатди. Саноатлаштириш ва мамлакат аҳолиси сонининг ортиши иқтисодиётнинг табиий ресурсларга бўлган эҳтиёжини сезиларли даражада оширмоқда, шунингдек, атроф муҳитга салбий таъсирни кучайтирмоқда.

Иқтисодиёт энергия самарадорлигининг паст даражаси, табиий ресурслардан нооқилона фойдаланиш, технологиялар янгиланишининг сустлиги, «яшил иқтисодиёт»ни ривожлантириш учун инновацион ечимларни жорий этишда кичик бизнес иштирокининг етарли эмаслиги Ўзбекистонни барқарор ривожлантиришга тўсқинлик қилмоқда. Айниқса ҳудудларда самарали яшил иқтисодиёт механизмларидан фойдаланмаслик, кадрларда соҳага оид малакаларни етишмаслиги, аҳолини атроф-муҳитга ҳамда “яшил” иқтисодиётга нисбатан маданий даражаси пастлиги кузатилмоқда.

Мамалакатда узоқ йиллар давомида узоққа мўлжалланган стратегиянинг мавжуд эмаслиги «яшил» технологияларни жорий этиш ва «яшил» иқтисодиётга ўтиш бўйича тизимли чоралар кўришни таъминлашга имкон бермай келаётган эди.Ўзбекистоннинг Париж битимига қўшилиши муносабати билан “яшил иқтисодиёт”га ўтиш бўйича давлат стратегияси ишлаб чиқилди. Мамлакатимизда бу йўналишда экологик соф, ресурстежамкор технологияларни жорий этиш бўйича қатор лойиҳалар амалга оширилмоқда.

Мамлакатда том маънода “яшил иқтисодиёт”ни барпо этиш, 2017 - 2021 йилларда Ўзбекистон Республикасини ривожлантиришнинг бешта устувор йўналиши бўйича Ҳаракатлар стратегиясида белгиланган вазифаларни изчил амалга ошириш, шунингдек, Париж битими (Париж, 2015 йил 12 декабрь) мажбуриятлари бажарилишини ва Ўзбекистон Республикасининг «яшил» иқтисодиётга ўтишини таъминлаш ҳамда бу орқали иқтисодиётда таркибий ўзгартиришларни чуқурлаштириш, иқтисодиётнинг базавий тармоқларини модернизatsiялаш ва диверсификациялаш ҳамда ҳудудларни бир маромда ижтимоий-иқтисодий ривожлантиришга қаратилган комплекс чора-тадбирлар амалга оширилиб келинмоқда.

Саноат корхоналари инфратузилмасини модернизациялаш, энергия самарадорлигини 20 фоиздан кам бўлмаган миқдорга ошириш ҳамда соф ва экологик хавфсиз технологиялар ва саноат жараёнларидан янада кенг

фойдаланиш ҳисобига уларнинг барқарорлигини таъминлаш мўлжалланган. Қайта тикланувчи энергия манбаларини кенг жорий этиш ва ривожлантириш назарда тутилган бўлиб, умумий энергия ишлаб чиқариш салмоғида ушбу экологик тоза энергия улушини 12 фоизга етказиш белгиланган.

Шунингдек, “ақлли” қишлоқ хўжалиги тамойилларини жорий этиш, иқтисодиётнинг барча тармоқларида сувдан фойдаланиш самарадорлигини сезиларли даражада ошириш, 1 миллион гектаргача майдонда томчилатиб суғориш технологиясини жорий этиш ва уларда етиштириладиган экинлар ҳосилдорлигини 20-40 фоизгача кўпайтириш кўзда тутилган. Озиқ-овқат хавфсизлигини таъминлаш мақсадида ерларнинг каррозияга учраши бўйича нейтрал балансга ҳамда асосий турдаги қишлоқ хўжалиги озиқ-овқат маҳсулотлари ишлаб чиқаришнинг ўртача ҳосилдорлигини 20-25 фоизгача оширишга эришиш мўлжалланган.

Ўзбекистон Республикаси Президентининг 2022 йил 2 декабрдаги ПҚ-436-сон қарори 2030-йилгача Ўзбекистон Республикасида “яшил” иқтисодиётга ўтиш ва “яшил” ўсишни таъминлаш бўйича мақсадли кўрсаткичлар берилган бўлиб биз уларни асосийларини ажратиб олдик ва улар:

1. Ялпи ички маҳсулот бирлигига тўғри келадиган энергия ҳажмини камайтириш (2021-йилга нисбатан) 2026 йилда 22, 2028 йилда 27 ва 2030 йилда 30 фоизга етказиш кўзда тутилган.

2. Саноатда электр энергияси истеъмоли, умумий истеъмолдаги улуши 2026 йилда 23, 2028 йилда 21 ва 2030 йилда 20 фоизга тушириш назарда тутилган.

3. Кичик қувватли қуёш фотоэлектр станцияларини қуриш 2026 йилда 400,0 МВт, 2028 йилда 800,0 МВт ва 2030 йилда 1500,0 МВт га етказиш режалаштирилган.

4. Ўрмон фонди ҳудудларида дарахт ва буталар захираларини 2026 йилда 77,0 млн.м^3, 2028 йилда 85,5 млн.м^3 ва 2030 йилда 92,3 млн.м^{3}га кўпайтириш режалаштирилган.

5. “Яшил макон” лойиҳаси доирасида шаҳарлардаги яшил майдонларни (аҳоли пунктининг умумий майдонига нисбатан) 2026 йилда 15,8, 2028 йилда 23,8 ва 2030 йилда 30,0 фоизга кенгайтириш назарда тутилган.

Хулоса ўрнида шуни таъкидлаш лозимки жисмоний шахсларни муқобил ёки қайта тикланувчи энергиядан фойдаланишини рағбатлантириш тизими аҳолининг ушбу турдаги энергия воситаларини кенг кўламда ўрнатишига хизмат қилади. Юрдик шахсларни муқобил ёки қайта тикланувчи энергиядан фойдаланишини рағбатлантириш тизими эса мамлакат энергия балансидаги тақчилликни камайтириш ҳамда ишлаб чиқарилаётган муқобил энергия миқдорини кўпайишини таъминлашга олиб келади.

Транспорт воситаларидан атроф-муҳитга чиқарилаётган ифлослантирувчи газларни камайтириш мақсадида, экологик хавфсиз электромобиллар импортини рағбатлантириш яшил иқтисодиётни қўллаб қувватлашга хизмат қилади. Мамлакатимизда экологик хавфсиз электромобил ва гибрид автомобилларни ишлаб чиқаришни йўлга қўйишни қўллаб қувватлаш натижасида Жиззах шаҳрида “BYD Uzbekiston Factory” қўшма корхонаси ишга туширилиб 2024-йил давомида инвестиция лойиҳасининг биринчи босқичида ишлаб чиқариш қувватини майда узелли йиғиш усулида 50 минг дона (кейинчалик босқичма-босқич йилига 500 минг донагача ошириш) электромобил ва гибрид автомобилларини ишлаб чиқиш ҳамда маҳаллий аҳоли учун 1000 та янги иш ўринларини яратиш режалаштирилган. Атроф-муҳитга чиқараётган ифлослантирувчи газларини камайтириш учун АИ-80 маркали бензинга акциз солиғи ставкасини босқичма-босқич ошириб бориш ва Евростандарт талабларига жавоб берадиган бензин маҳсулотлари учун солиқ ставкасини пасайтириш лозим.

Чиқиндиларни тўплаш, олиб чиқиш, саралаш ва қайта ишлаш фаолиятини рағбатлантирилиши натижасида мамлакатда ушбу фаолият билан шуғулланадиган кўплаб корхоналар очилишига ва улар орасида рақобатнинг шаклланишига ва энг асосийси катта ҳажмдаги чиқиндиларни қайта ишланишига эришилади. Бу эста чекланган табиий ресурсларнинг тежалишига ва бевосита яшил иқтисодиёт фаолиятини самарали таъминлашга хизмат қилади.

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YASHIL IQTISODIYOTDA INNOVATSION BOSHQARISH ASOSIDA SIFATNI TAKOMILLASHTIRISH

Atabayeva Малохат Аслидиновна
Biznes va tadbirkorlik oliy maktabi tinglovchisi.

Tadqiqot “Yashil iqtisodiyotda innovatsion boshqarish asosida xizmatlar sohasining samaradorligini oshirish” mavzusiga bag‘ishlangan bo‘lib, ekologik barqarorlik va innovatsion texnologiyalar yordamida xizmatlar sifatini yaxshilashni ko‘zda tutadi. Ushbu tadqiqotda yashil iqtisodiyot tamoyillari, innovatsion boshqaruv yondashuvlari va ularni xizmatlar sohasida qo‘llash usullari batafsil tahlil qilinadi. Raqamli boshqaruv tizimlari, sun’iy intellekt, yashil menejment va xodimlarni doimiy o‘qitish kabi metodlar orqali xizmatlar sifatini oshirish mumkinligi ko‘rsatilgan. Maqolada, shuningdek, xizmat ko‘rsatish jarayonlarida resurslardan samarali foydalanish, energiya tejash va atrof-muhitga zarar yetkazmaslik masalalariga alohida e’tibor qaratilgan. Tadqiqot natijalari, xizmatlar sohasidagi kompaniyalar va tashkilotlar uchun ekologik jihatdan toza va samarali boshqaruv tizimlarini joriy etish zarurligini ko‘rsatadi. Innovatsion boshqaruv orqali xizmatlarning raqobatbardoshligini oshirish, mijozlar ehtiyojlariga samarali javob berish va barqaror rivojlanishni ta’minlash muhim omillardan hisoblanadi.

Kalit so‘zlar: yashil iqtisodiyot, innovatsion boshqaruv, xizmatlar sohasi, xizmat sifati, raqamli texnologiyalar, ekologik barqarorlik, sun’iy intellekt, barqaror rivojlanish, resurslardan samarali foydalanish.

Hozirgi davrda ekologik muammolar va resurslardan oqilona foydalanish masalasi global muammo sifatida dolzarb bo‘lib qolmoqda. Shu nuqtai nazardan, yashil iqtisodiyot tushunchasi jamiyat taraqqiyotining yangi bosqichi sifatida namoyon bo‘lmoqda. Yashil iqtisodiyotda asosiy e'tibor iqtisodiy o‘sishni ekologik xavfsizlikni saqlagan holda ta'minlashga qaratilgan. Bu borada innovatsion boshqaruv mexanizmlari muhim rol o‘ynaydi.

Ushbu qaror bilan 2030-yilgacha O‘zbekiston Respublikasining “Yashil iqtisodiyot”ga o‘tish strategiyasi tasdiqlandi.

- Qarorga muvofiq, quyidagi asosiy yo‘nalishlar belgilandi:
- energiya samaradorligini oshirish va qayta tiklanuvchi energiya manbalaridan foydalanishni kengaytirish;
- sanoat va xizmatlar sohalarida ekologik toza texnologiyalarni joriy etish;
- atrof-muhitga zarar yetkazmaydigan transport va infratuzilmani rivojlantirish;
- iqtisodiy rivojlanish va ekologik xavfsizlik o‘rtasida muvozanatni ta'minlash;
- yashil moliyalashtirish tizimlarini yaratish va xalqaro tajribalarni tatbiq etish.[1]

Yashil iqtisodiyot tushunchasi va uning ahamiyati.

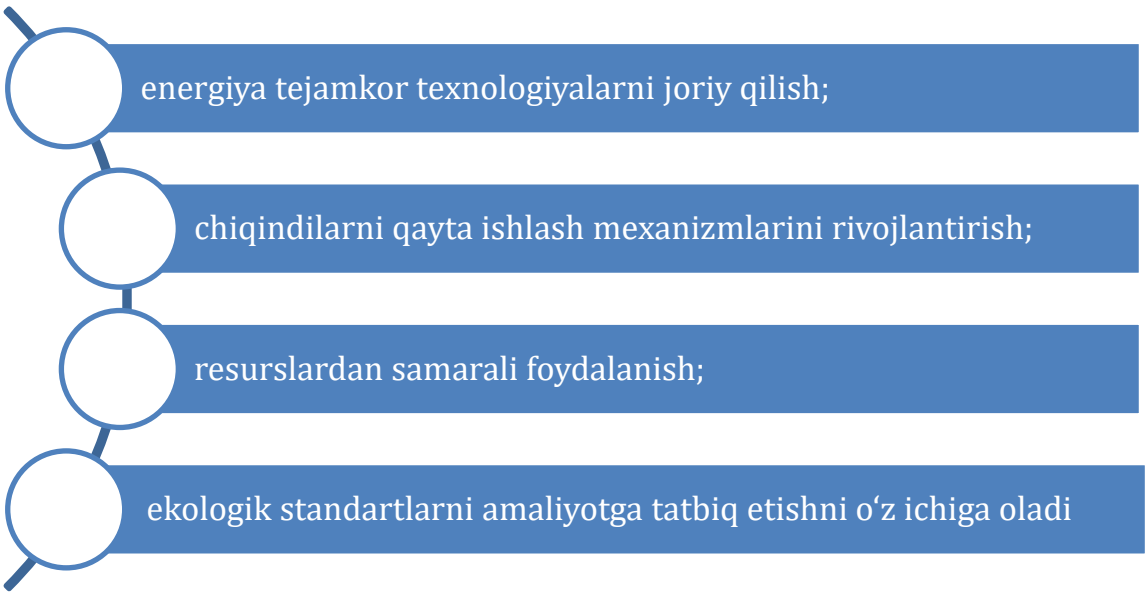
Yashil iqtisodiyot – bu ekologik barqarorlikni ta'minlovchi, atrof-muhitga zarar yetkazmaydigan, kam uglerodli texnologiyalarga asoslangan iqtisodiy faoliyatdir. Bu yondashuv orqali tabiiy resurslar oqilona boshqariladi, chiqindilar miqdori kamaytiriladi va yashash muhitining sifatini oshirishga erishiladi. [2]

BMTning atrof-muhit dasturlari (UNEP) yashil iqtisodiyotni “inson farovonligini oshirish va ijtimoiy tenglikni ta'minlovchi, ekologik xavf-xatarlarga duch kelmaydigan iqtisodiyot” deb ta'riflaydi. Bu model an'anaviy iqtisodiy yondashuvdan farqli ravishda ekologik, ijtimoiy va iqtisodiy omillarni uyg‘unlashtiradi.

Innovatsion boshqaruvning mohiyati

Innovatsion boshqaruv – bu tashkilot yoki tizimda yangi texnologiyalar, xizmatlar va boshqaruv usullarini joriy etish orqali raqobatbardoshlikni oshirish, samaradorlikni ta'minlash va sifatni yaxshilash jarayonidir.

Yashil iqtisodiyotda innovatsion boshqaruv(1-rasm):



1-rasm. Yashil iqtisodiyotda sifatni yaxshilash vositasi sifatida innovatsion boshqaruv

Yashil iqtisodiyot integratsiyalashgan, hisobdor va barqaror institutlar tomonidan boshqariladi. Inklyuziv yashil iqtisodiyot dalillarga asoslangan - uning me'yorlari va institutlari fanlararo bo'lib, moslashuvchan strategiya uchun mahalliy bilimlar bilan bir qatorda mustahkam fan va iqtisodni ham qo'llaydi. Integratsiyalashgan, hamkorlikda va izchil bo'lgan - gorizontal ravishda sektorlar bo'ylab va vertikal ravishda boshqaruv darajalari bo'yicha - va o'zlarining tegishli rollarini samarali, samarali va mas'uliyatli usullarda bajarish uchun etarli imkoniyatlarga ega institutlar tomonidan qo'llab-quvvatlanadi. Bu jamoatchilik ishtirokini, oldindan xabardor qilingan rozilikni, shaffoflikni, ijtimoiy muloqotni, demokratik javobgarlikni va barcha institutlarda - davlat, xususiy va fuqarolik jamiyatida shaxsiy manfaatlardan

ozodlikni talab qiladi, shunda ma'rifatli etakchilik jamiyat talabi bilan to'ldiriladi. Bu kuchli umumiy, markazlashtirilgan standartlar, protseduralar va muvofiqlik tizimlarini qo'llab-quvvatlagan holda mahalliy iqtisodiyotlar va tabiiy tizimlarni boshqarish uchun vakolatli qarorlar qabul qilishga yordam beradi.

Yashil iqtisodiyotda sifatni oshirish deganda, mahsulot yoki xizmatning ekologik xavfsizligi, energiya samaradorligi, iste'molchilarga mosligi va barqarorligi nazarda tutiladi. Bunda innovatsion boshqaruv quyidagi vositalar orqali sifatni yaxshilashga xizmat qiladi:

- Ekologik menejment tizimlari: ISO 14001 kabi standartlarni joriy etish orqali korxonalarda ekologik xavfsizlikni oshirish.
- Raqamli texnologiyalar: sun’iy intellekt, IoT (Internet of Things), “yashil” texnologiyalar orqali resurslar monitoringini yo‘lga qo‘yish.
- Ilm-fan va innovatsiyalar integratsiyasi: ilmiy tadqiqotlar natijalarini ishlab chiqarishga tatbiq etish.[3]

Amaliy misollar va natijalar

Yashil iqtisodiyotga o‘tishda Xitoy, Germaniya, Janubiy Koreya kabi mamlakatlar innovatsion boshqaruvni faol joriy qilgan. Masalan, Germaniyada “Energiewende” dasturi doirasida qayta tiklanuvchi energiya manbalarini rivojlantirish natijasida ishlab chiqarish sifati oshgan, resurslar tejalgan va ekologik barqarorlik ta'minlangan.

O‘zbekistonda ham “Yashil iqtisodiyotga o‘tish strategiyasi” (2023–2030 yillar) doirasida energiya samaradorligini oshirish, chiqindilarni qayta ishlash va “yashil” innovatsiyalarni joriy qilish bo‘yicha qator loyihalar amalga oshirilmoqda.

Xizmatlar sohasini yaxshilash yo‘llari

Yashil iqtisodiyot tamoyillari xizmatlar sohasida ham barqarorlik, ekologik xavfsizlik va raqamlashtirish orqali sifatni oshirishni talab qiladi. Xizmatlar sohasi - transport, turizm, savdo, moliya, ta'lim, tibbiyot kabi tarmoqlarni qamrab oladi va innovatsion boshqaruv orqali ularning samaradorligini oshirish mumkin. Quyidagi yo‘nalishlar bunga xizmat qiladi:

Raqamli xizmatlar platformalarini joriy etish[4].

Onlayn xizmat ko‘rsatish, mobil ilovalar va sun’iy intellekt asosidagi tizimlar orqali resurslardan foydalanish optimallashtiriladi. Masalan, elektron navbatlar, raqamli to‘lovlar, chat-botlar xizmatni tezlashtiradi va qog‘oz sarfini kamaytiradi.

Yashil transport xizmatlarini rivojlantirish/ Elektromobillar, ekologik toza jamoat transporti, velosiped ijarasi kabi xizmatlar orqali karbon izini kamaytirish bilan birga, foydalanuvchilarga innovatsion xizmatlar ko’proq foyda kiltiradi.

Xizmatlar sifatini innovatsion boshqaruv orqali yaxshilash yo‘llari

Raqamli boshqaruv tizimlari

Xizmat ko‘rsatish jarayonlarini avtomatlashtiruvchi CRM (Customer Relationship Management), ERP (Enterprise Resource Planning) kabi tizimlar xizmatni tez, aniqlik bilan va shaffof tarzda boshqarishga imkon beradi. Bu mijoz ehtiyojini aniqlash va unga mos xizmat ko‘rsatishga yordam beradi.

Sun’iy intellekt va data-tahli

Sun’iy intellekt (AI) yordamida mijozlarning xatti-harakatlari, talab darajasi, qoniqish ko‘rsatkichi avtomatik tahlil qilinadi va shu asosda individual yondashuv shakllanadi. Masalan, bank xizmatlarida chat-botlar mijozlarga 24/7 xizmat ko‘rsatadi.

Innovatsion yetakchilik (transformatsion liderlik)

Tashkilot rahbarlari o‘z jamoasini o‘zgartirishga, yangi texnologiyalarni qabul qilishga va doimiy takomillashishga undasa, xizmat sifati sezilarli darajada oshadi. Bu — innovatsion boshqaruvning eng muhim jihatlaridan biri.[5]

Yashil menejment tamoyillari

Ekologik xavfsizlikni inobatga olgan holda xizmatlarni boshqarish (masalan, energiya samaradorligi, chiqindilarni kamaytirish) orqali nafaqat xizmat sifati, balki brend obro‘si ham oshadi.

Yashil moliya yanada inklyuziv va barqaror iqtisodiyotni qurish uchun asosiy tadbirlardan biridir. Ayniqsa, tarix shuni ko’ratadiki, birinchi sanoat inqilobidan boshlab, moliya insoniyat taraqqiyotining qudratli omili bo'lishi mumkin. Kontseptsiyalar o'rtasidagi hamkorlik va ularning o'zaro manfaatli ekanligini hisobga oladigan bo'lsak, yashil moliya iqtisodiy tenglikka hissa qo'shishini ta’kidlash mumkin. Mana eng aniq usullardan ba'zilari[8]:

-bandlikni yaratish: yashil moliyalashtirish orqali qayta tiklanadigan energiya, energiya samaradorligi, barqaror qishloq xo'jaligi va boshqa ekologik toza sohalarga investitsiyalarni jalb qilib yangi ish joylarini yaratish mumkin, xususan marginallashgan guruhlar (masalan, boshlang'ich daraja) va innovatorlar hamda kichik biznes egalari uchun tadbirkorlik istiqbollarini yaratishi mumkin;

-toza energiyadan foydalanish: yashil moliyalashtirish yashash darajasini yaxshilash orqali kam ta'minlangan qatlam uchun toza va arzon energiya manbalaridan foydalanish imkoniyatinioshirishi mumkin. Shuningdek, bu kichik biznesning yanada samarali faoliyat yuritishini ta'minlagan holda uning iqtisodiy imkoniyatlarni ham oshirishi mumkin;

-inklyuziv moliya: yashil faoliyat bilan shug'ullanadigan jismoniy shaxslar va korxonalar uchun arzon kreditlar va mikrokreditlar kabi moliyaviy xizmatlardan foydalanish imkoniyatini taqdim etish orqali yashil moliyalashtirishinklyuziv moliya yashil investitsiyalar bilan birlashtirishi mumkin, bu ularga barqaror loyihalarga sarmoya kiritish va o'z bizneslarini hatto kichik miqyosda rivojlantirish imkonini beradi;

-jamiyatni rivojlantirish: yashil infratuzilmani barpo etish va shahar hududlarini qayta tiklash hamda toza suv va kanalizatsiyadan foydalanishni yaxshilash orqali yashil

loyihalar jamiyatda yashash sharoitlarini yaxshilaydi va iqtisodiy imkoniyatlar yaratadi (masalan, qayta ishlash loyihalari);

Xodimlarni doimiy o‘qitish va motivatsiya qilish

Innovatsion boshqaruv doirasida xodimlar yangi texnologiyalar, xizmat ko‘rsatish etikasi va kommunikatsiyalar bo‘yicha muntazam o‘qitiladi. Bu esa bevosita mijozlar bilan ishlash sifati va tezkorlikka ta’sir qiladi.

Jahon tajribasi shuni ko`rsatadiki, "yashil iqtisodiyot" mintaqaviy rivojlanishni, ijtimoiy barqarorlikka erishishni, "yashil iqtisodiyot" tarmoqlarida yangi ish o`rinlari yaratilishi orqali iqtisodiy salohiyatni oshirishni rag`batlantiradi . "Yashil iqtisodiyot", asosan, iqtisodiy taraqqiyotga yordam beradi va yalpi ichki mahsulotning o`sishini, mamlakat daromadlarini oshirishni, aholini ish bilan ta`minlash, mamlakatda ishsizlik darajasini pasaytirishni ta`minlaydi. Shu bilan birga, "yashil iqtisodiyotga" o`tish iqlim o`zgarishi, foydali qazilma minerallarning yo`qolishi va suv resurslarining tanqisligi kabi global tahdidlar xavfini kamaytiradi.Ammo butun jahon rivojlanishini olib qaralsa, uning umumiylik xususiyati namoyon bo`ladi, ya`ni, bugungi dunyo sivilizatsiyasi kuch to`plagan, o'z qudratining eng yuqori nuqtasiga yetgan vaqtda jahonning barcha mamlakatlari iqtisodiy rivojlanishda ekologik yo`naltirilgan model tanlanmas ekan, globallashuv sharoitida butun sayyoraning asta-sekin tanazzulga yuz tutishi va butunlay yo`q bo`lib ketishgacha borish xavfi yuzaga keladi, degan xulosaga kelishimiz mumkin.

Foydalanilgan adabiyotlar:

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ЯШИЛ ИҚТИСОДИЁТ ШАРОИТИДА ТАДБИРКОРЛИКНИ РИВОЖЛАНТИРИШ ИСТИҚБОЛЛАРИ

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Аннотация. Яшил иқтисодиёт шароитида тадбиркорлик фаолияти барқарор ривожланишнинг асосий йўналишларидан бири ҳисобланади. Ушбу мақолада яшил иқтисодиёт тушунчаси, унинг тадбиркорликка таъсири ва ушбу соҳадаги истиқболли йўналишлар таҳлил қилинади. Яшил тадбиркорликнинг асосий устунликлари сифатида экологик барқарорлик, ресурс тежамкорлиги ва ижтимоий масъулиятли бизнес моделларининг жорий этилиши кўрсатилади. Шунингдек, мақолада давлат сиёсатининг ушбу соҳани қўллаб-қувватлашдаги аҳамияти, яшил технологиялар, инновациялар ва инвестициялар имкониятлари таҳлил қилинади.

Калит сўзлар: Яшил иқтисодиёт, ижтимоий масъулият, яшил технологиялар, инновациялар, инвестициялар.

КИРИШ. Ўзбекистон Республикаси Президенти Шавкат Мирзиёев раҳбарлигида мамлакатда “яшил” иқтисодиётни ривожлантириш ва атроф-муҳитни муҳофаза қилишга қаратилган бир қатор муҳим ташаббуслар амалга оширилмоқда. 2025 йил - “Атроф-муҳитни асраш ва "яшил" иқтисодиёт йили” деб эълон қилинди. 2024 йил 20 ноябрда бўлиб ўтган Олий Мажлис Қонунчилик палатаси мажлисида Президент Шавкат Мирзиёев 2025 йилни “Атроф-муҳитни асраш ва “яшил” иқтисодиёт йили” деб эълон қилишни таклиф қилди ва бу ташаббус йиғилганлар томонидан тўлиқ қўллаб-қувватланди. [1]

2019 йилда эса Ўзбекистон “Яшил” иқтисодиётга ўтиш стратегияси”ни қабул қилган эди. Яқин ўн йилда мамлакатда углерод сарфини кескин камайтириш, иқтисодиётнинг барча тармоқларида экологик тоза ва ресурс тежамкор технологияларни жорий этиш, қайта тикланувчи, самарали энергия манбаларидан кенг фойдаланиш кўзда тутилган. Шу ўринда «яшил»иқтисодиёт нима ўзи? деган саволга жавоб излаб кўрамиз. “Яшил” иқтисодиёт тизимининг асосий мақсади сайёрамизнинг экологияси ва уни сақлаб қолиш билан бирга иқтисодиётнинг барча соҳаларини ривожлантиришга қаратилган. “Яшил” иқтисодиёт деганда, инсоният учун зарур бўлган ресурсларни, атроф-муҳит ва экологияни бир бутун ҳолда сақлаб қолиб ишлаб чиқариш ва хизмат кўрсатиш соҳалари билан боғлиқ иқтисодиётни янада ривожлантиришни амалга оширишга асосланган иқтисодий фаолиятнинг алоҳида йўналиши тушунилади.

[1] https://minenergy.uz/uz

Яшил иқтисодиёт – бу атроф-муҳитга хавфлар ва экологик танқисликларни камайтиришга қаратилган, шу билан бирга, муҳитни ифлослантирмасдан барқарор ривожланишни мақсад қилган иқтисодиётдир. У экологик иқтисодиёт билан яқин боғлиқ бўлиб, лекин кўпроқ сиёсий қўлланмали йўналишга эга.

2011 йилда БМТнинг Атроф-муҳит бўйича дастури (UNEP) томонидан нашр этилган Яшил иқтисодиёт ҳақидаги ҳисоботда таъкидланишича, иқтисодиёт яшил бўлиши учун у нафақат самарали, балки адолатли ҳам бўлиши керак. Адолатлилик, айниқса, кам углеродли, ресурс жиҳатдан самарали ва ижтимоий жиҳатдан инклюзив иқтисодиётга ўтиш жараёнида глобал ва миллий даражада тенглик тамойилларини ҳисобга олишни англатади.

Дунё тажрибасига назар ташлайдиган бўлсак, Давосда ўтказилган 40-Жаҳон иқтисодий форумида «яшил» иқтисодиёт сари янги глобал йўналиш кейинги ривожланишнинг ягона йўли сифатида эълон қилинди. Шундан сўнг жаҳонда биринчилардан бўлиб, Жанубий Корея «яшил» концепцияни амалга оширди ва «яшил» иқтисодиётни миллий стратегия сифатида қабул қилди. Швеция нефть, кўмир ва газдан воз кечишни режалаштирмоқда ва 2020 йилдан қайта тикланадиган энергия манбаларига ўтди. Полша сўнгги 20 йил ичида чиқиндиларни учдан бир қисмга камайтиришга муваффақ бўлди. Япония кам углеродли жамият учун ҳаракат қилиш ва узоқ муддатли ривожланиш мақсади дастурини ишлаб чиқди. Хитой сайёрамизда ишлаб чиқариши юқори даражада ривожланган мамлакат бўлиб, чиқиндиси ҳам катта ҳажмни ташкил қилади. Эътиборлиси, бу давлат ўзиникини қайта ишлаш билан бирга, хориждан ҳам чиқинди сотиб олиб, қайта ишлайди ва даромад олади.

Яшил иқтисодиётни олдинги иқтисодий тизимлардан ажратиб турадиган хусусиятлардан бири – табиий капитал ва экологик хизматларнинг иқтисодий қиймат сифатида баҳоланиши ҳамда тўлиқ харажатлар ҳисоби тизимининг жорий этилишидир. Бу тизим жамиятга ва атроф-муҳитга етказилган зарарни ҳисоблаб, уни аниқ қилган ташкилот ёки шахснинг молиявий мажбуриятлари сифатида қайд этади.

Шунингдек, яшил стикер ва экоёнғлик белгилар атроф-муҳитга дўстона ва барқарор ривожланишга йўналтирилган маҳсулотларни аниқлашда истеъмолчилар учун муҳим индикаторлар сифатида пайдо бўлди. Бугунги кунда кўплаб саноат тармоқлари глобаллашиб бораётган иқтисодиётда ўзларининг экологик ташаббусларини намоён қилиш мақсадида бу стандартларни қабул қилмоқда.

Барқарорлик стандартлари деб ҳам аталадиган бу қоидалар маҳсулотлар ишлаб чиқариш жараёнида атроф-муҳит ва ишчилар ҳуқуқларини ҳимоя қилишни кафолатлайди. Охирги йилларда бу стандартлар сони ошиб, янги, экологик барқарор иқтисодиётни шакллантиришга ёрдам бермоқда. Улар қишлоқ

хўжалиги, ўрмончилик, кончилик ва балиқчилик каби иқтисодий тармоқларга қаратилган бўлиб, сув манбаларини ҳимоя қилиш, биохилма-хилликни сақлаш ва парник газлари чиқиндиларини камайтириш каби экологик омилларни ўз ичига олади. Шунингдек, улар ижтимоий ҳимоя ва ишчилар ҳуқуқларини қўллаб-қувватлаш билан бирга, ишлаб чиқариш жараёнининг муайян босқичларига ҳам йўналтирилган.

Адабиётлар шарҳи. Шаклланиш босқичига назар ташлайдиган бўлсак, «яшил» иқтисод - бу XX аср охирида юзага келган иқтисодиёт фанининг йўналиши бўлиб, у иқтисодий фаолиятнинг атроф-муҳитга салбий таъсирини камайтириш зарурлигини назарда тутади.

“Яшил” иқтисодиёт концепцияси иқтисод фанининг экология иқтисодиёти ва атроф-муҳит иқтисодиёти каби соҳалари билан чамбарчас боғлиқ ҳолда яратилиши ва иқтисодиётининг ривожланиши асосидаилгари сурилган тамойилларнинг иқтисодий сиёсатга жорий этилиши натижасида “яшил иқтисодиёт” тушунчаси шакллана бошлади.

Ушбу атама илк бор 1989 йилда Буюк Британия ҳукумати учун етакчи иқтисодчилар томонидан “Яшил иқтисодиёт”ни ривожлантириш режаси”, деб номланган ҳисоботда фойдаланилган (Beder, 2011).

Тадқиқот методологияси. Иқтисодий ҳамкорлик ва тараққиёт ташкилоти (ИҲТТ) аъзо давлатларининг яшил иқтисодиётга оид прогнозлари ва ташаббуслари қуйидагиларни ўз ичига олади:

Яшил иқтисодиётга ўтиш: ИҲТТ аъзо давлатлари атроф-муҳитни муҳофаза қилиш ва барқарор ривожланишни таъминлаш мақсадида яшил иқтисодиёт моделларига ўтишга интилишмоқда. Бу, ўз навбатида, экологик тоза технологияларни жорий этиш, қайта тикланувчи энергия манбаларидан фойдаланиш ва ресурсларни тежашга қаратилган чора-тадбирларни амалга оширишни ўз ичига олади.

Инвестициялар ва инновациялар: Яшил иқтисодиётга ўтиш учун зарур бўлган инвестицияларни жалб қилиш ва инновацион технологияларни жорий этишга алоҳида эътибор қаратилмоқда. ИҲТТ аъзо давлатлари ўзаро ҳамкорлик орқали атроф-муҳитни муҳофаза қилиш соҳасидаги лойиҳаларни қўллаб-қувватлаш ва амалга оширишни мақсад қилмоқда.

Қайта тикланувчи энергия манбаларидан фойдаланиш: ИҲТТ давлатлари қуёш, шамол ва гидроэнергия каби қайта тикланувчи энергия манбаларидан фойдаланишни кенгайтиришга интилишмоқда. Бу нафақат экологик барқарорликни таъминлаш, балки энергетика хавфсизлигини оширишга ҳам хизмат қилади.

Ўзбекистоннинг ИҲТТга аъзо бўлиши билан мамлакатимизда ҳам яшил иқтисодиётга ўтиш жараёни фаоллашди. Президентимиз Шавкат Мирзиёевнинг

ташаббуси билан атроф-муҳитни муҳофаза қилиш ва барқарор ривожланишга қаратилган қатор лойиҳалар амалга оширилмоқда. Бунинг натижасида, Ўзбекистонда қайта тикланувчи энергия манбаларидан фойдаланиш, ресурсларни тежаш ва экологик тоза технологияларни жорий этиш борасида сезиларли ютуқларга эришилмоқда.

Шунингдек, ИҲТТ доирасидаги саммитларда аъзо давлатлар ўртасида яшил иқтисодиётга оид ҳамкорликни янада мустаҳкамлаш ва янги ташаббусларни амалга ошириш масалалари муҳокама қилинмоқда. Бу эса минтақадаги барқарор ривожланиш ва экологик барқарорликни таъминлашга қаратилган муҳим қадамдир. Шу билан бирга, Иқтисодий ҳамкорлик ва тараққиёт ташкилоти (ИҲТТ) прогнозларига кўра, замонавий ишлаб чиқариш усуллари ва истеъмол даражаси билан 2050 йилга келиб, 2024 йилга нисбатан дунё ўсимлик ва ҳайвонот дунёсининг 61 фоиздан 72 фоизгача қисмини йўқотади, 7,5 миллион квадрат метр майдонда эса табиий ҳудудларнинг хавфсизлиги қайтарилмас даражада бузилади.[1]

Яшил Келишув (Green Deal): Европанинг асосий мақсади - 2050 йилга қадар углерод эмиссиясини 55% га камайтириш ва қайта тикланувчи энергия манбаларига 1 триллион евро сармоя киритиш. Бу дастур Европада яшил иқтисодиётга ўтишни рағбатлантиради (European Commission, 2019).

Қайта тикланувчи энергия манбалари: Ўзбекистонда 2021 йилда қуёш энергетикаси лойиҳаларини амалга ошириш учун хорижий инвесторлар жалб қилинди, бу бўйича 8,5 миллиард долларлик лойиҳа бошланган. Бу лойиҳалар қайта тикланувчи энергия манбаларига эътиборни ошириш мақсадида амалга оширилмоқда (Uzbekistan Ministry of Energy, 2021).

Ёш тадбиркорлар учун имкониятлар: Ўзбекистонда экологик барқарор лойиҳаларга сармоя киритиш учун ёш тадбиркорларга молиявий ёрдам кўрсатишга йўналтирилган дастурлар мавжуд. Бу дастурлар, шу жумладан, экологик тоза технологиялар ишлаб чиқариш ва ишлаб чиқариш жараёнларини барқарорлаштиришга қаратилган.

Германияда "Energiewende" (Энергия ислоҳоти) сиёсати бўйича қайта тикланувчи энергия манбаларига катта эътибор қаратилади. Германия қайта тикланувчи энергия манбалари билан бирга, энергияни тежаш ва энергия самарадорлигини оширишга йўналтирилган кўплаб лойиҳаларни амалга оширмоқда (German Federal Ministry for Economic Affairs and Energy, 2020).

[1] Beder, S. (2011), 'Environmental economics and ecological economics: the contribution of interdisciplinary to understanding, influence and effectiveness', Environmental Conservation, vol. 38, no. 2, pp. 140-150.3SPASH2011.

Ўзбекистонда қуёш ва шамол энергетикаси лойиҳаларига сармоя киритиш катта ҳажмда. Республикада 2021 йилда 2,7 миллиард долларлик қуёш энергетикасини ишлаб чиқариш учун лойиҳалар бошланган.

Ўзбекистонда янги ёш тадбиркорларга экологик барқарор бизнеслар ташкил қилиш учун имтиёзлар берилмоқда. Давлатнинг экологик стандартларга асосланган сиёсатлари яшил бизнесларни ривожлантириш учун имкониятлар яратмоқда. Яшил иқтисодиётга асосланган тадбиркорлик имкониятлари кенгаймоқда. Давлатлар яшил иқтисодиётга катта сармоя киритишга ҳаракат қилмоқда. Масалан, Европада ва АҚШда экологик тоза технологияларга сармоя киритиш орқали янги иш ўринлари ва рақобатдош маҳсулотлар ишлаб чиқариш мумкин бўлади. Қайта тикланувчи энергия манбалари ишлаб чиқарувчи тадбиркорлар учун янги имкониятлар яратади. Ўзбекистонда қуёш ва шамол энергиясини ишлаб чиқариш соҳасида янги лойиҳалар бошланган. Бу йўналишда ишлаб чиқариш бизнеси учун экологик тоза технологиялар ва йўналишлар таклиф этилмоқда.

Яшил иқтисодиётда тадбиркорликни ривожлантириш учун давлатлар ва Ўзбекистон муҳим қадамлар ташламоқда. Яшил энергетика, энергия самарадорлиги, экологик технологиялар ва инновацион лойиҳалар тадбиркорлар учун янги имкониятлар яратади. Ўзбекистонда бу йўналишдаги сиёсатлар ва инвестицияларга эътибор катта аҳамиятга эга, бу эса экологик барқарор ривожланиш ва иқтисодий ўсишни таъминлаш учун муҳим омил бўлиб хизмат қилмоқда.

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THE ROLE OF INTERNATIONAL INVESTMENT ON ECONOMIC GROWTH OF CENTRAL ASIA

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Abstract: Central Asian nations are heavily tied to international capital, which remain a key driving force behind the region's growth and development. This study investigates the impact of foreign direct investments (FDI), portfolio investments, and international financial support on economic development in Central Asia. So with rich natural resources oil, gas, minerals, etc and strategic position the region is still an attraction for other world investors seeking for other investment opportunities.

But in spite of these benefits, there are multiple challenges that restrain the environment for investment. Political instability, bureaucratic inefficiencies, corruption, and legal uncertainties create hurdles that investors cannot easily jump to enter the market with confidence. This paper discusses international investments in key sectors: energy, transportation infrastructure, manufacturing, and services.

For Central Asian nations to improve the investment environment they must adopt strategic reforms. The recommendations are: To attract and retain foreign investment, the economy should be diversified and a transparent and investor-friendly regulatory system put in place with strengthened regional economic cooperation. It is, therefore, possible that these countries can ensure a stable and business friendly environment through which they can better attract and bond foreign capital for sustainable and long-term economic development in a highly competitive global market.

Keywords: International investment, Central Asian economy, portfolio investment, economic growth, investment climate, infrastructure development, economic diversification.

Introduction. Countries like Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, and Tajikistan focus heavily on international investments for their economic development. They are also rich in natural resources and have a promising geographical position which makes them an appealing target for investors around the world. During the post-independent era, all five countries have targeted foreign investments which helps them to further grow and accomplish international economic integration.

Foreign portfolio and direct investment are crucial in building an economically sound structure. Investing in industrial expansion, employment, modernization, and technologies needs focus. Primary world powers such China, Russia, European Union, and America have started pouring funds to the region extensively over the years. One of

the key investment driving forces could arguably be the Chinese BRI which used its funding to shift towards infrastructure investment in Central Asia.

Literature Review.

Economic development is one of the most crucial goals for any nation, and its pace and stability depend, to a great degree, on investment inflows. International investments are among them, having a specific, essential role to perform. Economists in recent years have debated extensively about the contribution of investments in outlining economic development, and emphasized investments' role in propelling industrial development, technological advancement, and financial stability.

Investments are universally regarded to make a contribution towards one of the most significant factors in economic development. Kongiratbay Sharipov and Umida Zaynutdinova (2024) have addressed investments in national development, trends in investment inflows, investment policy fundamentals, and contribution towards exports and imports through an analysis of empirical information. In a similar manner, Yusupov (2025) addressed the contribution of foreign investments in economies at a regional level, namely in Andijan, and exhibited positive implications of investment inflows in national economic development.

Furthermore, Kuanishova (2024) examined the character of investments, its types, and its relation with development in an economy. Her work considered factors that have an impact on development of capital and investment selection, as well. In contrast, Shadiyeva (2023) examined investment environment in Uzbekistan, examined development options for it, and examined efficiency of 2021-2023 investment program.

At the commercial level, Abduxalilova (2024) researched investment management by companies, establishing the functions of financial mechanisms and methods of increasing efficiency within them. Shoxakimova (2024), on the other hand, researched the contribution of foreign capital in the financing of investment programs, its advantageous and disadvantageous aspects in relation to increasing economic development, and its contribution to the development of companies.

The function of financial models in the regulation of international investments is another crucial one. Sindarov (2023) applied the Capital Asset Pricing Model (CAPM) in a portfolio investment profitability study, investigating market risks and future performance. In general, these kinds of studies demonstrate the significant function of international investments in leading to economic growth. Effective attraction and utilization of foreign capital and enhancement of the investment climate will induce acceleration in growth.

In an era of transforming economies in the whole world, one of the most significant tools for long-term national economy development is foreign investments. For developing countries and Central Asian nations, foreign inflows of capital contribute

immensely towards economy diversification, infrastructure development, and acceleration of technological development.

Evidence also confirms that investments in green have enormous potential - not only in driving environmental stewardship, but in creating jobs and enhancing efficiency in the economy. Long-term planning must include investments in renewable energy, recycling, and cleaner technology, in specific, in particular.

In 2017, Uzbekistan approved its Five Priority Areas of Development Strategy, with a view to diversify its economy and develop an environment for investments. As part of its strategy, significant reform work in attracting investments, including legislation for business, simplification of taxes, and creation of free economic zones, has been initiated. All of them have already generated a significant boost in terms of FDI, particularly in the sectors of energy, transport infrastructure, and industry, and have heightened even further the country’s attraction for investments.

From 2017 to 2024, a number of studies have been carried out with an aim of examining the contribution made by international investments towards driving development in an economy. Based on these studies, international investments play an important part in modernization in industries, innovation, and long-term development. However, political stability, a fair judicial system, and high-quality reform play an important part in determining success in attracting investments.

Going forward, countries will need to simplify investment policies, expand programs for green investments, and propel economic diversification in a bid to enhance dividends for foreign capital. In doing so, countries will have economic security in the long term and sustained growth, and will remain competitive in the global market.

Methodology.

In today’s era of globalization, international investments have become a driving force for development in economies, with an important role in strengthening national economies. Foreign inflows of capital have a role in widening capacities in industries, enhancing technological development, and creating jobs. With economies competing to enhance growth, international investments have become a critical factor in shaping long-term trends in economies.

Over the years, many studies have analyzed the contribution of foreign investments towards driving economic development using a range of analysis methodologies. In 2017 and 2024, most studies have focused on confirming the nexus between investment inflows and macroeconomic stability using statistical analysis, economic modeling, and empirical studies. All these methodologies shed more light regarding investments' contribution in an economy's sectors and national development.

Measuring the Impact: Quantitative Research Methods

In order to assess the contribution of international investments towards overall economic performance, quantitative analysis is utilized by most researchers. One of the

most utilized techniques adopted is that of regression analysis, through which a relation between investments and GDP growth rate is determined. In addition, panel data analysis is utilized in an attempt to view investments in countries over a long period of years, with a comparative analysis of their impact towards the economy.

A notable publication, Zhang (2022), utilized dynamic panel data analysis in a review of foreign direct investment (FDI) in developing economies. In its report, FDI aids in enhancing economic resilience, infrastructure development, and long-term development in industries. All these validate the imperative for a friendly environment for investment in an attempt to obtain secure and productive inflows of capital.

Beyond numerical data, qualitative approaches yield insightful information regarding drivers of international investments at a deeper level. Qualitative approaches including case studies, expert interviews, and analysis of policy documents stand high in terms of application in unearthing the economic, legal, and political environments supporting investment attraction.

For example, Dunning's (2001) OLI Paradigm is most frequently mentioned when explaining why multinational companies undertake investments in specific locations. Besides, a report regarding the economy of Uzbekistan prepared by a World Bank (2021) analyzed investment policies and economic reform through policy documents and key stakeholder interviews, offering a deeper analysis of factors that motivate foreign investment decisions.

Qualitative analysis, along with quantitative elements, can help researchers examine the relation of regions' political stability, investment incentives, and government transparency with investments placed in those regions. It complements statistics and helps paint a fuller picture of investment dynamics.

Academicians depend on a wealth of data consistently collected, compiled, and organized by international agencies to analyze investment in foreign countries and their contribution to the economies. The World Bank, the International Monetary Fund (IMF), and the United Nations Conference on Trade and Development (UNCTAD) are examples of cross-country agencies that have extensive datasets on investment inflows, financial soundness, as well as macroeconomics statistics.

Aside from empirical data, the impact of long-term investments on economic development has long been studied and explored through economic models. Here are a few of the most popular models:

Solow Growth Model - How does capital accumulation affect economic growth?

Endogenous Growth Model - Looks at long-term growth via investments in tech, innovation, and human capital.

Heckscher-Ohlin Model - Examines international investment and trade, as well as economic specialization relations.

These types of models enable one to evaluate the efficiency with which investment in an economy is undertaken and gain insight into the impact of various economic policies on the inflow of foreign capital.

Research on future international investments needs to have a forward-looking and comprehensive approach as the global economy continues to evolve. Hence, there are many questions that need detailed investigation of the reasons which encourage long-term economic viability:

Green Economy and Sustainable Investments – On identifying how green investments can help fund climate resilience, renewable energy, and jobs.

The Digital Economy and Trends in Investment – A look at how investment in technology is transforming industries, specifically in the areas of AI, fintech, and automation.

China's Belt and Road Initiative (BRI) – Understanding how tremendous infrastructure investments through the BRI play a key role in fostering regional economic cooperation and investment flows.

Such discussions between industries can go towards creating focused investment policies that make economies inclusive, diversified, and resilient. With a planned investment strategy, we can attract foreign investments, and our long-term economic growth will become equitable and sustainable.

Foreign direct investment continues to form a pillar of development in economies, supplying critical funding for infrastructure, industrialization, and technological innovation. Such investments, while revolutionizing economic development, rely on investment-facilitating environments, regulatory stability, and sound economic policies.

Looking ahead, governments need to think about how to create better investment climates, encourage financing arrangements for long-term growth, and create real opportunity for such investment-driven growth to benefit society as a whole. General strategies would both put foreign capital to its highest use and maximize national stability and its competitiveness in global economies.

Analysis and results. Central Asian countries are registering sustained development in finance, infrastructure, and industry through attracting foreign investments towards development in the economy. Central Asian countries have direct investments with a variation in each country and contribute a lot towards economic stability. According to its 2023 report, in its consideration, the most significant country in attracting investments in Central Asia is considered to be Kyrgyzstan, and 63% of overall investments have gone towards this country. Kazakhstan and Uzbekistan are the largest investors in Central Asia. In this essay, investments in Central Asia, largest investments, and economic development will be analyzed.

Out of Central Asian countries, the most significant region attraction of investments is in Kyrgyzstan with a contribution of 63%, then in Uzbekistan (24%), Kazakhstan (11%), and then in Tajikistan (2%). There is no contribution of any significant investment project in Turkmenistan. The overall value of 27 significant investment projects, under execution in Central Asia, is $1.1 billion. The regional distribution of investments can be seen in the following table:

Table 1: Investment Distribution in Central Asia

Country	Investment Share (%)	Total Investment (mln $)
Kyrgyzstan	63	693
Uzbekistan	24	264
Kazakhstan	11	121
Tajikistan	2	22
Turkmenistan	0	0

Source: Compiled by the author based on information from https://www.worldbank.org.

As much as to be understood from the information, Kyrgyzstan and Uzbekistan happen to be the centers of investment activity in Central Asia. Most investments are in mining, industrial production and financial services, a mirror image of the region's priority economic goals.

Kazakhstan and Uzbekistan are at the center of some of the biggest investment deals in the region and they also become destination countries for capital inflows. Kaz Minerals, for example, with an investment of $350 in Kazakhstan's Bozymchak gold-copper mine, makes up 32% of intra-regional investments in Central Asia.

Table 2: Largest investment projects in Central Asia

Company	Country	Project Type	Investment Volume (mln $)
Kaz Minerals	Kazakhstan	Mining	350
United Cement Group	Kazakhstan	Construction	200
National Bank	Kazakhstan	Banking	150
Vernyy Kapital (2 projects)	Kazakhstan	Banking	100
Artel	Uzbekistan	Manufacturing	80
Alliance Textile	Uzbekistan	Textiles	60

Source: Compiled by the author based on information from https://www.worldbank.org.

These have significantly influenced the industrial, banking, and infrastructure sector advancement in Central Asia. Uzbekistan's Artel, in particular, has become a dominant player in the regional home appliance market, capturing 50-70% market share of washing machines and kitchen appliances in Kazakhstan and Kyrgyzstan.

We still find ourselves at the forefront of the World Bank's 2025 projections, which indicate that Central Asia's economic growth trajectory remains strong with Uzbekistan, Tajikistan and Kyrgyzstan the regions fastest growing economies.

This table summarizes the economic growth indicators of the Central Asia countries.

Table 3: Economic Growth Indicators in Central Asia (2022-2025, forecast for 2025)

Country	2022 (%)	2023 (%)	2024 (%)	2025 (forecast) (%)
Uzbekistan	5.7	5.5	5.8	6.0
Tajikistan	4.9	5.0	5.1	5.2
Kazakhstan	3.2	3.4	3.3	3.5
Kyrgyzstan	4.3	4.6	4.5	4.8
Turkmenistan	2.8	2.9	2.9	3.1

*Source: Compiled by the author based on information from https://*www.worldbank.org.

This table shows the economic growth rates of Central Asian countries for 2022-2024 and the projected GDP growth rates for 2025. Uzbekistan has the fastest growing economy, with growth expected to reach 6.0% in 2025. Tajikistan also maintains a relatively stable growth trend, while Kazakhstan and Turkmenistan remain the slowest growing countries in the region.

Discussion. Foreign investments play a huge role in the contribution to national economies by way of enhanced production capacity, new technology, and more employment opportunities. Investments have grown in significance over the years in Central Asia, making a contribution to the modernization and development of the region. According to the 2023 report of the Eurasian Development Bank (EDB), Kyrgyzstan has been the largest recipient country in the region, while Uzbekistan and Kazakhstan have been the largest investors. Despite such encouraging trends, however, a set of challenges still hinders the full realization of investment-driven development in the region.

Foreign investment has made a considerable impact on industrial development, infrastructural development, and financial services in Central Asia. Priority sectors such as mining, energy, and manufacturing continue to attract the highest amounts of foreign investment. For example, Kaz Minerals has invested $350 million in the development of Kyrgyzstan’s Bozymchak gold-copper mine, and Uzbekistan’s Artel has expanded its operations by establishing manufacturing plants in Kazakhstan and Tajikistan. This type of investment results in increased production, greater export potential, and the provision of new jobs, which further enhances economic development in the region.

In spite of increased foreign investment inflows, Central Asian countries have several structural and policy-related constraints that dampen investment growth and its effectiveness. Most prominent among them are:

1. Geopolitical Threats – Economic and political ties with Russia, China, and the European Union in the region make investors apprehensive and make investment decisions for them challenging.

2. Inadequate Infrastructure and Transport – The remoteness of Central Asia's geography presents international investment and trade with logistical challenges, as there are underdeveloped transport networks and infrastructure within the region.

3. Weak Financial Sector – The region lacks a strong enough financial and banking sector to facilitate significant foreign investments, and this denies access to international businesses for secure financial services.

4. Limited Diversification in Industry – Investment is focused in extractive industries, such as mining, gas, and oil, with no significant investment in high-tech and innovation industries.

If these problems are not resolved then international investment in Central Asia will have limited long-term benefits. Therefore, specific policies and strategic changes should be implemented to enhance the investment climate and guarantee sustainable economic growth. Ways to Successfully Draw in Investments In order to attract foreign investment inflows and to ensure their contribution to the growth of the economy, the following strategic measures should be implemented by Central **Asian nations:**

1. Reforms to the Law and Institutions: Protect international investors within a sound legal framework. To protect investor rights, strengthen an independent judiciary. Reduce bureaucratic complexities and promote electronic governance of public services.

2. Development of Transportation and Infrastructure: Construct new highway and railroad projects in order to enhance connectivity. Expansions of regional transit networks are required for the facilitation of trade, notably through Turkmenistan, Kazakhstan and Uzbekistan.

3. Fostering Growth Through Both Technological and Innovation-Based Initiatives.

- Create an investment appeal in the IT, automation, and renewable energy sectors.

- By working with global technology firms we can build an innovation-focused startup ecosystem.

- This involves enhancing digital infrastructure and pushing forward technologies such as artificial intelligence.

4. Enhanced - Central Asian nations should be encouraged to participate in cross-border investments.

- Simplify trade regulations and optimize the customs clearance process.

- The investment drive by Uzbekistan and Kazakhstan should be used to support small and medium-sized enterprises in Kyrgyzstan and Tajikistan.

5. Advanced Financial Services - Engage with international financial institutions to increase access to funding.

- Build a stronger banking system while making more investment credit accessible.

- The process of simplifying and accelerating investment transactions should be facilitated by fintech solutions development.

Conclusion. Central Asia's Economy is Driven by Foreign Direct Investment Foreign direct investments (FDI) have subsequently played a vital role in promoting industrialization, infrastructure development and technology transfer, as the region integrates into the world economy. Kyrgyzstan, Uzbekistan, and Kazakhstan are now regional investment centers, attracting foreign capital into mining, manufacturing, and financial services. According to the 2023 report from the Eurasian Development Bank, Kyrgyzstan has a 63% share of intra-regional investments, with Uzbekistan and Kazakhstan continuing to dominate as the largest investors in the region.

Turning International investment into GDP growth, job creation and modernization of economic sectors are clear indicators of how international investments shape the economy. “In particular, Uzbekistan has emerged as one of the fastest growing economies within Europe and Central Asia, with a projected GDP growth estimated at 6% by 2025, as published by the World Bank.” Rising investments in infrastructure, logistics, as well as in high-tech industries, are contributing to greater economic diversification, lessening dependence on raw material exports.

Overall, international investment is still the key building block for Central Asian economic development. Though much has been achieved, ongoing investment in policy reforms, further investment in infrastructure, as well as promoting regional cooperation will be crucial to realizing the continent’s full economic potential. With the right management, international capital can turn Central Asia into a globally competitive economic center that ensures long-term prosperity and stability.

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РЕСПУБЛИКАМИЗДА ИННОВАЦИОН ТАДБИРКОРЛИКНИ РИВОЖЛАНТИРИШ ВА СТАРТАП ЭКОТИЗИМИНИ БАРПО ЭТИШГА ҚАРАТИЛГАН СТРАТЕГИЯЛАРНИНГ ТАҲЛИЛИ

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Аннотация: *мазкур мақолада инновацион иқтисодиётни барпо этиш, бунда инновацион тадбиркорликка қулай шарт-шароитлар яратиш, стартап экотизимини жорий этиш ҳамда инновацияларга асосланган товар/хизмат, янги технологиялар ва илмий-тадқиқот ишланмаларини яратувчи стартаплар учун мамлакатда иқтисодий ислоҳотларни амалга оширишга қаратилган муҳим қонунчилик ҳужжатларининг ўрни, уларни иқтисодий ислоҳотларни амалга оширишдаги аҳамияти ҳамда мазкур иқтисодий стратегияларнинг инновацион тадбиркорликка таъсир этиши очиб берилган. Шунингдек, мақолада мамлакатимизда инновацион тараққиётга эришиш йўлида миллий иқтисодиётмиз учун устувор ва истиқболли саналган йўналишлар кўриб чиқилган. Иқтисодий стратегияларни амалга ошириш натижасида ҳар қандай давлатнинг миллий иқтисодиётида инновацион тараққиёт учун яратиб бериладиган имкониятлар тўғрисида таҳлиллар олиб борилган.*

Муаллиф мақолада мамлакатимиз иқтисодий тараққиёт йўлини белгилаб берувчи муҳим норматив ҳужжатларнинг асосий мазмун-моҳиятига эътиборни қаратган ҳолда уларнинг келажак истиқболда барқарор ривожланиш, инновацион иқтисодиётни барпо этишга таъсири, "яшил иқтисодиёт"га ўтишда инновацион тадбиркорлик ҳамда стартап экотизими учун аҳамиятини кўрсатиб берган.

Ушбу мақолада муаллиф томонидан ўрганилган давр мобайнида мамлакатнинг инновацион иқтисодиётни ривожлантиришдаги стратегик аҳамиятга эга бўлган қонунчилик ҳужжатларининг зарурияти ва барқарор иқтисодий ўсишни таъминлашдаги ўрни батафсил ёритиб берилган.

Мақолада инновацион тадбиркорликни ривожлантиришда мамлакатда қабул қилинадиган стратегик ҳужжатларнинг иқтисодий ислоҳотларни амалга оширишдаги ўрнини ошириш ва уларни самарали жорий этишни янада такомиллаштириш борасида таклиф ва тавсиялар берилган.

Калитли сўзлар: *инновацион иқтисодиёт, инновацион тадбиркорлик, инновациялар, стартап экотизими, "яшил" технологиялар*.

Кириш. XXI асрга келиб, ривожланган ва ривожланаётган давлатларнинг иқтисодий таррақиёт йўли маълум маънода инновацион ривожланиш борасида олиб борилаётган иқтисодий ислоҳотлар, бу борадаги кенг кўламли давлат стратегиясининг самарали амалга оширилиши ҳамда унда инновацион тадбиркорлик ва янги соҳаларда рақобатқодирликка эришиш бўйича катта имкониятларни очувчи стартап экотизимининг нечоғлик тўлақонли шакллантирилишида ўз аксини топмоқда.

Бу борада мамлакатимиз Президенти Шавкат Мирзиёевнинг “бугунги кунда дунёда инновацион ғоясиз, илм-фан ютуқларисиз бironта соҳанинг ривожланиши мумкин эмас”, деган фикрлари Ўзбекистон иқтисодиётининг инновацион тараққиётга эришиш борасида давлат бош ислоҳотчи сифатида катта эътибор бераётганлигини англаб етишимиз мумкин [1].

Бугунги кунда айнан бозорда ўхшаши бўлмаган инновацион товар/хизматларнинг таклиф этилиши, кескин ўзгаришлар қилувчи технологияларнинг яратилиши, тамомила янги материаллар ҳамда янги бошқарув услуб ва ёндошувларининг тадбиркорлик соҳасида кенг жорий этилиши миллий иқтисодиётни узоқ муддатли истиқболда барқарор ривожланишига олиб келувчи ислоҳотларнинг пираворд натижаси сифатида намоён бўлмоқда.

Мамлакатимиз ҳаётининг энг муҳим жабҳалари учун юксак технологиялар, илмий ишланмалар яратиш, малакали мутахассислар тайёрлаш, жаҳон ахборот технологиялари бозорида муносиб ўрин эгаллаш масаласига устувор аҳамиятга эга вазифа сифтида қаралаётганлигини алоҳида таъкидлаб ўтиш лозим [1].

Албатта, инновацион товар/хизматлар, янги технологиялар, туб янгиликларга олиб борувчи бошқарув жараёнлари ва ёндошувларининг юзага келишига ҳар қандай давлатда инновацион тадбиркорликни қўллаб-қувватлашга қаратилган изчил стратегиялар, уни ривожантиришнинг муҳим воситаси саналган стартаплар бозори ва уларни қўллаб-қувватловчи экотизимни яратишга қаратилган иқтисодий ислоҳотларнинг мазмун-моҳияти билан изоҳлаш мумкин бўлади.

Сўнгги йилларда республикамизнинг жаҳон иқтисодиётига интеграциялашувини таъминлаш, миллий иқтисодиётнинг глобал миқёсда рақобатқодирлигини ошириш ҳамда мамлакат иқтисодиётини янги тараққиёт босқичига олиб чиқиш, инновацион иқтисодиётни ривожлантириш, шунингдек стартап экотизимини яратиш борасида Ўзбекистонда олиб борилаётган иқтисодий ислоҳотлар қатор олим ва тадқиқотчилар томонидан кўплаб илмий тадқиқот ва изланишларнинг олиб борилишига туртки берди.

Мамлакатимизнинг бугунги иқтисодий ривожланиш босқичини оладиган бўлсак, унда республикамизнинг дунё ҳамжамиятига иқтисодий

интеграциялашуви жараёнларининг жадаллашуви, инновацион тараққиёт сари иқтисодий ўсишнинг юқори суръатлар билан давом эттирилиши ҳамда мамлакатнинг иқтисодий ривожланишида стратегик усутворликка эга истиқболли йўналишларни жорий этилиши айнан 2017 йилдан бошлаб то 2024 йиллар оралиғида янги босқичга кўтарилганлигини кўришимиз мумкин.

Мазкур иқтисодий ислоҳотларда барча соҳалар ва тармоқларни қамраб олган ҳолда аввало, инновацияларни жорий этишга қаратилган ҳолда кескин ўзгаришлар ва чуқур трансформация жараёнларини амалга оширишга эътибор берилганлигини ва шу ислоҳотлар негизида барқарор иқтисодий ўсишга эришиш, инновацион ривожланишнинг истиқболли йўналишларини белгилаб олиш, кичик бизнес ва хусусий тадбиркорликка кенг йўл бериш ҳамда миллий иқтисодиёт учун инновациялар билан боғлиқ тадбиркорликнинг инновацион соҳаларини қамраб олувчи стартап лойиҳаларни кенг жорий этиш, янги товар ва хизматларни яратиш, инновацион технологиялар ва ишланмаларни ривожлантиришда ўз аксини топади.

Ўзбекистонда инновацион тадбиркорлик ва стартап экотизимига таъсир этувчи стратегиялар: жорий таҳлил.

Маълумки, давлат мамлакатнинг ижтимоий-иқтисодий ривожланишини тартибга солишда маълум ҳужжатлар ишлаб чиқади. Иқтисодиётни тартиблашнинг муҳим ҳужжатларидан бири иқтисодий ривожланишни дастурлашдир. Шунинг учун иқтисодий дастурлар бозор муносабатлари амал қилаётган шароитда давлатнинг ижтимоий такрор ишлаб чиқариш жараёнларига бевосита фаол аралашувининг асосий дастакларидан саналиб, бутун иқтисодиётни ёки унинг алоҳида соҳаларини ташкил этувчи тармоқ, ҳудуд ва кўптармоқли комплекслар ривожланиши дастурларини ишлаб чиқиш ва амалга оширишни англатади [2].

Ушбу мақола орқали 2017-2024 йиллар давомида республикамизда амалга оширилган иқтисодий ислоҳотлар борасида инновацион иқтисодиётни барпо этиш, инновацион тадбиркорликка асосланган бизнес фаолиятга кенг йўл бериш, инновация ва стартапларга асосланган янги лойиҳаларни қўллаб-қувватлашда стартап экотизимини шакллантириш бўйича зарур шарт-шароитлар яратиш учун қабул қилинган муҳим норматив-ҳуқуқий ҳужжатлар таҳлил қилиниб, бунда Ўзбекистонинг инновацион тараққиёт йўлидаги ислоҳотлар, иқтисодий стратегиялар ва устувор вазифалар кўриб чиқилади ҳамда мазкур ислоҳотлар негизида инновацион тадбиркорлик ва стартапларни ривожлантиришга қаратилган амалий чора-тадбирларнинг нечоғлик муҳим аҳамият касб этиши ёритиб берилади.

Шуни алоҳида таъкидлаб ўтиш лозимки, республикамизни 2017-2021 йилларда ривожлантиришнинг бешта устувор йўналишлари бўйича қабул

қилинган Ҳаракатлар стратегиясига мувофиқ ўтган давр мобайнида давлат ва жамият ҳаёти ҳамда иқтисодий тараққиётга эришиш борасида барча соҳаларни тубдан ислоҳ этишга қаратилган 300 тага яқин қонун ва 4 мингдан ортиқ Ўзбекистон Республикаси Президенти қарорлари қабул қилинди. Мазкур қонунчилик ҳужжатлари мамлакат миллий иқтисодиётини инновацион тараққиёт йўлига олиб чиқиш, инновацион тадбиркорлик ва стартап экотизимини ривожлантиришда кенг кўламли ислоҳотларни амалга оширилганлигидан далолат беради.

Мазкур мақолада таҳлил этилаётган давр мобайнида Ўзбекистоннинг инновацион салоҳиятини ҳар томонлама ривожлантириш, “яшил” иқтисодиётга ўтишга қаратилган ислоҳотлар, иқтисодиёт тармоқларини диверсификациялаш, хизматлар соҳасини кенгайтириш, инновацион фаолиятга кенг имкониятлар беришга қаратилган бир қатор Ўзбекистон Республикасининг Қонунлари, Президент Фармон ва қарорлари, Вазирлар Маҳкамасининг қарорлари қабул қилинганлигини инобатга олган ҳолда мақолада республикамизнинг инновацион тараққиёт йўли, унда инновацион тадбиркорлик, стартап экотизимига, шунингдек “яшил иқтисодиёт” билан боғлиқ инновацион бизнес фаолиятга кенг йўл очишда қабул қилинган энг муҳим стратегик ҳужжатларнинг аҳамияти қисқача кўриб ўтилади.

Сўнгги йилларда инновацион иқтисодиётни барпо этиш, бунда инновацион тадбиркорликни ривожлантириш ҳамда республикамизда стартап экотизимини шакллантиришга қаратилган муҳим ҳужжатлар сирасига қуйидагилар киришини алоҳида таъкидлаб ўтиш лозим:

- Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида”ги 2017 йил 7 февралдаги ПФ-4947-сонли Фармони;

- Ўзбекистон Республикаси Президентининг “2019 - 2030 йиллар даврида Ўзбекистон Республикасининг «яшил» иқтисодиётга ўтиш стратегиясини тасдиқлаш тўғрисида”ги 2019 йил 4 октябрдаги ПҚ-4477-сонли қарори;

- Ўзбекистон Республикаси Президентининг “Илм-фанни 2030 йилгача ривожлантириш концепциясини тасдиқлаш тўғрисида”ги 2020 йил 29 октябрдаги ПФ-6097-сонли Фармони;

- Ўзбекистон Республикаси Президентининг “Рақамли Ўзбекистон-2030” стратегиясини тасдиқлаш ва уни самарали амалга ошириш чора-тадбирлари тўғрисида”ги 2020 йил 5 октябрдаги ПФ-6079-сонли Фармони;

- Ўзбекистон Республикаси Президентининг “2022-2026 йилларга мўлжаллан-ган Янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида”ги 2022 йил 28 январдаги ПФ-60-сонли Фармони;

- Ўзбекистон Республикаси Президентининг “2022 - 2026 йилларда Ўзбекистон Республикасининг инновацион ривожланиш стратегиясини тасдиқлаш тўғрисида”ги 2022 йил 6 июлдаги ПФ-165-сонли Фармони;

- Ўзбекистон Республикаси Президентининг “2022-2026 йилларда Ўзбекистон Республикасининг инновацион ривожланиш стратегиясини амалга ошириш бўйича ташкилий чора-тадбирлар тўғрисида”ги 2022 йил 6 июлдаги ПҚ-307-сонли қарори;

- Ўзбекистон Республикаси Президентининг “2030 йилгача Ўзбекистон Республикасининг «яшил» иқтисодиётга ўтишига қаратилган ислоҳотлар самарадорлигини ошириш бўйича чора-тадбирлар тўғрисида”ги 2022 йил 2 декабрдаги ПҚ-436-сонли қарори;

- Ўзбекистон Республикаси Президентининг “Ўзбекистон - 2030” стратегияси тўғрисида”ги 2023 йил 11 сентябрдаги ПФ-158-сонли Фармони.

Мамлакатимизда мустақиллик йилларида амалга оширилган кенг кўламли ислоҳотларни давом эттириш ва Ўзбекистонни жаҳон иқтисодиётида ўз ўрнига эга бўлишини таъминлаш, миллий иқтисодиётни барқарор ўсишга эга инновацион тараққиёт йўналишига олиб чиқиш ва бунда инновацион тадбиркорликни ҳар томонлама қўллаб-қувватлаш Ўзбекистонни 2017-2021 йилларда ривожлантириш бўйича ҳаракатлар стратегиясида ўз аксини топди.

Мазкур Ҳаракатлар стратегияси Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида”ги 2017 йил 7 февралдаги Фармони билан қабул қилинган бўлиб, ўз ичига бешта устувор йўналишлар ва 21 та кичик йўналишларни қамраб олади.

Жумладан, 2017-2021 йилларга мўлжалланган Ҳаракатлар стратегиясининг учинчи устувор йўналиши сифатида иқтисодиётни ривожлантириш ва либераллаштириш белгиланган бўлиб, унга кўра ўтган 5 йил давомида олиб борилган иқтисодий ислоҳотлар мамлакатда иқтисодий барқарорликни таъминлаш, иқтисодиёт тармоқларини диверсификация қилиш, бизнесга қулай муҳит яратиш, инновацион экотизимни ривожлантириш орқали янги товар/хизматлар, янги технология ва ишланмаларга асосланган тадбиркорлик учун кенг имкониятларни яратишни ўз ичига олади.

Инновацион экотизими тўғрисида сўз юритганда аксарият тадқиқотчилар томонидан инновациялар учун қулай муҳитни яратувчи шарт-шароитлар назарда тутилиб, бунда унинг асосий бешта омиллар, яъни давлат ва хусусий сектор ўртасида ўзаро ҳамкорлик, инсон капиталига инвестициялар, инновацияларни молиялаштириш ва тижоратлаштиришни қўллаб-қувватлаш, инновацион бизнес маданият ва тегишли инфратузилманинг ривожланиши инновациялар пайдо бўлишига жиддий таъсир қилиши эътироф этилади [3].

Шунингдек, мазкур Ҳаракатлар стратегияси доирасида инновацион фаолият учун тадбиркорликка ва бизнесни юритишга кенг имкониятлар очиб берилди. Масалан, ўтган 2017-2021 йиллар давомида иқтисодиётнинг етакчи саноат тармоқлари бўлган тўқимачилик, электротехника, кимё, автомобильсозлик, қурилиш материаллари, кимё ва нефть-кимё саноати, қишлоқ хўжалиги машинасозлиги, энергетика саноатини ривожлантириш стратегиялари қабул қилинди.

Мазкур даврда айнан иқтисодий ислоҳотларнинг муҳим йўналиши сифатида т**аълим ва фан соҳасини ривожлантириш ҳам белгиланиб, унда** илмий-тадқиқот ва инновация фаолиятини рағбатлантириш, илмий ва инновация ютуқларини амалиётга жорий этишнинг самарали механизмларини яратиш, олий ўқув юртлари ва илмий-тадқиқот институтлари ҳузурида ихтисослаштирилган илмий-экспериментал лабораториялар, юқори технология марказлари ва технопаркларни ташкил этиш беш йилликнинг устуворликлари сифатида белгилаб қўйилди.

Инновацион фаолиятни ривожлантиришга ҳар томонлама эътибор қаратиш, олиб борилаётган ислоҳотларда инновацион тараққиётга устуворлик бериш ҳамда бунда инновацион тадбиркорликни қўллаб-қувватлайдиган инфратузилма объектларини барпо этиш борасидаги саъй-ҳаракатлар натижасида Ўзбекистоннинг Бутун жаҳон интеллектуал мулк ташкилоти томонидан юритиладиган Глобал инновациялар индексидаги (Global Innovation Index) рейтинг кўрсаткчилари 2020 йилда 29 позицияга яхшиланиб, ушбу рейтингда баҳоланадиган 131 мамлакатлар орасида 93-ўринни эгаллади. Шуни таъкидлаб ўтиш керакки, 2015 йилда республикамиз ушбу рейтингда 122-ўриндан жой олганди. Инновацион тараққиётга қаратилган ислоҳотлар самараси натижасида 2021 йилда Ўзбекистон Глобал инновациялар индексида янада юқорилаб, 86-ўринга кўтарилишга муваффақ бўлди.

Шу ўринда Ҳаракатлар стратегиясини ўтган давр мобайнида амалга ошириш борасида ҳар бир йиллар бўйича инновацион тадбиркорлик ва стартап экотизимини ривожлантиришга қаратилган ислоҳотлар амалга оширилди.

Масалан, 2018 йилда стартап экотизимини ривожлантиришга қаратилган чора-тадбирлар доирасида иқтисодиётни ривожлантириш ва фаол тадбиркорликни қўллаб-қувватлаш соҳасида кичик бизнес ва хусусий тадбиркорликни ривожлантириш учун қулай ҳуқуқий, ташкилий шароитлар яратиш, инновацион ғоялар ва технологияларни жорий қилишга эътибор қаратилди. Жумладан, инновацион лойиҳаларни фоизсиз кредитлаш ва тадбиркорлар амалга ошираётган юқори рискка эга ва ўзида инновацион ишланмаларни акс эттирган лойиҳалар учун тижорат банклари тақдим этадиган фоизларсиз кредитлашга давлат кафолатларини бериш жорий этилди.

Шунингдек, стартап экотизимини ривожлантириш, стартаплар учун қулай бизнес муҳитни яратиш бўйича 2018 йил январдан то 2023 йил 1 январга қадар юқори технологияли тадбиркорлик лойиҳалар бўлган стартапларни биргаликда молиялаштириш учун ташкил қилинадиган венчур фондлар, юқори технологияли стартаплар, илмий-тадқиқот муассасалари, инновацион марказлар, лойиҳа-конструкторлик бюролари ўзларининг янги технологияларини тадбиркорларга сотишдан олинган даромадлар бўйича ҳамда янги технологияларни тадбиркорларга трансфер қилувчи ташкилотлар бу фаолиятдан олинган даромадлари бўйича ягона ижтимоий тўловдан ташқари, барча турдаги солиқ ва мажбурий тўловлар тўлашдан озод қилинди.

Мазкур Ҳаракатлар стратегияси доирасида стартап экотизимини ривожлантириш бўйича 2021 йилдан эътиборан ёшларнинг «Бизнесга биринчи қадам» стартап ғоялари танлови доирасида ҳар бир туман ва шаҳарда камида уч нафардан ғолибга базавий ҳисоблаш миқдорининг 200 баробаригача давлат бюджетидан грантлар бериш амалиёти йўлга қўйилди.

Инновацион иқтисодиётни тараққий эттиришга қаратилган саъй-ҳаракатларда “яшил” иқтисодиётга ўтиш билан боғлиқ бўлган иқтисодий ислоҳотлар ва бунда инновацион тадбиркорликни ривожлантириш, яшил иқтисодиёт»ни ривожлантириш учун инновацион ечимларни жорий этишда кичик бизнес иштирокини оширишга эътибор қаратиш бўйича чора-тадбирлар ҳам ўз ифодасини топди.

Инновацион тараққиёт ва кичик бизнесни инновацияларга фаол жалб этишга қаратилган “яшил” иқтисодиётни жорий этиш борасидаги ислоҳотларда «яшил» технологияларни жорий этишнинг институционал асосларини ривожлантиришга катта эътибор қаратилганлигини алоҳида таъкидлаб ўтиш лозим. Бунда ислоҳотларнинг диққат-марказида «яшил» технологияларни тижоратлаштириш механизмларини ривожлантириш, «яшил» инновацияларни жорий этишда хусусий инвесторларга, жумладан кичик бизнесга кўмак кўрсатиш ҳамда инновацион фаолиятни қўллаб-қувватлаш учун ташкилий тузилмалар, яъни технологияларни етказиб бериш агентликлари, технологик бизнес-инкубаторлар, технопарклар, кластерлар яратиш давлат сиёсати учун айнан “яшил” иқтисодиёт билан боғлиқ ислоҳотларда ўтган даврлардан бошлаб 2030 йилга қадар устувор вазифа сифатида белгилаб олинди.

Жаҳон банки экспертлари томонидан ҳар қандай давлатнинг ҳукумати инновацион стратегияни ишлаб чиқишда 4 та устворликка эътибор қаратишни тақазо этишини кўрсатиб ўтиб, булар инновацион сиёсатнинг асослари ва механизмлари, уни амалга ошириш самарадорлиги, миллий инновацион тизимни жорий этишнинг изчиллиги ҳамда маълум муддатда инновацион сиёсатнинг давомийлиги ва келажакни кўра олиши билан изҳоланади [4].

Шу ўринда биз 2021 йилдан кейинги инновацион тараққиётни белгилаб берувчи, инновацион тадбиркорликка кенг шарт-шароитлар яратувчи ва стартап экотизимини ривожланишини устувор йўналишларини ўз ичига олган қуйидаги ҳужжатлар айнан Жаҳон банкининг инновацион ривожланиш стратегиясига қўйган талабларга монандлигини кўришимиз мумкин. Бунда Ўзбекистон Республикаси Президентининг “Рақамли Ўзбекистон – 2030” стратегиясини тасдиқлаш ва уни самарали амалга ошириш чора-тадбирлари тўғрисида”ги 2020 йил 5 октябрдаги ПФ-6079-сонли, “2022-2026 йилларда Ўзбекистон Республикасининг инновацион ривожланиш стратегиясини тасдиқлаш тўғрисида”ги 2022 йил 6 июлдаги ПФ-165-сонли ҳамда “Ўзбекистон - 2030” Стратегияси тўғрисида”ги 2023 йил 11 сентябрдаги ПФ-158-сонли Фармонларида инновацион иқтисодиётни барпо этиш, бунда иқтисодиётнинг инновацияга асосланган пойдеворини яратишга қаратилган бизнес муҳитни ривожлантириш ва қўллаб-қувватлаш, инновацион тадбиркорлик билан боғлиқ стартап лойиҳалар ва инновацион ишланмаларни иқтисодиётга татбиқ этишнинг мутлақо янги тузилмасини яратиш, стартап экотизимини шакллантириш, ҳамда стартап лойиҳаларни ривожлантиришда янги институционал ўзгаришларни жорий этишга қаратилган устувор вазифалар белгилаб берилди.

Хулоса.

Хулоса қилиб айтганда, инновацион тадбиркорликни ривожлантириш, стартап экотизимини шакллантириш аввало, давлат томонидан ҳар томонлама чуқур ва пухта ишлаб чиқилган иқтисодий стратегияни амалга оширишни талаб этади.

Шу ўринда Ўзбекистонни 2017-2021 йилларда ривожлантириш бўйича ҳаракатлар стратегиясини амалга оширишда мамлакатнинг иқтисодий тараққиётида эришилган ютуқлар каби 2022 - 2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегиясида белгилаб берилган устувор йўналишлар ва стратегик вазифаларни амалга ошириш миллий иқтисодиётни барқарор ўсишини таъминлаш, инновацион тадбиркорлик ва уни қўллаб-қувватловчи стратап экотизимини тўлақонли шакллантириш ва мукаммал тизим сифатида ўз функцияларини бажаришига замин яратади.

Тадқиқот натижаларига кўра, айнан инновацион тараққиётни белгилаб берувчи иқтисодий стратегияларни ўзида мужассам қилган муҳим қонунчилик ҳужжатлари мамлакатда иқтисодий ислоҳотларни изчиллик билан амалга ошириш, инновацияларга асосланган қулай бизнес муҳитни яратиш ҳамда стартап лойиҳалар учун янги товар/хизмат, инновацион технология ва ишланмаларни бозорга жадал жорий этиш ҳамда “яшил” технологияларга асосланган стартапларни қўллаб-қувватлашда янги имкониятларни пайдо қилади.

Демак, шу ўринда ҳар қандай давлат учун инновацион тадбиркорлик ва стартап экотизимини ривожлантириш борасида мавжуд муаммоларни ҳал этиш аввало, инновацияларга кенг имкониятларни яратишга қаратилган инновацион ислоҳотларни амалга ошириш, бунда тадбиркорлик учун инновацияларни кенг жорий этишнинг иқтисодий, молиявий ва ташкилий масалаларини ўз ичига олган комплекс стратегияга таянишини кўришимиз мумкин.

Иқтисодий ислоҳотларни ўз ичига олган стратегиялар орқали мамлакат миллий иқтисодиётида устувор мақсад ва вазифаларни амалга оширишда инновацион тараққиёт учун зарур бўлган иқтисодий, молиявий, ташкилий ва бошқа дастаклардан самарали фойдаланишга катта эътибор қаратиш лозим бўлади.

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10. Ўзбекистон Республикаси Президентининг “Ўзбекистон – 2030” стратегияси тўғрисида”ги 2023 йил 11 сентябрдаги ПФ-158-сонли Фармони.

YASHIL IQTISODIYOTNI RIVOJLANTIRISH JARAYONIDA XORIJIY INVESTITSIYALARNI JALB QILISH VA IQTISODIY BARQARORLIKNI TA'MINLASH MEXANIZMLARINI TAKOMILLASHTIRISH YO'LLARI

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Annotatsiya: Maqolada yashil iqtisodiyotni rivojlantirish jarayonida xorijiy investitsiyalarni jalb qilish va iqtisodiy barqarorlikni ta'minlash mexanizmlari ilmiy jihatdan tahlil qilinadi. Tadqiqotda xorijiy ilg'or mamlakatlar (Germaniya, Yaponiya, AQSh, Xitoy va Janubiy Koreya) tajribasi bilan bir qatorda O'zbekiston Respublikasining mavjud holati, muammolari va istiqbollari ham batafsil o'rganiladi. Xususan, xorijiy investitsiyalarni samarali jalb qilishning asosiy omillari aniqlanib, iqtisodiyotning barqaror rivojlanishiga ta'sir qiluvchi muhim jihatlar xalqaro amaliyot misolida tahlil qilinadi. Shuningdek, investitsiyalar oqimini rag'batlantirish, ekologik xavfsizlik va iqtisodiy barqarorlikni ta'minlash bo'yicha ilmiy asoslangan amaliy taklif va tavsiyalar ishlab chiqildi.

Kalit so'zlar: yashil iqtisodiyot, xorijiy investitsiyalar, iqtisodiy barqarorlik, ekologik xavfsizlik, investitsion muhit, iqtisodiy diversifikatsiya.

JEL: E22, F21, O13.

Hozirgi globallashuv va iqtisodiy integratsiya jarayonlari sharoitida jahon hamjamiyati oldida iqtisodiy o'sishni ekologik barqarorlik bilan uyg'unlashtirish muhim vazifa bo'lib turibdi. XX asrning ikkinchi yarmidan boshlab dunyo miqyosida ekologik muammolarning kuchayishi va tabiiy resurslarning cheklanganligi yashil iqtisodiyot konsepsiyasining shakllanishiga sabab bo'ldi. Mazkur konsepsiya, avvalo, atrof-muhit muhofazasi bilan bog'liq bo'lgan ijtimoiy-iqtisodiy rivojlanishning yangi paradigmasini belgilaydi. Bugungi kunda dunyoning ko'plab davlatlari ekologik xavfsizlik va iqtisodiy rivojlanish o'rtasida optimal muvozanatni ta'minlash uchun yashil iqtisodiyot tamoyillariga o'tishni o'zlarining uzoq muddatli rivojlanish strategiyalariga kiritganlar.

Birlashgan Millatlar Tashkiloti (BMT), Jahon banki, Xalqaro valuta jamg'armasi (XVJ) va boshqa xalqaro moliyaviy institutlar yashil iqtisodiyotni rivojlantirishni global iqtisodiy barqarorlikning asosiy sharti sifatida qarab, ushbu yo'nalishda keng ko'lamli chora-tadbirlarni amalga oshirishmoqda. Xususan, BMT tomonidan qabul qilingan Barqaror rivojlanish maqsadlarining (BRM) aksariyati aynan yashil iqtisodiyotga o'tishni ko'zda tutadi. Mazkur konsepsiya iqtisodiy faoliyat natijasida yuzaga keladigan atrof-muhitga salbiy ta'sirlarni kamaytirish, resurslardan

oqilona foydalanish, qayta tiklanuvchi energiya manbalarini rivojlantirish orqali iqtisodiyotning ekologik va ijtimoiy jihatdan barqaror rivojlanishini ta’minlashga qaratilgan.

Shu nuqtayi nazardan, yashil iqtisodiyotga o’tishda xorijiy investitsiyalarni jalb qilish juda katta strategik ahamiyatga ega. Xorijiy investitsiyalar, ayniqsa rivojlangan davlatlardan jalb qilingan mablag’lar, mamlakat iqtisodiyotiga ilg’or texnologiyalar, innovatsion boshqaruv usullari va bilimlarni olib kiradi hamda ichki resurslardan samarali foydalanishni ta’minlaydi. Bu esa, o’z navbatida, iqtisodiy barqarorlikning mustahkamlanishi, milliy raqobatbardoshlikning oshishi va iqtisodiyotni modernizatsiya qilish imkoniyatlarini yaratadi.

O’zbekiston Respublikasi ham dunyodagi mazkur tendensiyalardan chetda qolmasdan, 2019-yildan boshlab qabul qilingan “2019-2030-yillar davrida O’zbekiston Respublikasining “yashil” iqtisodiyotga o’tish strategiyasi” doirasida iqtisodiyotni ekologik barqarorlik asosida rivojlantirishni ustuvor yo’nalish sifatida belgiladi. O’zbekiston hukumati tomonidan yashil iqtisodiyotga o’tish bo’yicha belgilangan vazifalarni amalga oshirish uchun xorijiy investitsiyalar oqimini kuchaytirish choralari ko’rilmoqda. Biroq, bu yo’nalishda investitsion muhitni yanada yaxshilash va xorijiy investorlarning ishonchini qozonish yuzasidan hali ham qator muammolar mavjud bo’lib, ularni hal etish istiqbolli vazifalar qatoriga kiradi.

Zamonaviy iqtisodiy taraqqiyot jarayonlarining globallashuvi sharoitida ekologik barqarorlik va iqtisodiy o’sish o’rtasidagi muvozanatga erishish tobora dolzarb ahamiyat kasb etmoqda. XX asrning oxirgi choragi va XXI asr boshlarida ekologik muammolar kuchayishi va tabiiy resurslarning cheklanganligi yashil iqtisodiyot konsepsiyasining shakllanishiga olib keldi. Yashil iqtisodiyot tushunchasi dastlab Birlashgan Millatlar Tashkilotining Atrof-muhit dasturi (UNEP) tomonidan ilgari surilgan bo’lib, unga ko’ra yashil iqtisodiyot – ekologik xavfsizlik, iqtisodiy farovonlik va ijtimoiy tenglikni birlashtiruvchi rivojlanish modeli hisoblanadi [1]. Mazkur konsepsiya bo’yicha iqtisodiy rivojlanish nafaqat yalpi ichki mahsulot o’sishi, balki tabiat resurslaridan oqilona foydalanish, qayta tiklanuvchi energiya manbalarini rivojlantirish, chiqindilarni kamaytirish, atrof-muhit ifloslanishini oldini olish va inson salomatligini saqlash bilan ham o’lchanadi. Yashil iqtisodiyot konsepsiyasi barqaror rivojlanish tamoyillarini o’z ichiga olib, iqtisodiyotning barcha tarmoqlarida atrof-muhit va ijtimoiy omillarni iqtisodiy siyosat bilan uyg’unlashtiradi [2].

Yashil iqtisodiyot konsepsiyasining ilmiy-nazariy asoslarini ishlab chiqishda xorijlik iqtisodchilar E. Barbier, D. Pears, A. Markandya, H. Daly, T. Jakson kabi olimlarning ilmiy tadqiqotlari muhim ahamiyatga ega. Ayniqsa, Barbier yashil iqtisodiyotning asosiy tamoyillari sifatida iqtisodiy samaradorlik, ekologik yaxlitlik, ijtimoiy adolat va tenglik tamoyillarini ilgari surib, iqtisodiy siyosatni ishlab chiqishda ekologik omillarni hisobga olish zarurligini ta’kidlaydi [3].

Yashil iqtisodiyot konsepsiyasini joriy qilishning nazariy jihatdan asoslanishi BMT tomonidan qabul qilingan Barqaror rivojlanish maqsadlari (BRM) bilan ham uzviy bog‘langan. 2015-yilda qabul qilingan ushbu maqsadlar global rivojlanish siyosatining asosiy yo‘nalishi sifatida yashil iqtisodiyotga o‘tishni belgilaydi. BRMning 17 ta asosiy yo‘nalishi ichida iqlim o‘zgarishiga qarshi kurash, qayta tiklanuvchi energiyani kengaytirish, barqaror sanoatlashtirish va ekologik infratuzilmani yaratish kabi maqsadlar yashil iqtisodiyotning muhim yo‘nalishlarini belgilaydi [4].

Shuningdek, yashil iqtisodiyot konsepsiyasini amalga oshirishda Jahon banki va Xalqaro valuta jamg‘armasi kabi xalqaro moliyaviy institutlar ham faol qatnashmoqda. Ushbu tashkilotlar tomonidan ekologik jihatdan xavfsiz va barqaror loyihalarni moliyalashtirish uchun alohida moliyaviy vositalar va dasturlar ishlab chiqilmoqda. Masalan, Jahon banki tomonidan taklif qilingan “Yashil rivojlanishni moliyalashtirish mexanizmlari” dunyoning turli davlatlarida yashil iqtisodiyot tamoyillarini joriy qilish uchun muhim ahamiyat kasb etmoqda [5].

1-jadval. Xorijiy investitsiyalarni jalb qilish orqali yashil iqtisodiyot rivojlanishining iqtisodiy barqarorlikka ta’siri

№	Iqtisodiy barqarorlik ko‘rsatkichlari	Xalqaro ilg‘or davlatlar tajribasi (AQSh, Germaniya, Yaponiya)
1	**YaIM o‘sishi va tarkibining diversifikatsiyasi**	- AQSh va Germaniyada yashil iqtisodiyotga investitsiyalar YaIMni o‘rtacha yillik 2-3 foiz oshirgan. - Yaponiyada YaIM tarkibida yashil texnologiyalar ulushi 20 foizgacha yetgan.
2	**Bandlikning oshishi va yangi ish o‘rinlari yaratish**	- Germaniyada qayta tiklanuvchi energiya sohasida 350 mingdan ortiq yangi ish o‘rinlari yaratildi - AQShda yashil iqtisodiyot sektorlarida 154nergeti 10 yilda 1 mln kishiga oshgan.
3	**Xorijiy savdo balansining yaxshilanishi**	- Germaniya va Yaponiya yashil texnologiyalar eksportidan yiliga o‘rtacha 50 mlrd dollargacha daromad olmoqda.
4	**Energiya mustaqilligi va xavfsizligining ta’minlanishi**	- Yaponiya va Germaniyada qayta tiklanuvchi energiya ulushi 40% dan oshib, energiya xavfsizligi oshgan. - AQShda 154nergetic mustaqillik ko‘rsatkichi 30 foiz yaxshilangan.
5	**Ekologik barqarorlik va tabiiy resurslardan samarali foydalanish**	- Germaniya va Yaponiyada ekologik ifloslanish darajasi 10 yilda 25 foizga kamaygan. - AQShda yashil iqtisodiyot loyihalari tufayli ekologik zararlar 15 foizga qisqargan.
6	**Innovatsiyalar va texnologik rivojlanish sur’ati oshishi**	- Yaponiya va AQSh yashil texnologiyalar va innovatsiyalar bo‘yicha yetakchi bo‘lib, patentlar soni bo‘yicha dunyo reytingida yuqori o‘rinlarni egallaydi.

Manba: Muallif tomonidan ilmiy tadqiqotlar natijasida tayyorlandi

Tahlillardan kelib chiqib xulosa qilinsa, rivojlangan mamlakatlar tajribasiga ko‘ra yashil iqtisodiyotga xorijiy investitsiyalarni jalb qilish iqtisodiy o‘sish, bandlikning ortishi, eksport salohiyati va ekologik barqarorlikning ta’minlanishiga olib kelmoqda. O‘zbekiston ham mazkur yo‘nalishlarda, xususan, energiya mustaqilligini

oshirish, yangi ish o‘rinlarini yaratish, innovatsion texnologiyalarni rivojlantirish orqali iqtisodiy barqarorligini mustahkamlash imkoniyatiga ega. Buning uchun mamlakatda moliyaviy mexanizmlarni tezkorlik bilan takomillashtirish lozim.

2023-yilning yanvar-dekabr oylarida O‘zbekiston Respublikasida iqtisodiy va ijtimoiy sohalarni rivojlantirish, shu jumladan yashil iqtisodiyotga o‘tish va iqtisodiy barqarorlikni ta’minlashga qaratilgan jami kapital qo‘yilmalarning hajmi 352,1 trillion so‘mni tashkil etib, bu ko‘rsatkich 2022-yilga nisbatan 122,1 foizga oshganligi qayd etildi. Ushbu holat mamlakatda investitsion muhitning yaxshilanayotganligi va yashil iqtisodiyot yo‘nalishida investitsiyalarni diversifikatsiya qilish jarayoni faollashganligini ifodalaydi.

Kapital qo‘yilmalar tarkibida davlat resurslari bilan bir qatorda xususiy va xorijiy investitsiyalarning ulushi ham salmoqli darajaga yetdi. Xususan, Respublika davlat budjeti hisobidan moliyalashtirilgan kapital qo‘yilmalar hajmi 20,4 trillion so‘mni, Tiklanish va taraqqiyot jamg‘armasi mablag‘lari esa 1,6 trillion so‘mni tashkil etdi. Korxonalarning o‘z mablag‘lari hisobiga kiritilgan investitsiyalar hajmi 84,9 trillion so‘mni yoki jami investitsiyalarning 24,1 foizini tashkil qilishi ichki investitsion salohiyatning yuqori ekanligini hamda korxonalarning yashil iqtisodiyotga yo‘naltirilgan loyihalarga qiziqishlari ortib borayotganini ko‘rsatadi.

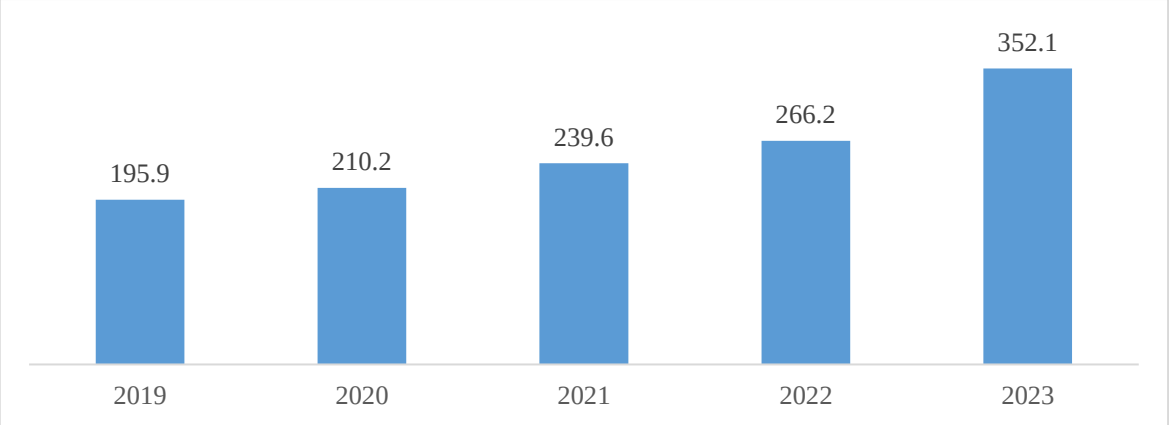
To‘g‘ridan-to‘g‘ri xorijiy investitsiyalar hajmining 84,3 trillion so‘mga yetishi esa mamlakatda xorijiy investitsion muhitning sezilarli darajada yaxshilanib borayotganligidan dalolat beradi. Bu omil yashil iqtisodiyotni rivojlantirish jarayonida xorijiy investorlarning mamlakatga bo‘lgan ishonchi oshganligini va xorijiy investitsiyalar orqali innovatsion texnologiyalarni joriy qilish, ekologik toza sanoat tarmoqlarini rivojlantirish imkoniyatlarini yaratishini anglatadi.

Davlat kafolati ostida jalb qilingan xorijiy kreditlar hajmi 21,2 trillion so‘mni tashkil etishi ham yashil iqtisodiyot loyihalarini amalga oshirish va ekologik xavfsizlikni ta’minlashda xorijiy moliyaviy resurslarning rolini kuchaytiradi. Shu bilan bir qatorda, tijorat banklari tomonidan ajratilgan kreditlar va boshqa qarz mablag‘larining hajmi 22,3 trillion so‘mga yetib, bu holat bank-moliya tizimining yashil loyihalarni moliyalashtirishdagi ahamiyatini ko‘rsatmoqda.

Infratuzilmani modernizatsiya qilish, xususan, suv ta’minoti va kanalizatsiya tizimlarini rivojlantirish uchun kiritilgan kapital qo‘yilmalar hajmi 1,7 trillion so‘mni tashkil etishi atrof-muhit barqarorligini ta’minlash borasidagi chora-tadbirlarning amaliy ifodasi sifatida baholanishi mumkin. Kafolatlanmagan xorijiy investitsiyalar va boshqa xorijiy kreditlar mablag‘larining hajmi 82,4 trillion so‘mga yetishi esa xalqaro kapital oqimlarining mamlakat yashil iqtisodiyoti uchun tobora muhim ahamiyat kasb etayotganligini ko‘rsatadi.

Aholi tomonidan iqtisodiyotga jalb qilingan investitsiyalarning hajmi 33,3 trillion so‘mga yetishi ham mamlakatda ichki moliyaviy imkoniyatlarning yuqori

ekanligini, aholi ishtirokining kuchayishini hamda yashil iqtisodiyotning rivojlanishiga keng aholi qatlamlarini jalb qilish zaruriyatini ta’kidlaydi.



1-rasm. Asosiy kapitalga investitsiyalarning hajmi dinamikasi, trillion. so‘m

Manba: www.stat.uz *ma’lumotlari asosida muallif tomonidan tayyorlandi.*

1-rasmdagi tahliliy natijalar O‘zbekistonda yashil iqtisodiyotga o‘tishda xorijiy investitsiyalarni jalb qilish va iqtisodiy barqarorlikni ta’minlash bo‘yicha amalga oshirilayotgan chora-tadbirlar samarali ekanligini ko‘rsatmoqda. Investitsiyalar hajmining 2019-yildagi 195,9 trillion so‘mdan 2023-yilda 352,1 trillion so‘mga yetishi mamlakatda investitsion muhit yaxshilanib, yashil iqtisodiyot yo‘nalishidagi loyihalarga bo‘lgan talab va qiziqish oshganligidan dalolat beradi. Ushbu tendensiyani davom ettirish orqali mamlakat iqtisodiyotini ekologik barqaror va innovatsion rivojlanish yo‘liga yo‘naltirish mumkin. Bu esa, o‘z navbatida, yashil iqtisodiyotga yo‘naltirilgan investitsiyalarni rag‘batlantirish mexanizmlarini yanada takomillashtirish lozimligini bildiradi.

Tadqiqot natijalari shuni ko‘rsatadiki, yashil iqtisodiyotni rivojlantirish jarayonida xorijiy investitsiyalarni jalb qilish O‘zbekistonning iqtisodiy barqarorligini ta’minlashda strategik ahamiyat kasb etadi. Ushbu yo‘nalishda quyidagi asosiy takliflarni ilgari suramiz:

Birinchidan, xorijiy investorlar uchun yashil iqtisodiyot loyihalariga oid soliq va bojxona imtiyozlarini kengaytirish hamda moliyaviy subsidiyalar tizimini yaratish zarur. Bu esa yashil iqtisodiyotga yo‘naltirilgan kapital oqimini oshiradi va iqtisodiy barqarorlikni mustahkamlaydi.

Ikkinchidan, yashil iqtisodiyotni rivojlantirish bo‘yicha maxsus qonunchilik bazasini ishlab chiqish va tegishli davlat organlari o‘rtasida institutsional muvofiqlashtirish mexanizmlarini joriy qilish talab etiladi. Mazkur chora-tadbir yashil iqtisodiyotni samarali rivojlantirish va xorijiy investorlar ishonchini mustahkamlash uchun muhim omil bo‘ladi.

Uchinchidan, yashil texnologiyalarni rivojlantirishga yo‘naltirilgan ilmiy-innovatsion klasterlar va texnologik parklarni tashkil qilish zarur. Ushbu mexanizm

yuqori texnologik investitsiyalar jalb qilinishiga, mahalliy ishlab chiqarish va eksport salohiyatining oshishiga xizmat qiladi.

To‘rtinchidan, xalqaro moliyaviy institutlar va yashil iqtisodiyot sohasidagi yetakchi xorijiy tashkilotlar bilan integratsiyani kengaytirish hamda xalqaro moliyaviy fondlarning mablag‘larini jalb qilish lozim. Bu orqali yashil iqtisodiyot loyihalarini moliyalashtirish salohiyatini oshirish va iqtisodiyotning ekologik barqarorligini ta’minlash mumkin.

Xulosa qilib aytganda, yuqorida ilgari surilgan chora-tadbirlarning amaliyotga joriy etilishi mamlakatda yashil iqtisodiyot tamoyillari asosida barqaror iqtisodiy taraqqiyotni ta’minlash, ekologik xavfsizlikni mustahkamlash hamda ijtimoiy farovonlik darajasini yanada oshirish uchun muhim omil bo‘lib xizmat qiladi.

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ҚИММАТЛИ ҚОҒОЗЛАР БОЗОРИДА БАНК ОПЕРАЦИЯЛАРИНИНГ САМАРАДОРЛИГИНИ ОШИРИШ СТРАТЕГИЯЛАРИ

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Аннотация: Мақолада Ўзбекистон Республикаси қимматли қоғозлар бозорида банк операцияларини такомиллаштиришнинг назарий-методологик асослари ва амалий жиҳатлари атрофлича тадқиқ қилинган. Замонавий молия бозорида банкларнинг воситачилик функциялари, инвестицион стратегиялари ҳамда рискларни бошқариш механизмлари илмий-назарий ёндашувлар асосида таҳлил этилган. Шу билан бирга, тижорат банклари томонидан молиявий барқарорликни таъминлаш, инвестиция фаоллигини рағбатлантириш ҳамда молиявий рискларни минималлаштиришга қаратилган операцияларни такомиллаштиришнинг асосий йўналишлари ва стратегик истиқболлари ёритилган. Мақолада Ўзбекистондаги банклар амалиёти халқаро тажриба билан қиёсий таҳлил қилиниб, миллий қимматли қоғозлар бозорида банкларнинг фаол иштирокини кенгайтириш бўйича аниқ илмий-амалий тавсиялар ишлаб чиқилган.

Калит сўзлар: қимматли қоғозлар бозори, банк операциялари, молиявий барқарорлик, инвестиция фаоллиги, рискларни бошқариш, молиявий воситачилик, капитал бозори, инвестицион стратегиялар.

JEL таснифлаш кодлари: G21, G23, G32.

Банк тизими иқтисодий ўсишни рағбатлантириш ва таъминлашда муҳим институционал тузилмалардан бири бўлиб, улар иқтисодиётда молиявий ресурсларни самарали тақсимлаш, маблағларни аккумуляция қилиш ҳамда инвестицион жараёнларни фаоллаштириш вазифаларини бажаради. Банклар иқтисодий фаолиятни молиявий ресурслар билан таъминлаш, кредитлаш механизмларини такомиллаштириш ва самарали инвестицион стратегияларни амалга ошириш орқали иқтисодий тизимнинг барқарор ривожланишига ҳал қилувчи таъсир кўрсатади. Шу билан бирга, улар жамғарма маблағларни тўплаш ва самарали бошқариш орқали иқтисодий ўсиш суръатларини тезлаштиришда фаол иштирок этади.

Қимматли қоғозлар бозори иқтисодиётда капитал оқимларини бошқариш, молиявий воситаларни диверсификация қилиш ва инвестиция имкониятларини кенгайтиришда асосий институционал платформа сифатида хизмат қилади. У эмитент ва инвесторлар ўртасидаги воситачилик вазифасини бажариб, капитал ресурсларнинг оптимал тақсимланишига ёрдам беради ҳамда умумий иқтисодий барқарорликни таъминлашга хизмат қилади. Мазкур бозорда банклар фаол

иштирокчи сифатида ўз ресурсларини мақсадли бошқариш, ликвидликни таъминлаш ва рискларни диверсификация қилиш имкониятига эга бўлади. Биржа савдоларида банкларнинг иштироки молиявий барқарорликни мустаҳкамлаш билан бирга, активлар портфелининг оптимал шаклланишига ва рискларни камайтиришга имкон яратади.

Шунингдек, қимматли қоғозлар бозорида банкларнинг фаол иштироки қўшимча даромад оқимларини шакллантириб, даромад базасини кенгайтириш имкониятини беради. Хусусан, комиссия даромадлари ва фоизли тушумларнинг ортиши банкларнинг инвестиция портфелини кенгайтиришга хизмат қилади ва шу орқали банк тизимининг молиявий барқарорлигини оширишга ҳисса қўшади.

Қимматли қоғозлар бозоридаги банк операцияларини оптималлаштириш учун турли назарий моделлар ва стратегик ёндашувлар мавжуд бўлиб, уларнинг энг муҳимлари молиявий воситачилик назарияси, ресурсларни тақсимлаш назарияси ва рискларни бошқариш назариясидир. Ушбу назариялар банкларнинг молиявий бозорларда ликвидликни сақлаш, рискларни минималлаштириш ва инвестицион имкониятларни кенгайтиришдаги роли ва аҳамиятини илмий жиҳатдан асослаб беради. Бу, ўз навбатида, иқтисодий ресурслардан самарали фойдаланиш ҳамда умумий иқтисодий тараққиётни рағбатлантиришга хизмат қилади.

Шу билан бирга, банкларнинг қимматли қоғозлар бозоридаги иштирокини янада такомиллаштириш учун технологик инновациялар ва меъёрий-ҳуқуқий базани такомиллаштириш бўйича аниқ стратегияларни амалга ошириш муҳимдир. Хусусан, рақамли ва молиявий технологияларнинг жорий этилиши банк хизматларининг самарадорлигини ошириб, мижозларга хизмат кўрсатиш сифатини янада яхшилаш имконини беради. Бундан ташқари, норматив-ҳуқуқий базанинг такомиллашуви банкларнинг молиявий бозорлардаги операцияларини соддалаштириш, шаффофликни ошириш ва молиявий барқарорликни таъминлаш учун зарур шароитларни яратиб беради.

1-жадвалда банкларнинг қимматли қоғозлар бозоридаги иштироки ҳамда ушбу бозор орқали уларнинг кенг иқтисодиётга кўрсатадиган таъсири назарий моделлар асосида умумлаштирилган ҳолда акс эттирилган. Ҳар бир назарий ёндашув банкларнинг қимматли қоғозлар бозоридаги хатти-ҳаракатларининг ўзига хос жиҳатларини илмий жиҳатдан асослаб, ушбу молия бозоридаги операцияларни такомиллаштириш ва уларнинг иқтисодий самарадорлигини ошириш учун назарий-амалий асос вазифасини бажаради.

1-жадвал. Банкларнинг қимматли қоғозлар бозоридаги ролини изохловчи назариялар тахлили

Назария	Асосий ғоялар	Банкларнинг роли	Манбалар
Бошқарув назарияси	Банклар инвесторлар ва эмитентлар ўртасида воситачи сифатида хизмат қилади. Бу агентлик харажатларини камайтириш ва информацион асимметрияни бартараф этишга ёрдам беради.	Эмитентлар номидан қимматли қоғозларни чиқариш, тарқатиш ва сотиш. Инвесторлар учун ишончли маълумот манбаи.	Женсен & Месклинг [1]
Ресурслар назарияси	Банкларнинг ички ресурслари ва қобилиятлари бозорнинг ликвидлигини таъминлаш ва инвестиция портфелини кенгайтиришда мухим рол ўйнайди.	Молиявий ресурслар, инсон капитали ва технологик имкониятлар орқали қимматли қоғозлар бозорида фаолият юритиш.	Барней [2]
Молиявий воситачилик назарияси	Банклар маблағларни тежаш ва инвестиция қилиш жараёнларини осонлаштирувчи воситачилар сифатида хизмат қилади.	Эмитентлар ва инвесторлар ўртасида воситачилик. Инвесторлар учун рискларни камайтириш ва ликвидликни таъминлаш.	Диамонд & Дйбви [3]
Инновацион назария	Технологик янгиликларни жорий этиш орқали банкларнинг операцион самарадорлигини оширади.	Замонавий технологияларни қўллаш, янги махсулотлар ва хизматлар яратиш.	Счумпетер [4]
Риск бошқариш назарияси	Банклар қимматли қоғозлар бозорида рискларни бошқариш орқали хавфсиз ва ишончли инвестиция мухитини яратади.	Рискларни диверсификация қилиш ва бошқариш. Рискларни бахолаш ва минималлаштириш учун илғор усулларни қўллаш.	Фроот, Счарфстеин, & Стеин [5]
Ижтимоий масъулият назарияси	Банклар ижтимоий ҳамда экологик масалаларга эътибор қаратиш орқали барқарор ривожланишга ҳисса қўшади.	Ижтимоий масъулиятли инвестицияларни рағбатлантириш, ижтимоий ва экологик манфаатларни мувозанатлаштириш.	Сарролл [6]
Қайта молиялаш назарияси	Ресурсларни қайта тақсимлаш ва молиявий барқарорликни таъминлашда банкларнинг роли.	Қимматли қоғозлар чиқариш ва уларни қайта сотиб олиш орқали ресурсларни бошқариш.	Модиглиани & Миллер [7]

Манба: муаллиф томонидан тайёрланди

Ўзбекистон Республикаси шароитида қимматли қоғозлар бозори ривожини қўллаб-қувватлаш ва унинг иқтисодиётдаги ролини ошириш учун тижорат банкларининг бозордаги иштироки ва фаоллигини кенгайтириш муҳим аҳамият касб этади. Бунинг учун қимматли қоғозлар бозорида банкларнинг инвестицион фаоллигини оширишга қаратилган комплекс чора-тадбирлар ва институционал стратегияларни амалга ошириш талаб этилади. Мазкур ёндашув банкларнинг молиявий ресурсларини самарали бошқариш, иқтисодий ўсиш суръатларини рағбатлантириш ва мамлакат молиявий барқарорлигини таъминлашга хизмат қилади.

2-жадвал. Ўзбекистон қимматли қоғозлар бозорида тижорат банкларининг тутган ўрни

Кўрсаткич-лар	*01.01.2018 й.*		*01.01.2019 й.*		*01.01.2020 й.*		*01.01.2021 й.*		*01.01.2022 й.*	
	млрд. сумда	*% да*	*млрд. сумда*	*% да*	*млрд. сумда*	*% да*	*млрд. сумда*	*% да*	*млрд. сумда*	*% да*
Жами биржа савдолари хажми	161	100	299,8	100	298,6	100	687,3	100	438,8	100
Банклар	141,4	87,8	151,7	50,6	257,6	86,3	591	86	319,5	72,8

Манба: муаллиф томонидан тайёрланди

Сўнгги йилларда Ўзбекистон Республикасининг қимматли қоғозлар бозорида тижорат банкларининг роли ва фаолиятида сезиларли динамик ўзгаришлар кузатилмоқда. Жумладан, 2018-йилда банкларнинг биржа савдоларидаги улуши 87,8 фоизни ташкил қилган бўлса, 2019-йилга келиб ушбу кўрсаткич 50,6 фоизгача кескин пасайган. Бироқ 2020-йилда банклар бозордаги ўз иштирокини қайта тиклаб, савдоларнинг 86,3 фоизини ташкил этди ва бу тенденция 2021-йилда ҳам сақланиб қолиб, банкларнинг бозор улуши 86 фоиз даражасида қайд этилган. Аммо 2022-йилда мазкур кўрсаткич 72,8 фоизгача пасайиб кетганлиги кузатилди.

Ушбу динамик ўзгаришлар бир қатор ички ва ташқи омиллар, хусусан, миллий қимматли қоғозлар бозорининг ривожланиш даражаси, макроиқтисодий шароитлар, давлат сиёсати ўзгаришлари ҳамда тижорат банкларининг инвестицион стратегиялари билан боғлиқ бўлиши мумкин. 2020-2021 йилларда банклар томонидан инвестицион фаолиятга кучайтирилган эътибор қаратилиши уларнинг бозордаги иштирокининг тикланишига сабаб бўлди. Лекин 2022-йилда банклар бозордаги ролининг пасайиши, эҳтимол, уларнинг инвестицион стратегияларидаги ўзгаришлар ёки фонд бозорида бошқа молиявий институтлар ролининг ошганлиги билан боғлиқ бўлиши мумкин.

Шуни таъкидлаш лозимки, Ўзбекистон банкларининг миллий қимматли қоғозлар бозоридаги иштироки юқори даражада бўлишига қарамасдан, бу кўрсаткич халқаро амалиётга нисбатан етарли эмас. Ривожланган хорижий

давлатлар тажрибасига назар ташласак, АҚШ, Германия, Япония каби мамлакатлардаги банклар қимматли қоғозлар бозорида юқори улушга эга бўлиб, улар инвестицион портфелларини юқори даражада диверсификация қилади ва жадал инвестицион фаолиятни амалга оширади. Шунингдек, Россия ва Қозоғистон каби айрим МДҲ мамлакатларининг банклари ҳам давлат ва корпоратив облигациялар ҳамда бошқа молиявий инструментларга инвестиция киритиш орқали бозорда сезиларли фаоллик кўрсатмоқда.

Хорижий тажрибани ҳисобга олган ҳолда, Ўзбекистон банклари ҳам ўзининг қимматли қоғозлар бозоридаги иштирокини янада кенгайтиришлари, инвестиция портфелларини диверсификация қилишлари ва замонавий молиявий инструментлардан кенг фойдаланишлари лозим. Бунда хорижий банкларнинг илғор амалиётларини ўрганиш, замонавий инвестицион стратегияларни жорий этиш ҳамда норматив-ҳуқуқий муҳитни янада такомиллаштириш долзарб вазифалардан бири бўлиб қолмоқда. Бу эса, ўз навбатида, мамлакатнинг молиявий барқарорлигини ошириш ва иқтисодий ўсишни рағбатлантиришда муҳим аҳамият касб этади.

3-жадвал. 2022 йилда Ўзбекистон молия бозорида тижорат банклари фаолияти натижалари

Соха	Битимлар сони дона	Қимматли қоғозлар сони, дона
Агросаноат	1,167	26,798,365
Банклар	26,042	3,483,679,451
Лизинг	37	16,287
Саноат	21,247	5,695,260
Бошқалар	10,574	1,629,626,626
Алоқа	327	22,539
Суғурта	2,586	30,996,280,411
Қурилиш	14,628	10,254,180
Транспорт	84	82,573
Энергетика	4,031	2,304,490

Манба: муаллиф томонидан тайёрланди

Юқоридаги жадвал маълумотлари асосида, 2022 йилда Ўзбекистон Республикаси қимматли қоғозлар бозорида турли тармоқлар бўйича амалга оширилган битимлар ҳажмини ва бозордаги иштирокчилар фаоллигини таҳлил қилиш мумкин. Банк сектори мазкур бозорда энг юқори фаоллик кўрсатиб, умумий савдо ҳажмининг 47,94 фоизини эгаллаган ҳолда, битимларнинг умумий қиймати 2,31 трлн сўмга етган. Банклар томонидан жами 26,042 та битимнинг амалга оширилиши уларнинг бозордаги етакчи ўрнини янада тасдиқлайди. Бу ҳолат банк тизимининг қимматли қоғозлар бозоридаги инвестицион ва эмиссион фаолиятини кенгайтириш билан бирга, мамлакат молиявий барқарорлигини мустаҳкамлашга ҳам муҳим ҳисса қўшаётганлигини кўрсатади.

Қурилиш соҳаси ҳам қимматли қоғозлар бозоридаги йирик иштирокчилардан бири бўлиб, ушбу сектор бўйича битимлар ҳажми 1,92 трлн сўмни ташкил этган ва бу кўрсаткич умумий биржа савдо ҳажмининг 39,96 фоизи билан белгиланган. Қурилиш соҳаси бўйича жами 14,628 та битим амалга оширилган бўлиб, ушбу кўрсаткич соҳанинг қимматли қоғозлар бозорида фаол инвестиция жалб қилаётгани ва бу орқали иқтисодий ўсишга кўмаклашаётганидан далолат беради.

Агросаноат секторида эса жами 1,167 та битим қайд этилган бўлиб, уларнинг савдо ҳажми 237,93 млрд сўмга тенг бўлган. Ушбу сектордаги битимлар аграр соҳанинг молиявий ресурслардан фойдаланиш имкониятларини кенгайтириб, қишлоқ хўжалиги ва озиқ-овқат хавфсизлиги масалаларини ҳал қилишда муҳим аҳамият касб этади.

Шу билан бирга, бошқа тармоқларда амалга оширилган 10,574 та битимнинг савдо ҳажми 169,31 млрд сўмга етганлиги бу соҳаларнинг ҳам қимматли қоғозлар бозоридаги иштирокининг ортиб бораётганини ва бунинг мамлакат иқтисодий ривожланишига ижобий таъсир кўрсатаётганини билдиради. Бундай ҳолат мамлакатда қимматли қоғозлар бозорининг янада диверсификацияланиши ва бу орқали иқтисодиётнинг барқарор ўсишига хизмат қилаётганлигидан далолат беради.

Юқоридаги тахлиллар асосида Ўзбекистон тижорат банкларининг қимматли қоғозлар бозоридаги фаолиятини ошириш ва уларнинг самарали иштирокини таъминлаш учун қуйидаги стратегик йўналишларда чуқур иш олиб бориш тавсия этилади:

Норматив-ҳуқуқий базани такомиллаштириш: Тижорат банкларининг қимматли қоғозлар бозоридаги фаолиятини тартибга солувчи амалдаги қонун ва меъёрий ҳужжатларни кўриб чиқиш ва замон талабларини қондириш учун янгилаш керак. Бу жараён банклар учун қулай хуқуқий мухит яратишга ёрдам беради ва уларнинг бозордаги фаолиятини фаоллаштиради.

Ўз-ўзини мувофиқлаштирувчи ташкилотларнинг ролини кучайтириш: Ўз-ўзини мувофиқлаштирувчи ташкилотларнинг ваколатларини кенгайтириш ва назорат функсияларини мустахкамлаш орқали қимматли қоғозлар бозорида шаффофлик ва адолатлиликни таъминлаш мумкин.

Бизнинг тадқиқотимиз натижалари Ўзбекистон банкларининг қимматли қоғозлар бозоридаги фаолиятини кенгайтириш ва оптималлаштиришнинг мухим йўналишларини белгилаб берди. Молиявий маълумотларни чуқур таҳлил қилиш асосида ўтказилган тадқиқотда тижорат банкларининг фонд бозорининг айнан шу секторидаги фаолиятини кенгайтириш ва тартибга солиш муҳимлиги таъкидланди. Меъёрий-ҳуқуқий базани такомиллаштириш, шунингдек, корпоратив бошқарув амалиётини модернизатсия қилиш самарали ҳамкорликни

таъминлашда муҳим аҳамият касб этади. Ушбу ўзгаришларнинг амалга оширилиши банкларнинг бозордаги мавқеини оширади ва молиявий барқарорлигини таъминлайди.

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KOMPANIYALARDA YASHIL BUXGALTERIYA HISOBINI TAKOMILLASHTIRISH YO'LLARI

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Annotasiya Ushbu maqola, shuningdek, yashil buxgalteriya tushunchasi va ahamiyatini tushunishga qaratilgan. Atrof-muhit doimiy boylik emasligi va insoniyat tabiat bilan uyg'unlikda yashash san'atini kashf etishi kerakligini anglash kuchayib bormoqda. Global isish insoniyatning omon qolishi uchun katta tahdidga aylanib borayotgan bir paytda, iqtisodiy rivojlanish va atrof-muhitni muhofaza qilishning to'g'ri muvozanatlanishi barcha manfaatdor tomonlar tomonidan asta-sekin e'tirof etilmoqda. Ma'lum bo'ldiki, jadal sanoatlashtirish iqtisodiy taraqqiyotga ijobiy ta'sir ko'rsatsa-da, lekin u dunyoning tabiiy ekologik muvozanatiga ham jiddiy tahdid solmoqda. Ushbu maqolaning asosiy maqsadi yashil buxgalteriya hisobi bo'yicha mavjud adabiyotlarni o'rganish va tahlil qilish va u ustida ishlagan turli mutaxassislar tomonidan qanday o'rganilganligi va baholanganligini tushunishdir.

Kalit so'z: yashil buxgalteriya, atrof-muhitni muhofaza qilish, barqarorlik hisobi, atrof-muhit hisobi, barqaror buxgalteriya, yashil buxgalteriya hisobi

Kirish. Yashil buxgalteriya atrof-muhitni muhofaza qilish faoliyatining iqtisodiy samaradorligini va umuman kompaniyalarning biznes faoliyatining ekologik samaradorligini o'lchash vositasi sifatida ishlashi kerak. Rahbariyat kamdan-kam hollarda atrof-muhitni saqlash uchun tegishli choralarni ko'rishga harakat qiladi, agar qonun talab qilmasa, investitsiyalar va foyda o'rtasida to'g'ridan-to'g'ri bog'liqlik yo'q. Ko'pgina kontekstlarda yashil buxgalteriya firma mahsuloti va jarayonlarini o'zgartirish natijasida kelib chiqadigan har qanday xarajatlar va foydalarni aniqlash va hisobot berishni anglatadi, bunda o'zgarish atrof-muhitga ta'sir qiladi.

Mikro darajada, biznes korxonalari korxonalarning muvaffaqiyati uchun tabiiy resurslarning tugashini yoki atrof-muhitning xarajatlarini hisobga olmaydilar. Garchi amortizatsiya hisobiga texnogen resurslarning kamayishini qayd etish an'anasi mavjud. Shunga qaramay, an'anaviy hisobot usullarida ekologik xarajatlar hisobga olinmaydi. Umuman olganda, biznes korxonalari ekologlar, hukumat va uning idoralari, biznes firmalarining raqobatchilari, jamiyat, xodimlar va mijozlar tomonidan atrof-muhitga javobgarlik talablari ortib borayotgan bosimga duch kelmoqda.

Atrof-muhit muammolarini muvozanatlash va atrof-muhit bilan bog'liq xarajatlar haqida hisobot berish uchun biznes korxonalariga bosim kuchayishi bilan yangi atama paydo bo'ldi, "Yashil buxgalteriya" yoki "Ekologik hisob". Yashil

buxgalteriya kontseptsiyasi nafaqat akademik, balki hukumat, biznes jamiyati, ijtimoiy va atrof-muhit faollari tomonidan ham katta qiziqish uyg'otmoqda. Atrof-muhit hisobi atamasi 1980-yillarda professor Piter Vud tomonidan kiritilgan. Yashil buxgalteriya buxgalteriya hisobining bir turi bo'lib, atrof-muhit xarajatlarini faoliyatning moliyaviy natijalariga kiritishga harakat qiladi. Yalpi ichki mahsulot atrof-muhitga e'tibor bermasligi va shuning uchun siyosatchilar yashil buxgalteriya hisobini o'z ichiga olgan qayta ko'rib chiqilgan modelga muhtojligi ta'kidlangan.

Yashil buxgalteriya hisobining asosiy maqsadi korxonalarga an'anaviy iqtisodiy maqsadlar va atrof-muhit maqsadlari o'rtasidagi potentsial kvid pro-kvoni tushunish va boshqarishga yordam berishdir. Bu, shuningdek, siyosat masalalarini tahlil qilish uchun mavjud bo'lgan muhim ma'lumotlarni oshiradi, ayniqsa, bu muhim ma'lumotlar ko'pincha e'tibordan chetda qolsa. [7]

Yashil buxgalteriya hisobi yoki atrof-muhit buxgalteriyasi milliy daromadni hisoblashda mamlakatning tabiiy resurs bazasining kamayishi va etkazilgan zararni hisobga oladi. Yashil buxgalteriya - bu korxonalarning atrof-muhitni muhofaza qilish faoliyatidagi xarajatlari va samaradorligini miqdoriy baholash. Korxonalardan tizimli yozuvlar va hisobotlar bo'lishi talab qilinadi va samarali va samarali ekologik faoliyatni amalga oshirish uchun ekologik muhit bilan ijobiy munosabatlarni saqlashga yo'naltiriladi. Yakuniy maqsad barqaror rivojlanishga erishishdir. [8]

Yashil buxgalteriya hisobi yashil o'sishni o'lchaydigan buxgalteriya hisobidir. Yashil buxgalteriya hisobi tashqi muhitga ta'sir ko'rsatadigan ijtimoiy va iqtisodiy ekologik xarajatlarni aniqlash va pul bilan o'lchashni talab qiladi, ularning korporativ hisoblarga ichki ob'ektlar sifatida kiritilishi, kam resurslarning yanada samarali taqsimlanishini anglatishi mumkin va tabiiy aktivlar zaxirasini kamaytirmasdan ta'minlanishi mumkin bo'lgan barqaror daromad darajasini o'lchashga yordam beradi. Xulosa qilib aytish mumkinki, Yashil buxgalteriya boshqaruv hisobi vositasi bo'lib, u tabiatning bepul sovg'alari sifatida qabul qilingan narx belgisini qo'yadi. [9]

Yashil buxgalteriya buxgalteriya tizimi bo'lib, atrof-muhit xarajatlari va foydalarini hisobga oladi. U kompaniyaning moliyaviy doirasida atrof-muhit bilan bog'liq xarajatlarni davolashni o'z ichiga oladi [1].

Atrof-muhit hisobi yoki barqarorlik hisobi deb ham ataladigan "yashil buxgalteriya hisobi" atamasi tabiiy muhitni muhofaza qilish uchun tashkiliy harakatlar va investitsiyalarni kuzatish va o'rganishni anglatadi.

Yashil buxgalteriya hisobidan foydalanadigan kompaniyalar atrof-muhitga salbiy ta'sirini cheklash harakatlari bilan bog'liq xavf va foydalarni hisobga oladi. Buxgalteriya hisobini yuritish va moliyaviy natijalarni aniqlashda iqlim va uning farovonligiga e'tibor qaratish yashil buxgalteriya hisobini boshqa hisob turlaridan ajratib turadi [2].

Yashil buxgalteriya buxgalteriya hisobining bir turi bo'lib, atrof-muhit xarajatlarini faoliyatning moliyaviy natijalariga kiritishga harakat qiladi. Yalpi ichki mahsulot atrof-muhitga e'tibor bermasligi va shuning uchun siyosatchilar yashil buxgalteriya hisobini o'z ichiga olgan qayta ko'rib chiqilgan modelga muhtojligi ta'kidlangan. [3] Yashil buxgalteriya hisobining asosiy maqsadi korxonalarga an'anaviy iqtisodiyot maqsadlari va atrof-muhit maqsadlari o'rtasidagi potentsial quid pro-kvoni tushunish va boshqarishga yordam berishdir.

Yashil buxgalteriya - bu tadbirkorlik faoliyatining iqtisodiy, ekologik va ijtimoiy xarajatlari va foydalarini hisobga oladigan tizim. [4]

Yashil buxgalteriya (atrof-muhit hisobi yoki barqaror buxgalteriya) tashkilotning iqtisodiy, ijtimoiy va ekologik taassurotlarini hisobga oladigan hodisadi. [5]

Yashil buxgalteriya hisobi bugungi kunda milliy iqtisodiyotga ta'sir ko'rsatadigan eng ta'sirli vositalardan biridir; u barqarorlik kontseptsiyasini iqtisodiy rivojlanishga kiritadi va sayyoramiz uchun yaxshi kelajak sari ajoyib qadamdir. [6]

Yashil buxgalteriya ekologik hisob sifatida ham tanilgan. U tashkilotning ekologik barqarorlikni ta'minlashga qaratilgan harakatlarining moliyaviy ta'sirini o'lchash, tahlil qilish va etkazish jarayonlarini o'z ichiga oladi. Bu usul qandayligini aniqlashga yordam beradibiznes operatsiyalaritabiiy resurslarga va tegishli hududlarga ta'sir qiladi.

Yashil buxgalteriya hisobi, shuningdek, ekologik hisob yoki barqaror buxgalteriya sifatida ham tanilgan, moliyaviy va iqtisodiy qarorlar qabul qilish jarayonlariga ekologik va ijtimoiy omillarni integratsiyalashga qaratilgan buxgalteriya hisobining ixtisoslashgan tarmog'i. U iqtisodiy faoliyatning atrof-muhitga ta'siri va barqarorligini hisobga olgan holda yanada kengroq va aniqroq tasvirni taqdim etishga qaratilgan.

U iqtisodiy faoliyatning qisqa muddatli rentabelligini emas, balki barqarorligini baholashga qaratilgan. Tabiiy kapital va ekotizim xizmatlarini hisobga olgan holda, yashil buxgalteriya tashkilotlarga o'z harakatlarining atrof-muhit va jamiyatga uzoq muddatli oqibatlarini tushunishga yordam beradi.

Yashil buxgalteriya hisobi moliyaviy va iqtisodiy tahlilga ekologik va ijtimoiy omillarni birlashtirishni o'z ichiga oladi, bu esa iqtisodiy faoliyatni yanada to'liqroq tushunish imkonini beradi.

U iqtisodiy faoliyatning atrof-muhit va jamiyatga uzoq muddatli ta'sirini baholash orqali barqarorlikni ta'kidlaydi, hozirgi harakatlar kelajak avlodlarning ehtiyojlarini qondirish qobiliyatiga putur etkazmasligini ta'minlaydi.

Yashil buxgalteriya hisobi atrof-muhitga ta'sirlarni (masalan, uglerod chiqindilari va suvdan foydalanish) va ijtimoiy ta'sirlarni (masalan, adolatli mehnat

amaliyoti va jamoatchilik ishtiroki) o'lchash va hisoblash uchun ko'rsatkichlarni o'z ichiga oladi.

Yashil buxgalteriya tushunchasi. Atrof-muhit hisobi deb ham ataladigan yashil buxgalteriya moliyaviy va iqtisodiy tahlilga innovatsion yondashuv bo'lib, u inson faoliyatining atrof-muhitga ta'siri haqidagi ortib borayotgan tashvishlarga javoban paydo bo'ldi. Bu iqtisodiy ko'rsatkichlar bo'yicha yanada muvozanatli va barqaror istiqbolni yaratish uchun ekologik va ijtimoiy omillarni an'anaviy buxgalteriya tizimiga integratsiyalashni o'z ichiga oladi.

Yashil buxgalteriya hisobining ma'nosi an'anaviy pul ko'rsatkichlaridan tashqarida biznes faoliyatining ekologik ta'sirini o'z ichiga oladi. U biznes qarorlarining atrof-muhitga ta'sirini tan olish va hal qilish uchun asos yaratadi. Yashil buxgalteriya amaliyotini qo'llaydigan korxonalar:

- emissiyalarni kamaytirishning asosiy yo'nalishlarini aniqlash orqali atrof-muhit samaradorligini oshirish.
- shaffoflikni oshirishhisobot berishmanfaatdor tomonlar uchun ekologik xarajatlar va foyda.
- namoyish orqali raqobatdosh ustunlikni oshiringkorporativ javobgarlik.

20-asr o'rtalarida 1960—1970-yillarda avj olgan ekologik harakat atrof-muhitning ifloslanishi, resurslarning kamayishi va boshqa ekologik muammolarga keng e'tibor qaratdi. Bu ortib borayotgan xabardorlik atrof-muhitga iqtisodiy faoliyatning xarajatlari va foydalarini hisobga olishning yanada keng qamrovli usullarini talab qilishga olib keldi.

Standartlashtirish va izchil metodologiyaning etishmasligi yashil buxgalteriya hisobining dastlabki rivojlanishini tavsiflaydi. Biroq, tizimli va taqqoslanadigan ekologik hisob amaliyotiga bo'lgan ehtiyoj ortib borayotganligi sababli, xalqaro tashkilotlar, buxgalteriya organlari va korxonalar umumiy asoslar va yo'riqnomalarni yaratish bo'yicha hamkorlik qila boshladilar. Bu yashil buxgalteriya hisobi va hisobotiga tizimli yondashuvni ta'minlaydigan Global Hisobot Tashabbusi (GRI) va Barqarorlik Buxgalteriya Standartlari Kengashi (SASB) kabi keng tan olingan standartlarni yaratishga olib keldi.

Xususiyatlari. Atrof-muhit yoki barqaror buxgalteriya sifatida ham tanilgan yashil buxgalteriya hisobi, uni an'anaviy buxgalteriya amaliyotidan ajratib turadigan bir qancha o'ziga xos xususiyatlarga ega. Bu xususiyatlar iqtisodiy tahlilga ekologik va ijtimoiy mulohazalarni birlashtirishga qaratilganini aks ettiradi. Yashil buxgalteriya hisobining asosiy elementlari:

Siyosat yo'nalishi: Ko'pincha siyosatni ishlab chiqish va tartibga solish qarorlarini xabardor qilish uchun ishlatiladi. Yashil buxgalteriya ma'lumotlari hukumatlarga atrof-muhitni muhofaza qilish va barqarorlikni ta'minlovchi siyosatlarni

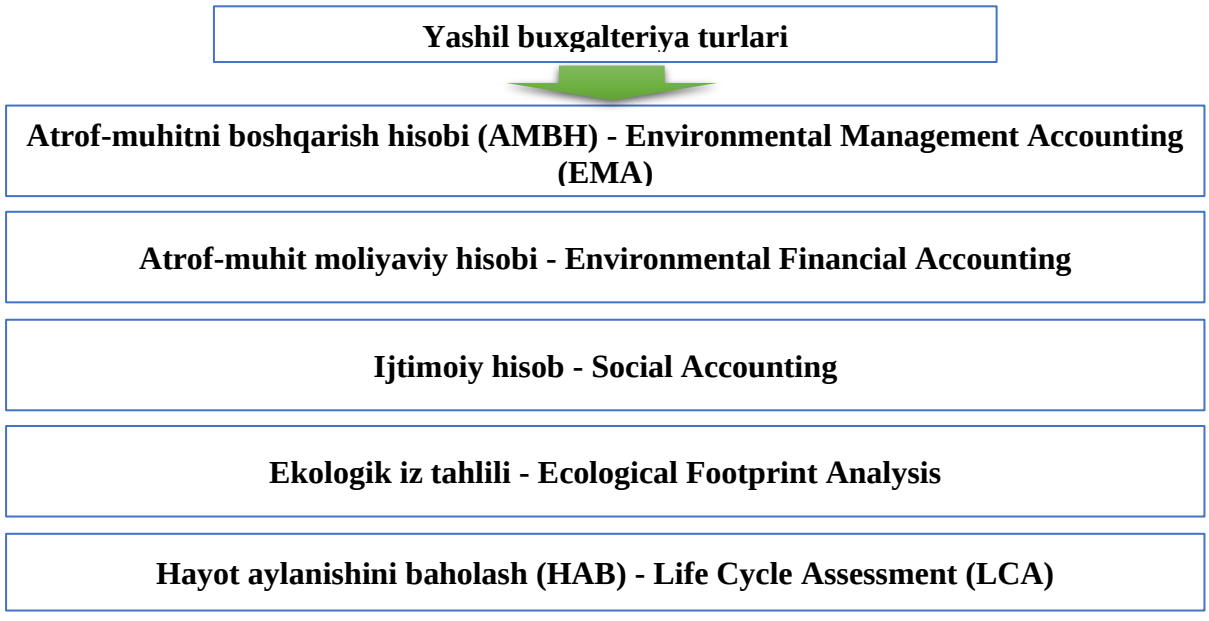
ishlab chiqish va baholashda yordam berishi mumkin, masalan, chiqindilarni kamaytirish maqsadlari va tabiatni muhofaza qilish tashabbuslari:

Shaffoflik va hisobot berish: Yashil buxgalteriya shaffoflik va atrof-muhit va ijtimoiy ma'lumotlarning oshkor etilishini rag'batlantiradi. Ko'pgina tashkilotlar o'zlarining atrof-muhit ko'rsatkichlari va ijtimoiy mas'uliyat bilan bog'liq sa'y-harakatlari to'g'risida manfaatdor tomonlarga etkazadigan barqarorlik hisobotlarini tayyorlaydilar;

Xalqaro standartlar: Barqarorlik va taqqoslanuvchanlikni oshirish uchun yashil buxgalteriya hisoboti Global Tashabbus (GRI) va Barqarorlik Buxgalteriya Standartlari Kengashi (SASB) tomonidan ishlab chiqilganlar kabi xalqaro standartlar va ko'rsatmalarga amal qiladi;

Samaradorlikni o'lchash: U atrof-muhit va ijtimoiy samaradorlikni baholash uchun vositalar va ko'rsatkichlarni taqdim etadi. Bunga uglerod chiqindilari, energiya samaradorligi, suvdan foydalanish, chiqindilarni ishlab chiqarish va ijtimoiy ta'sir va boshqalar bilan bog'liq ko'rsatkichlar kiradi;

Manfaatdor tomonlarning ishtiroki: Yashil buxgalteriya turli manfaatdor tomonlarni, jumladan investorlar, iste'molchilar, xodimlar va jamoalarni jalb qilish muhimligini tan oladi. Ushbu tomonlarni barqarorlik haqida hisobot berish va qarorlar qabul qilish jarayonlariga jalb qilish hisobdorlik va shaffoflikni oshiradi.



1-rasm. Yashil buxgalteriya turlari[1]

Yashil buxgalteriya turlari:

Yashil buxgalteriya hisobi har xil turdagi yoki yondashuvlarni o'z ichiga oladi, ularning har biri o'ziga xos yo'nalish va maqsadlarga ega. Ushbu yashil buxgalteriya turlari turli xil ehtiyojlarni qondirish va ekologik va ijtimoiy hisobning alohida

[1] Muallif tomonidan ishlab chiqilgan.

jihatlarini hal qilish uchun mo'ljallangan. Yashil buxgalteriya hisobining ba'zi keng tarqalgan turlari:

Atrof-muhitni boshqarish hisobi (EMA):

Yo'nalish: ichki boshqaruv.

Maqsad: EMA, birinchi navbatda, tashkilotlarga ichki atrof-muhit xarajatlarini va resurslardan samaraliroq foydalanishni baholash va boshqarishda yordam berish bilan shug'ullanadi. U tashkilot ichidagi xarajatlarni tejash va resurslardan samarali foydalanish imkoniyatlarini aniqlashga qaratilgan.

Atrof-muhit moliyaviy hisobi:

Yo'nalish: moliyaviy hisobot.

Maqsad: Yashil buxgalteriya hisobining ushbu turi atrof-muhitga oid ma'lumotlarni moliyaviy hisobotlarga integratsiyalashga qaratilgan. U investorlar, kreditorlar va boshqa manfaatdor tomonlarga kompaniyaning ekologik xavf-xatarlari, imkoniyatlari va moliyaviy natijalarga ta'siri haqida aniqroq tushuncha berishga qaratilgan.

Ijtimoiy hisob:

Fokus: Ijtimoiy ta'sirlar

Maqsad: Ijtimoiy buxgalteriya hisobi ijtimoiy va jamoat ta'sirini o'z ichiga olgan holda yashil hisob ko'lamini kengaytiradi. U ish o'rinlari yaratish, jamiyatni rivojlantirish va ijtimoiy mas'uliyat kabi tashkilotning ijtimoiy samaradorligini o'lchash va hisobot berishni maqsad qilgan.

Ekologik iz tahlili:

Fokus: Resurslardan foydalanish va Barqarorlik

Maqsad: Ekologik izlar tahlili inson faoliyatining atrof-muhitga ta'sirini tabiiy resurslar iste'molini o'lchash va uni Yerning ushbu resurslarni qayta tiklash qobiliyati bilan taqqoslash orqali baholaydi. U inson faoliyati sayyoralar chegaralari ichida ekanligini aniqlashga qaratilgan.

Hayot aylanishini baholash (LCA):

Fokus: Mahsulot yoki jarayon tahlili

Maqsad: LCA mahsulot, jarayon yoki xizmatning xom ashyoni qazib olishdan tortib, utilizatsiya qilishgacha bo'lgan butun hayot tsikli bilan bog'liq atrof-muhitga ta'sirini baholash uchun ishlatiladi. U hayot aylanishining turli bosqichlarida atrof-muhitga ta'sirni kamaytirish imkoniyatlarini aniqlashga qaratilgan.

Tahliliy misollar:

1. Aytaylik, qayta tiklanadigan energiya ishlab chiqaruvchi EcoTech Solutions kompaniyasi shamol turbinasi ishlab chiqarish operatsiyalarini baholash uchun yashil hisobdan foydalanadi. Ular uglerod chiqindilarini hisoblab chiqadi, resurslar samaradorligini oshiradi va turbinalar emissiya va ekotizim xizmatlarini kamaytirishga qo'shgan hissasini qadrlaydi. Hayotiy tsiklni baholash va uglerodni kamaytirish

maqsadlarini belgilash orqali ular bir yil ichida energiya sarfini 15% ga kamaytiradi va raqobatbardosh ustunlikka ega bo'ladi. Barqarorlik hisobotida o'z sa'y-harakatlarini baham ko'rish ularning obro'sini oshiradi va atrof-muhitga ongli investorlarni jalb qiladi. Ushbu misol yashil buxgalteriya ekologik mas'uliyatli qarorlar qabul qilishda qanday yo'l-yo'riq ko'rsatishi, operatsion xarajatlarni kamaytirishi va barqarorlikni ta'minlash bo'yicha sa'y-harakatlarda shaffoflikni rag'batlantirishi mumkinligini ko'rsatadi;

2. 2021 yilda Apple Inc turli xil ekologik toza loyihalarni moliyalashtirish uchun 1,5 milliard dollarlik yashil obligatsiya chiqardi. Yashil buxgalteriya hisobining ushbu misoli yirik korporatsiya o'zining moliyaviy strategiyasiga atrof-muhitni muhofaza qilish masalalarini qanday birlashtirganligini ko'rsatadi. Tafsilotlar:

3. Yashil obligatsiyaning maqsadi: Apple yashil obligatsiyani uglerod izini kamaytirish, suv resurslarini tejash va qayta tiklanadigan energiya tashabbuslarini ilgari surish loyihalarini moliyalashtirish uchun chiqardi;

4. Shaffoflik: Kompaniya yashil obligatsiya orqali jalb qilingan kapitaldan foydalanishda shaffoflikni namoyish qilib, mablag'larni taqsimlash haqida batafsil ma'lumot berdi;

Ta'sir o'lchovi: Apple yashil obligatsiyalar hisobidan moliyalashtirilgan loyihalarning atrof-muhitga ta'sirini kuzatish va hisobot berish majburiyatini oldi va bu yashil hisob amaliyotiga sodiqligini ko'rsatdi.

Yashil buxgalteriya hisobining afzalliklari va kamchiliklari:

Yashil buxgalteriya hisobining afzalliklari:

1. Takomillashtirilgan qarorlar qabul qilish: Tashkilotlar va hukumatlarga atrof-muhit va ijtimoiy omillarni hisobga olgan holda ko'proq asosli qarorlar qabul qilishga yordam beradi;

2. Barqarorlikni rejalashtirish: Barqarorlik uchun uzoq muddatli rejalashtirishni osonlashtiradi, ekologik va ijtimoiy muammolar xavfini kamaytiradi;

3. Resurs samaradorligi: Chiqindilarni kamaytirish va resurslarni boshqarishni yaxshilash orqali resurslar samaradorligi va xarajatlarni tejashni rag'batlantiradi;

4. Riskni kamaytirish: Ekologik va ijtimoiy xavflarni aniqlaydi va boshqaradi, potentsial majburiyatlarni va obro'ga ziyonni kamaytiradi;

5. Shaffoflik va hisobdorlik: manfaatdor tomonlarga ekologik va ijtimoiy natijalarni oshkor qilish, ishonchni mustahkamlash orqali shaffoflikni oshiradi.

Yashil buxgalteriya hisobining kamchiliklari:

6. Murakkablik va ma'lumotlarga qo'yiladigan talablar: Amalga oshirish murakkab va ko'p ma'lumot talab qiladigan, resurslar va tajribani talab qilishi mumkin;

7. Subyektivlik: Atrof-muhit va ijtimoiy omillarni baholash sub'ektiv mulohazalar va baholarni o'z ichiga olishi mumkin;

8. Resistance to Change: Some organizations may resist green accounting due

to a perceived burden on existing practices;

9. Initial Costs: Implementing green accounting systems and standards can require significant upfront investments;

10. Lack of Standardization: Lack of uniform standards and regulations can lead to inconsistency in reporting and data comparison.

2-jadval

Yashil buxgalteriya hisobi va ijtimoiy buxgalteriya hisobini taqqoslash holati[1]

Aspekt	Yashil buxgalteriya	Ijtimoiy hisob
Atrof-muhitga ta'sirni baholash	Asosiy e'tibor ekologik jihatlarga, jumladan, ekologik ta'sirlar, resurslardan foydalanish va emissiyalarga qaratilgan. Atrof-muhitga ta'siri va iqtisodiy faoliyatning barqarorligini baholaydi.	Asosan, mehnat amaliyoti, jamoatchilik ishtiroki va ijtimoiy farovonlik kabi ijtimoiy va insoniy jihatlarga e'tibor qaratadi. Tashkilotlarning ijtimoiy va ijtimoiy ta'siri va hissalarini baholaydi.
Maqsadlar	- Ekologik xarajatlar va foyda miqdorini aniqlash; - Barqarorlik va resurslar samaradorligini oshirish; - Atrof-muhit bo'yicha qarorlar qabul qilish va siyosatni qo'llab-quvvatlash.	- Ijtimoiy ta'sir va samaradorlikni o'lchash. - axloqiy va mas'uliyatli biznes amaliyotlarini rag'batlantirish. - Ijtimoiy mas'uliyat va manfaatdor tomonlarning ishtirokini kuchaytirish.
Ko'rsatkichlarga misollar	- Uglerod chiqindilari; - Suvdan foydalanish; - Energiya samaradorligi; - Chiqindilarni ishlab chiqarish.	- mehnat amaliyoti (adolatli ish haqi, mehnat sharoitlari); - jamoatchilik ishtiroki; - xodimlarning xilma-xilligi; - xayriya faoliyati.
O'lchov muammolari	- Tabiiy kapitalni baholash; - Tashqi ta'sirlarni bartaraf etish; - Kompleks ma'lumotlarni yig'ish va baholash.	- Ijtimoiy ta'sirni baholashda sub'ektivlik; - Ma'lumotlarning to'g'riligi va dolzarbligi; - Nomoddiy ijtimoiy nafaqalarni hisobga olish.
Siyosat oqibatlari	Atrof-muhit qoidalari va barqarorlik tashabbuslari haqida ma'lumot beradi.	Mehnat qonunlari, korporativ ijtimoiy mas'uliyat (KSS) va jamiyatni rivojlantirish siyosatiga ta'sir qiladi.

Yashil buxgalteriya hisobini qo'llash orqali korxonalar:

- atrof-muhitni muhofaza qilish qoidalari va siyosatlari bilan muvofiqlashtirish, huquqiy xavflarni kamaytirish;
- barqarorlikka intilayotgan investorlardan yashil moliyalashtirish imkoniyatlaridan foydalanish imkoniyatiga ega bo'lish;
- kuchliroq yaratingbrend tasviriatrof-muhitni muhofaza qilishga sodiqligini namoyish etish orqali erishish;

[1] Muallif tomonidan ishlab chiqilgan.

- yashil buxgalteriya hisobiga o’tish qiyin bo’lishi mumkin, ammo u innovatsion biznes yechimlari va biznes uchun yo’l ochadi.

Yashil buxgalteriya hisobi juda o'ziga xosdir, chunki u ushbu texnikadan foydalanuvchilarga quyidagi afzalliklarni taqdim etadi:

- yashil buxgalteriya hisobi iqtisodiy va ijtimoiy jihatdan barqarorlikka erishishda juda foydali. ya'ni: kelajak avlod ehtiyojlarini buzmagan holda hozirgi avlod ehtiyojlarini qondirish;
- yashil hisob atrof-muhitni muhofaza qilishga yordam beradi, bu esa chiqindilar va xom ashyo kommunal xizmatlari bilan bog'liq xarajatlarni kamaytirishga yordam beradi;
- yashil buxgalteriya hisobi xodimlarning o'zini yaxshi his qilishiga yordam beradi, chunki xodimlar pul ishlashdan tashqari o'ylaydigan kompaniyada ishlashni yaxshi ko'radilar;
- ko'rsatkichlarini yaxshilashga yordam beradi;
- yashil buxgalteriya hisobi atrof-muhit degradatsiyasini o'lchash, monitoring qilish, nazorat qilish va ma'lum darajada kamaytirish yoki to'xtatishga yordam beradi;
- yashil buxgalteriya hisobi atrof-muhitga etkazilgan zararning salomatlik, mashina va tuzilmalar hamda tabiiy kapitalga ta'sirini kamaytirish uchun qancha mablag' ajratilganligi haqida ma'lumot to'plashga yordam beradi.

Iqlim o'zgarishiga bo'lgan g'amxo'rlik kuchayib borayotganligi sababli, barqarorlik sohasidagi yutuqlar muhimroq bo'ladi; yashil buxgalteriya buning muqarrar mahsulotidir. Agar siz minglab odamlarning hayotiga xalqaro ta'sir ko'rsatishga intilayotgan kompaniya bo'lsangiz, yashil buxgalteriya bu maqsadga erishish uchun ajoyib vosita bo'ladi.

Yashil buxgalteriya hisobining korporativ moliya sohasiga kiritilishi an'anaviy buxgalteriya hisobi tizimidan keskin o'tishni anglatadi. Yashil buxgalteriya hisobi korxona faoliyatini baholashda iqtisodiy, ijtimoiy va ekologik jihatlarni o‘z ichiga olgan yaxlit yondashuv sifatida namoyon bo‘ladi. Shunday qilib, u korporativ ijtimoiy mas'uliyat (KIM) rivojlanayotgan landshaftiga to'liq mos keladi. Kompaniyalar nafaqat moliyaviy muvaffaqiyat, balki mas'uliyatli va barqaror biznes amaliyotlari muhimligini tobora ko'proq tan olishmoqda. Barqaror buxgalteriya hisobi orqali ular moliyaviy maqsadlarni atrof-muhit va jamiyat farovonligi bilan uyg'unlashtiruvchi asosli qarorlar qabul qilish uchun zarur bo'lgan vositalar va tushunchalarga ega bo'ladilar.

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КОРПОРАТИВ ИЖТИМОИЙ ВА ЭКОЛОГИК МАСЪУЛИЯТНИ ЭКО-ИННОВАЦИЯЛАР ЁРДАМИДА АМАЛГА ОШИРИШ ЙЎЛЛАРИ

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Аннотация. Мамлакатимизда корпоратив ижтимоий масъулятни жорий қилиш, экологик назоратда рақамли технологияларни қўллаш ва мамлакатимизда экологик мухитни яхшилашга қаратилган чора-тадбирларни илмий изоҳлаш. Рақамли технологияларнинг экологик масъулиятга таъсирини таҳлил қилиш. Бу жумладан, рақамли технологияларнинг экологик масъулиятни оширишдаги ролини, ишлаб чиқариш ва хизмат кўрсатиш соҳаларидаги ўрнини ўрганиш. Экологик хавфсизлик ва корпоратив ижтимоий масъулиятни таъминлашда рақамли технологиялар, масалан, ишлаб чиқаришда автоматизация, интернет тўрлари, қуёш энергияси каби янги технологияларнинг ишлаш принципларини таҳлил қилиш. Рақамли иқтисодиётни татбиқ этиш орқали корпоратив ижтимоий масъулятни жорий қилиш, экологик назоратда рақамли технологияларни қўллаш ва мамлакатимизда экологик мухитни яхшилашга қаратилган илмий изоҳлар келтирилган.

Мақолада рақамли технологиялар ёрдамида экологик масъулиятни ошириш бўйича мавжуд корхона ва ташкилотларнинг усулларини ва ёндашувларини ўрганилган. Экологик хавфсизликни мониторинг қилишда рақамли технологиялар, масалан, суний интеллект (IoT), маълумотлар тўплаш тизимлари ва блокчейн технологияларининг қўлланилишига асосланган методларни тўлиқ таҳлил қилинган. Экологик хавфларнинг ва табиий ресурслар сарфига оид маълумотларни тўплаш ва таҳлил қилиш усулларини ишлаб чиқилган.

Калит сўзлар: Корпоратив ижтимоий масъулият, иқтисодиёт, рақамлаштириш, менежмент, бизнес, жамият, экологик дастурлар, блокчейн.

КИРИШ. Айтиш жоизки, глобаллашув жараёнида мамлакатлар рақобатбардошлигини белгилашда рақамли иқтисодиётнинг ўрни муҳим аҳамият касб этади. Рақамли иқтисодиёт инсоният оламининг кундалик ҳаётига кириб келганига узоқ вақт бўлган бўлсада, хозирда, деярли барча ишлаб чиқариш ва хизмат турларининг барча соҳаларини қамраб олган ва бевосита фойдаланишади. Айнан шунинг учун хам, сўнгги пайтларда жамоатчиликнинг ижтимоий масъулият масаласига эътибори янада кучаймоқда. Замонавий илғор технологияларнинг фаол ва кенг амалиётга жорий қилиниши туфайли, хорижий мамлакатларда бу соҳада янги талаб ва нормалар белгиланмоқда. Корпоратив

ижтимоий масъулият атамасини талқин қилиш, шунингдек ушбу соҳадаги энг муҳим муаммоларини ҳал қилиш билан боғлиқ бўлган кўплаб мухокамаларни келтириб чиқаради.

Корпоратив ижтимоий масъуллик – бу корхона ва ташкилотларнинг ўз фаолиятлари орқали ижтимоий, иқтисодий ва экологик манфаатларга эга бўлган аҳолининг манфаатларини ҳисобга олиб, ижтимоий ҳуқуқ ва мажбуриятларни бажаришни кўзда тутади. Корпоратив ижтимоий масъулликнинг экологик хавфсизликка таъсири айниқса, рақамли иқтисодиётнинг шаклланиши билан янгиланган ва янгича ёндашувларни талаб қилади.

Корпоратив ижтимоий масъулият тушунчаси ва моҳияти Ғарб мамлакатларига кўпроқ тегишли деб аташ мумкин бўлган тушунча хисобланади. Бугунги кунда ички тадбиркорларга таниш бўлмаган тушунча десам адашмайман. Вақт ўтиши билан бу тушунчани ўзлаштириш ва амалга тадбиқ этиш ҳақида жиддий ўйлаш зарур. Сабаби, бу масъулиятни амалга тадбиқ этиш орқали кўпгина амалий ютуқларга эришиш мумкин. Тизимли рақамлаштириш ва экологик масъуллик муайян соҳаларга катта таъсир кўрсатади.

Корпоратив ижтимоий масъулият XX-асрнинг 60-йиллари атрофида жаҳон ҳамжамиятида қўлланила бошланди, бу тушунча Канада ва АҚШда фаолият кўрсатаётган корхоналарда фаол қўлланила бошланди. Ўша пайтда, у фақат ходимлар учун иш берувчиларнинг ташвиши, шунингдек, маҳаллий ҳукуматга ёрдам сифатида қаралди. Атроф-муҳит шароитлари ҳақида халқ ва хукумат ташвишга туша бошлагач, ишлаб чиқариш билан шуғулланадиган корхоналардан чиқаётган чиқинди ва зарарли моддалар, ахоли саломатлиги ва атроф-муҳитни ифлосланишига олиб кела бошлади. Ғарб мамлакатларининг бошқарув мутахассислари корпоратив ижтимоий масъулиятни тадбиқ этиш орқали компаниянинг фойда олиш билан бир қаторда уларнинг ўз ходимлари, ҳамкорлар, мижозлар ва атроф-муҳитга бўлган ғамхўрликларини ошириши мақсадида қонун билан амалга киритилган. Корпоратив ижтимоий масъулиятнинг асосий вазифасидан бири атроф-муҳитни муҳофаза қилиш ҳисобланади. Атроф-муҳитни муҳофаза қилаш, асраб авайлаш, атрофга карбанат ангидрид моддасини ишлаб чиқарувчи ўсимликлар оламини асраш, корхоналарда ишлаб чиқариш жараёнида атроф–муҳитга чиқаётган чиқиндиларни назорат қилиш ва бошқариш тизимлари стандартларининг пайдо бўлиши жамиятда атроф-муҳитга бўлган қизиқишнинг ортишига туртки бўлди. Сўнги йилларда ер юзида ҳаво ва сувнинг ифлосланиши, тупроқ эррозияси, чўлланиш, қазилма ёқилғиларни беҳисоб ишлатиш, глобал исишга, табиий офатларнинг кўпайишига олиб келмоқда. Атроф-муҳит ва аҳоли соғлиғига катта зарар етказмоқда. Мамлакатимизда экологик барқарорликни таъминлаш мақсадида уч йил аввал «Яшил макон» умуммиллий лойиҳасини амалга ошириш бошланди.

Қўшни мамлакатлар билан биргаликда Минтақавий иқлим стратегиясини амалга оширишга киришилди. Бу йўналикда малакали кадрларни тайёрлаш мақсадида пойтахтимизда Марказий Осиё атроф-муҳит ва иқлим ўзгаришларини ўрганиш университети ташкил этилди. Шунингдек, Ўзбекистон БМТ томонидан бу борада қабул қилинган иккита муҳим резолюциянинг ташаббускори бўлди. Айни вақтда “яшил” энергетика иқтисодиётимиз драйверларидан бирига айланмоқда. Ахолининг фикр-мулоҳазалари, хоҳиш-истакларини атрофлича ўрганиб, билдирилган тавсиялардан келиб чиққан ҳолда, бу борадаги ишларни янги, янада юксак босқичга кўтариш мақсадида мухтарам юртбошимиз Шавкат Мирзиёев 2025-йилни юртимизда “Атроф-муҳитни асраш ва «яшил» иқтисодиёт йили” деб эълон қилинди.

У дастурда “яшил” технологияларни жорий этиш, сувни тежаш, кўкаламзор ҳудудларни кескин кўпайтириш, Орол фожиасининг оқибатларини юмшатиш, чиқиндилар муаммосини ҳал қилиш, энг муҳими, аҳоли саломатлигини мустаҳкамлаш каби масалалар устувор аҳамият касб этиши зарурлиги таъкидланди. Ўзбекистон Республикаси Президентининг 30.01.2025 йилдаги ПФ-16-сон фармонида “Ўзбекистон - 2030” стратегиясини “Атроф-муҳитни асраш ва “яшил иқтисодиёт” йилида амалга оширишга оид давлат дастури тўғрисида хужжатда хам “Атроф-муҳитни асраш ва “яшил иқтисодиёт” йилида мамлакат ривожланишининг устувор ёндашувлари этиб қилинажак вазифалар белгиланиб ўтилган.

Ўзбекистоннинг иқтисодий ривожланишида кўмир саноати муҳим ўрин тутади. Кўмир - энергетика, металлургия ва бошқа ижтимоий-иқтисодий соҳаларнинг ривожи учун муҳим хомашё ҳисобланади. Аммо, кўмир конларини ишлаб чиқариш жараёни, ўз навбатида, табиий ресурсларни истеъмол қилиш, атроф-муҳитга салбий таъсир кўрсатиш ва экологик муаммоларга олиб келиши мумкин. Шу боис, кўмир саноатини ривожлантиришда экологик барқарорликни таъминлаш, кўмир ишлаб чиқаришнинг экологик самарадорлигини ошириш ва корпоратив ижтимоий масъуллик принципларига асосланган иш олиб бориш талаб этилади. Рақамли иқтисодиёт шароитида Ўзбекистондаги кўмир конларида экологик барқарорликни таъминлаш учун инновацион технологиялар ва корпоратив ижтимоий масъулликни амалга ошириш муҳим аҳамиятга эга. Мазкур мавзу нафақат экологик, балки иқтисодий ва ижтимоий муаммоларни ҳал қилишга қаратилган катта илмий ва амалий аҳамиятга эга.

Мазкур вазифалар мақола мавзуси доирасида тадқиқотларни амалга оширишда мақсадли йўналишларни белгилаб беришга хизмат қилади. Шунингдек, мамлакатимизда рақамли технологиялардан фойдаланиб, корпоратив ижтимоий масъулликни яъни экологик масъулликни ошириш, кўчаларда яшиллик даражасини ошириш, экологик жиҳатдан қулай ва фаровон

яшаш муҳитини шакллантириш, табиий ресурсларни тежаш ва улардан оқилона фойдаланиш, экологик барқарорликни таъминлаш республика энергобалансида қайта тикланувчи энергия улушини ошириш, шу жумладан, давлат-хусусий шериклик асосида йирик “яшил энергия” станцияларини барпо этиш, ҳудудларда кичик ва микро гидроэлектр станциялари тармоғини кенгайтириш, аҳоли хонадонларида қуёш панелларини ўрнатишни рағбатлантириш каби амалиётларни жорий этиш ва иқтисодиёт тармоқлари ва ижтимоий соҳада замонавий энерготежамкор технологияларни кенг қўллаш орқали иқтисодиётда “углерод изи”ни камайтириш.

Ишлаб чиқариш корхоналаридан атроф-мухитга чиқаётган зарарли чиқиндиларни хусусан кўмир конларидаги назоратни рақамли технологияларни жорий этиш зарурлиги билан боғлиқ тадқиқотларни амалга ошириш муҳим аҳамият касб этади.

Ўзбекистон Республикаси Президентининг 2018 йил 18 февралдаги ПФ-5349-сон “Ахборот технологиялари ва коммуникациялари соҳасини янада такомиллаштириш чора-тадбирлари тўғрисида”ги фармони, 2018 йил 3 июлдаги ПҚ-3832-сон “Ўзбекистон Республикасида рақамли иқтисодиётни ривожлантириш чора-тадбирлари тўғрисида”, 2018 йил 2 сентябрдаги ПҚ-3927-сон ““Рақамли ишонч” рақамли иқтисодиётни ривожлантиришни қўллаб-қувватлаш жамғармасини ташкил этиш тўғрисида”, Ўзбекистон Республикаси Вазирлар Маҳкамасининг 2019 йил 20 майдаги 421-сонли “Замонавий ахборот-коммуникация технологияларини янада жорий этиш ҳисобидан аҳолига давлат хизматларини кўрсатиш тартибини такомиллаштириш бўйича қўшимча чора-тадбирлар тўғрисида”ги қарори, Ўзбекистон Республикаси Вазирлар Маҳкамасининг 25.09.2024 йилдаги 602-сонли қарори, экология, атроф-муҳитни муҳофаза қилиш ва иқлим ўзгариши соҳаси янада такомиллаштирилиши муносабати билан Ўзбекистон Республикаси Ҳукуматининг айрим қарорларига ўзгартириш ва қўшимчалар киритиш тўғрисида қарори ҳамда мамлакатда рақамли иқтисодий тизимга ўтишни рағбатлантириш ва экология вазиятни барқарорлаштириш, энергия тежовчи манбалардан фойдаланиш, қайта тикланувчи энергия манбаларидан фойдаланиб атроф-муҳитга чиқиндиларни камайтириш ва шу каби бошқа меъёрий-ҳуқуқий ҳужжатларда белгиланган вазифаларни амалга оширишда хизмат қилади.

Рақамли иқтисодиёт шароитида экологик хавфсизлик масаласи давлат сиёсатидаги муҳим йўналишлардан биридир. Бунинг асосий мақсади – табиий ресурсларни тежаш, атроф-муҳитни муҳофаза қилиш ва экологик барқарорликни таъминлашдир. Корпоратив ижтимоий маъсулиятни амалга оширишда рақамли технологиялар, интернет эко-инновациялари, экологик муаммоларни ҳал қилишда муҳим рол ўйнаши мумкин. Масалан, интеллектуал технологиялар ва

маълумотларнинг кенг тарқалиши экологик мониторингни амалга оширишда, энергия сарфини камайтиришда ва табиий ресурсларни самарали ишлатишда ёрдам беради.

Давлатлар корпоратив ижтимоий масъулиятни экологик компонентларини қўллаб-қувватлаш ва уларни мажбурий қонунлар билан тартибга солишни мақсад қилган. Масалан, Ўзбекистонда ва бошқа мамлакатларда “яшил” технологиялар, қайта тикланувчи энергия манбаларидан самарали фойдаланиш тўғрисида давлат дастурлари мавжуд. Корпорациялар экологик хавфсизликни таъминлаш мақсадида турли хил экологик стандартларга амал қилишлари керак. Яъни, ҳар бир ташкилот атроф-муҳитга таъсирини камайтириш учун талабларни қўллаши лозим. Бунинг учун махсус экологик сертификатлаш тизимлари, масалан, ISO 14001 стандартлари мавжуд.

Хулоса. Мутахассисларнинг фикрича мамлакатимизда корпоратив ижтимоий масъулиятнинг ривожланишига уни амалиётга жорий қилишда асосий қийинчилик туғдирувчи бир қанча тўсиқлар мавжуд. Мисол тариқасида маҳаллий аҳолининг келиб чиқиши менталитети ва маданиятимиз. Бир қанча бизнес йўналишларидаги шаффофликнинг йўқлиги, маълум бир даражадаги яширин иқтисодиёт ва солиқ сиёсати, ҳукуматнинг корпоратив ижтимоий масъулият тизимини рағбатлаштириш бўйича сиёсати қонун билан белгиланмаганлиги, корхона ташкилотлардан ижтимоий масъулиятни талаб қилувчи манфаатдор томонлар фаолияти йўқлиги. Юқоридагилардан келиб чиқиб айтиш мумкинки, мамлакатимизда корпоратив ижтимоий масъулиятни жорий этиш учун, экологик масъулликни ошириш учун аввало бир қанча қонуний талаблар жорий қилиш зарур.

Жумладан, корпоратив ижтимоий масъулиятни жорий этиш ва ривожлантириш бўйича илмий-амалий тадқиқотларни давлат томонидан рағбатлантириш, корпоратив ижтимоий масъулият ва барқарор ривожланиш соҳасини тарғиб қилиш учун турли ўқувлар, семинарлар ва анжуманларни ташкил этиш; корпоратив ижтимоий масъулият тизимини яратиш ва ривожлантириш борасида давлат стратегияси ва дастурларини ишлаб чиқиш ва амалга ошириш, корхоналар томонидан номолиявий ҳисоботларни тайёрлаш ва чоп этиш амалиётини йўлга қўйиш, бу борада қонунчиликни такомиллаштириш орқали амалий натижаларга эришиш мумкин. Амалга ошириш орқали қуйидаги самараларга эришиш мумкин. Яъни фаолиятда фойда кўпаяди, ўсиш суръатлари ошади. Корхоналар ижтимоий масъулиятли инвестицияларга кириш ҳуқуқини қўлга киритадилар, уларни тақсимлашда инвесторлар компаниянинг ижтимоий ва ахлоқий фаолиятини тавсифловчи кўрсаткичларни ҳисобга оладилар. Атроф-муҳитни муҳофаза қилиш соҳасидаги амалий ишлари хам мухимдир. Ташкилотларнинг ижтимоий масъулияти даражасини баҳолашга имкон берадиган

бир нечта кўрсаткичлар мавжуд.

Операцион харажатларни камайтириш мумкин, масалан, ишлаб чиқаришни камайтириш ёки чиқиндиларни қайта ишлаш, энергия самарадорлигини ошириш ёки қайта ишланган материалларни сотиш орқали манфаатдор бўлади. Ушбу мақоланинг илмий янгилиги - мамлакатимизда экологик масъулиятни оширишда рақамли технологиялардан фойдаланишнинг янги ва инновацион ёндашувларини ишлаб чиқишдаги мукаммал йўналишларни кўрсатиш, шунингдек, экологик хавфларни камайтиришга, ресурсларни самарали бошқаришга ва ишлаб чиқариш жараёнини оптималлаштиришга қаратилган илмий принципларни яратишда иложи борича тўлиқ, илмий асосланган янгиликларни тақдим этувчи тадқиқотдир.

INTEGRATING THE EDUCATION SYSTEM INTO SUSTAINABILITY IN THE TRANSITION TO A GREEN ECONOMY

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***Background*:** Today, issues like climate change, decreasing natural resources, and environmental degradation affect the entire world, including Uzbekistan. The necessity of shifting to a green economy—that is, an economic model that is both environmentally friendly and guarantees economic growth—is brought to the top of the agenda by this circumstance. The importance of education in this transition process is emphasized by the Sustainable Development Goals of the UN. Since the Republic of Uzbekistan also pursues sustainable development, aligning the educational system with sustainability principles is an essential requirement for guaranteeing the nation's long-term economic and environmental prosperity.

Objectives: This study's primary objective is to establish theoretical and methodological underpinnings and pinpoint useful paths for incorporating sustainability principles into the Uzbek educational system as part of the country's transition to a green economy. The following tasks were established in order to accomplish this goal:

- Examination of the subject's theoretical and methodological literature.
- Analysis and evaluation of sustainability education's present situation in the Uzbek educational system.

Determine the best approaches and systems for incorporating sustainability concepts into the educational system in Uzbekistan. In light of the shift to a green economy, create a model for incorporating sustainability into the Uzbek educational system.

Create suggestions and ideas for putting the developed model into practice.

Methodology: The study used a qualitative research methodology that involves semi-structured interviews with curriculum developers, education policy makers, and school instructors as well as case study analysis. Information was gathered from teachers and pupils at Tashkent's Mukhammad al-Khwarizmi Specialized IT School, which has adopted eco-friendly teaching methods.

Findings: According to the findings, pupils voiced their opinions on recycling waste into high-quality products and switching to disposable paper cups from plastic ones, while teachers are becoming more interested in expanding green spaces, nature-based learning, and water conservation techniques. In order to do this, the Muhammad al-Khwarizmi IT School has set up Echo-Union areas where students engage on a variety of projects.

Nevertheless, effective implementation is complicated by a shortage of age-appropriate green learning resources, inadequate teacher training, and a lack of systematic policy support. The study matched cultural values and national educational requirements with sustainable education.

Keywords: global challenges; nature based education; sustainability; Eco-union; environmental and economic well-being; environmentally friendly.

Introduction. Countries are reevaluating their educational priorities in light of Uzbekistan's pressing need to switch to green economic models. Secondary and postsecondary education are the main targets of education for sustainable development. Nonetheless, children's attitudes and behaviors throughout their lives are greatly influenced by their early encounters with the environment. According to this article, education is essential to producing a generation that is prepared to handle the demands of environmental citizenship as well as capable of guaranteeing sustainability.

Literature Review. Scholars like Walls, Aryen E.J., have made contributions to the field of ecology and environmental protection, while Saliev, A. S., and Gafforov, Ya. M. have helped to promote sustainability. According to research, children who participate in hands-on ecological activities grow to have a stronger bond with nature and a greater sense of environmental responsibility. Implementation is still uneven, though, particularly in poorer nations where sustainability is not yet formally covered in the curriculum. In Uzbekistan, reforms put quality and accessibility ahead of sustainability.

Research Design and Methodology. In order to investigate contemporary sustainability practices and viewpoints in Uzbekistan, a qualitative research design was chosen.

Example: Tashkent's Mirzo Ulug'bek and Muhammad al-Khwarizmiy Specialised Educational Institutions.

Data gathering methods include curriculum review, classroom observations, and interviews and discussions with ten participants.

Analysis: Key ideas from transcribed interviews are extracted through thematic analysis utilizing.

CAQDAS (Computer Assisted Qualitative Data Analysis Software). The following were the primary research questions:

1. How are the various educational levels in Uzbekistan (preschool, general secondary, secondary specialized and vocational, and higher education) now evaluating sustainability education? Which subjects, abilities, and methods are being taught at the moment?

2. Which ecological, economic, and social sustainability concepts are most crucial for the Uzbek educational system's shift to a green economy, and how may they be successfully included into the curriculum?

3. What are the primary methodological and pedagogical strategies for incorporating sustainability into the educational system in Uzbekistan? What part do things like training teachers, creating educational resources, and implementing active learning strategies play?

4. Given Uzbekistan's national identity, economic progress, and environmental issues, what approach of incorporating sustainability into the educational system can be the most successful and efficient? What lessons can be drawn from other nations' experiences?

Results and Discussion. The results demonstrate that educators in Uzbekistan's educational establishments are eager to introduce kids to environmentally friendly concepts. Typical activities include establishing small gardens, recycling crafts, conserving the environment, and telling stories about nature. Consistent execution is restricted, nevertheless, by inadequate staff training, a lack of national norms, and a lack of instructional and methodological resources.

The Cerebry platform is suggested as a solution to these issues.Its characteristics include being an artificial intelligence (AI)-based platform that is used in Uzbek schools to evaluate students' proficiency in the natural sciences and mathematics, drawing on Singapore's experience.

Student assessment: To ascertain students' level of understanding, the platform offers customizable questions. Depending on the student's responses, AI automatically modifies the question's level of difficulty.

Task assignment and outcome tracking: Using the platform, teachers can give students assignments and monitor their progress in real time. Students can utilize the platform independently to complete science assignments and evaluate their own performance.

Task types: The portal offers a range of English, Russian, and Uzbek nature-adapted challenges.

Test result analysis: The platform examines test outcomes to determine students' levels of proficiency. The goals of the Cerebry platform are to assess students' proficiency in science and math throughout the learning process, make teaching easier, and raise educational standards.

Conclusion. It is essential that sustainability education in Uzbekistan no longer be viewed as secondary or optional. It ought to be a key element of national green development plans. Countries like Uzbekistan can create future workers and citizens who are well-suited to the difficulties of sustainable development by fostering environmental awareness in children from an early age. A versatile, culture-based strategy that can be expanded across institutions is provided by the Cerebry platform.

ECONOMIC IMPACT OF UNITED STATES-CHINA TRADE WAR ON GLOBAL SUPPLY CHAINS

Ehsonov Akram

Introduction. Trade has always seen as a locomotive of the economy and economists usually measure trade volume with the exchange of goods and services (export and import). However, trade conflicts are the obstacles that slow the economic relationships down between countries, especially when the world's economic giants- United States of America (USA) and China- are in the main scope of the research: gross domestic product (GDP) of the USA ($27trln) and China ($17trln) solely constituted almost 42% of the world GDP ($107trln) in 2023 (World Bank report, 2023). Deterioration of the economic relations between these big players will eventually cause economic recessions within these countries, causing the destruction of the global supply chains in different sectors of the international economy.

During the end of the last decade, several trade disputes started between China and the USA, the US imposed roughly $350 billion worth tariffs on Chinese imports, while China implemented $100 billion worth trade barrier on the US imports that was allowed by World Trade Organization (WTO) as a retaliatory action (Bown 2018). As a result, this trend showed its negative impacts on the US imports, decreasing it 18 % or 2.5% of total GDP and the same trend was experienced in Chinese import- 11% of decline in imports or 3.5% fall in overall economy. In return, there were no winners, nevertheless, US tensions to prevent strengthening of army of Peoples Republic of China (PRC), increase the number of job positions, limiting the access of Chinese companies to American high-end technologies as well as decreasing the budget deficit with tariff charges (Kapustina at.al, 2020).

As these trade conflicts are concerned, many international companies in both countries either faced with the difficulties to get necessary goods and services or received them at least at significantly higher price. As the costs of these company's products and services increased as a result of imposed tariffs and quotas, most of them faced with the risk of bankruptcy in fierce competition, indeed, leading to the collapse of the supply chains and loss of job places. To mitigate financial losses and ensure operational viability, many leading international companies got stack, not knowing potential solutions, lead to take strategic measures to survive. The authorities of the both USA and China experienced decrease in the overall economy as a result of imposed trade barriers. These types of measures carried their own risks and opportunities, whether governments can increase trade volume with different countries to cover GDP loss, international companies found it easier to get necessary parts and raw materials from different economic partners. If stakeholders of the trade disputes were familiar with

the instructions and experiences to prevent economic loss and bankruptcy, they could easily mitigate negative economic consequences of the trade conflict.

The author of the research investigates how US-China trade disputes affected stakeholders- US and Chinese governments, international companies, financial intuitions, multinational corporations- day-to-day operations, especially, those who import and export goods and services from or to China and the USA. It tries to analyze and create formula to assess how 1% increase or decrease in one of the country's exports and import volumes will affect to world GPD, calculates relationship between the number of trade disputes and exchange of goods volume, identifying whether these variables are positively or negatively related to each other. Besides, it shows uses regression analysis to show linear regression between variables.

Current research is important for policymakers, state authorities and international companies, as it provides crucial insights about how to act during trade conflicts, they can make future economic forecasts and prevent negative economic trends relying on the results of the work. Moreover, the study will be contributed as a promoter of sustainable development for supply networks, showing where is the weakness of international companies in delivering raw materials for consumption goods.

Literature Review. There have been conducted several studies about the impacts of US-China trade war on companies, entrepreneurs in microeconomic level and governments, world GDP, unemployment, inflation, supply chains, global supply values and international organizations in macroeconomic level. In one of the recent studies (Zhou Y, 2020), using multi-country, multi-stage- general equilibrium model, it is showed that trade barriers, especially, tariffs on imports of Chinese intermediate goods negatively affect US output, downstream exports and employment. While the results of another researcher (Itakura K, 2020) explained that escalation of trade war reduced US and Chinese economic welfare -1.3% and 1.45% respectively, indicating the global supply chains (GVCs) as a main indicator in determining trade responses. According to Wu (Wu J at.al, 2021), the US tariffs on goods imported from China were estimated at 67% of the indirect tariff imposition resulting from five rounds of tariff escalation, which totaled almost $23 billion.

On the other hand, different research (Yuan R, 2023) examining the impacts of US-China trade conflicts on global greenhouse gas (GHG) level revealed that in the absence of trade war GHG levels decreased by roughly -1.2%, while certain types of products and services are redistributed to the rest of countries, global emissions grow on net by 0.3–1.8% driven by rose domestic production in China. Similarly, the study by Gur N and Dilek S, (Gur N & Dilek S, 2023) showed that neo-protectionism and vast use of high- performance technologies is not the way to maintain US technological dominance over China, instead US government should allocate incentives to mainly manufacturing investments, and create high-salary jobs for the different spheres of

American society including agriculture, finance, healthcare system, education, heavy and light industry.

Moreover, it is explained by another study (Freund C, at. all, 2024) that nevertheless, level of the US imports from China decreased remarkably from 22% to 16%, this gap is covered by large and developing countries with revealed comparative advantage in a product. Regarding the strategic products, countries who are replacing Chinese imports tend to experience faster import rates from PRC (Peoples Republic of China), despite the obstacles preventing Chinese goods and services, China remains top supplier of directly imported goods in the world.

In the recent study by Lau L (Lau L, 2019), it is founded that despite the escalations of bilateral trade conflicts, the Chinese economy will continue to grow at a faster real rate than the US economy and will likely to overcome the US economy in terms of aggregate real GDP rate in the late 2030s. Group of scholars from China come to similar conclusion using the SMART model, analyzing direct economic effects of US-China trade war (Tu X at. all, 2020), according to this research, US imports are more likely to be diverted to other markets, specifically, Japan, Mexico and Germany, in most fields of the economy.

Above mentioned researchers significantly contributed to the US-China merchandise war, analyzing its causes, effects, what kind of strategies used by both countries to protect their domestic industries from the negative effects of this conflict and even have suggestions proven with statistics and data. However, there is still existing gap about how this bilateral trade escalations affected to the specifically to the supply chain networks and what strategies should be taken to achieve sustainable economic growth. Current research tries to fulfil this gap by providing official statistics by World Trade Organization (WTO), World Bank (WB) as well as other international organizations.

Methodology.

Theoretical framework. There have conducted several studies regarding the US-China trade war, however very limited information is available about the effects of trade barriers, especially tariffs, on the global value networks. The author uses several economic theories to find valuable results, including neo-classical, classical trade theories (Antras P, 2007) and cumulative tariff method to evaluate the impacts of trade conflict between United States and China in third party countries. Research data is collected from different official sources including: World Bank statistics, WIOD (World Input-Output Database), United States Department of commerce and Ministry of Finance of the People′s Republic of China.

It is important to highlight main points of used theories and models in current study, classic trade theory itself formulated by Adam Smith through the late 1970s, it explains that countries achieve economic growth through the effective use of resources,

at this point absolute advantage came into the play, increased total production with low cost and effective labor than any other country. However, in 1817 David Ricardo, British classical economist, proposed comparative advantage in international trade that explains it is better for one county to produce goods that has lower opportunity cost. He makes the point that the foundation of global trade is the difference in prices caused by variations in labor productivity when the same product is produced by all countries. Besides, author uses neo-classical trade theories, in 1930 Swedish economist Ohlin (Ohlin, 1930) inspiring from the works of David Ricardo, proposed theory that explains country's production choice. According to theory, countries produce goods and service that either require more labor or capital based on their labor or capital abundance.

Table 1. Description and sources of data

Description of data	Sources
World Input-Output tables (2016 release)	World Input-Output Database
World Input-Output tables (2013 release)	World Input-Output Database
Tariff rates and commodity list of US imported goods from China	Office of the United States Trade Representative
Tariff rates and commodity list of China imported goods from the US	Ministry of Finance of the People's Republic of China

Source: Created by author

In order to show how research independent variables are connected with dependent variable, we represent conceptual diagram that gives clear review to the reader. According to the diagram there are two subgroups of independent variables that impact either positively or negatively on dependent variable – global value chains, while first group consists of export values, imports values and GDP (GDP = Consumption + Investment + Government Spending + Net Exports), second subgroup include negatively related independent variable – trade barriers, especially tariffs.

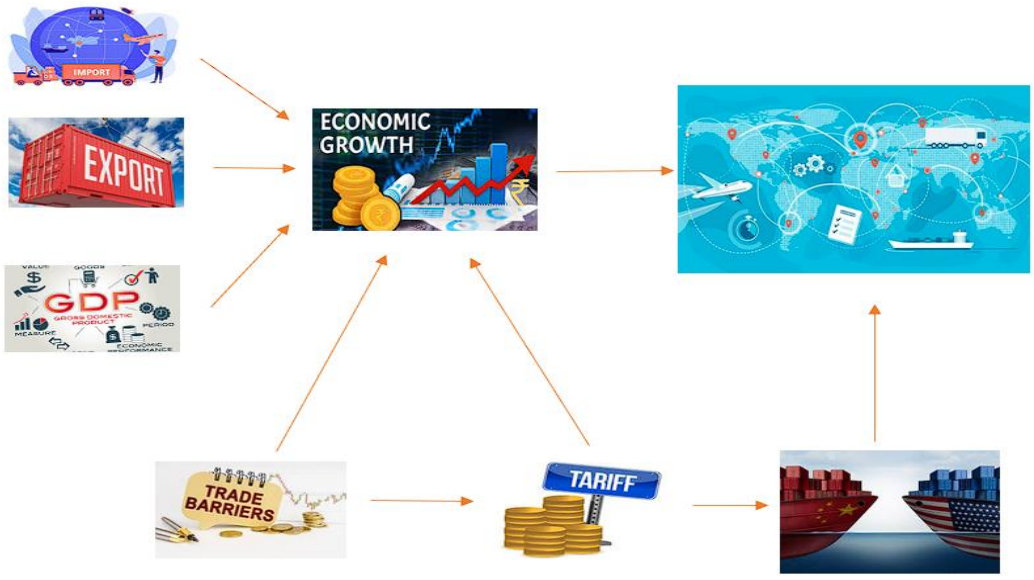

Figure 1. Conceptual framework

Source: Created by author

3.2 Empirical framework

3.2.1 Model construction

Cumulative tariff model is used in this research, cumulative tariff is the total value of tariffs used in the trade in global supply chains, it calculates both direct and indirect tariffs used between countries with trade conflicts and the third-party countries being hurt as a result of trade disputes (Rouzet & Miroudot, 2013). According to the model, cumulative tariff is calculated by:

$$\mathrm{CTi,j(s)} = \mathrm{ti,j} + \sum_{m=1}^{N} a_{m,i} \cdot t_{m,i} + \sum_{m=1}^{N} \sum_{l=1}^{N} a + \ldots \sum_{m1,m2,m3\ldots ms \in N}^{N} am1, am2, \ldots ams, ams - 1 \quad (1)$$

When **s** $>\infty$, $\mathbf{CT_{i,j}^{(s)}}$ represents all tariffs with the supply chain.

Considering direct tariff matrix is $\mathbf{T^2=T^1+\Delta T}$, we find indirect tariff value caused by additional tariff:

$$\Delta CT = \Delta T + ((e \times (A \times \Delta T) \times B)' \times e) \times D = \Delta T + \Delta IT \quad (2)$$

Where **ΔT** represents the change in the value matrix of tariff, and **ΔIT** represent indirect tariff burden because of **ΔT.**

Results and discussions

Main results. Using the cumulative tariff calculation model's formula, author calculated effects of indirect tariffs imposed by United States and China on each other's goods. There are three main indicators: Indirect tariff rate added in percentage, indirect tariff growth rate and indirect tariff burden in million dollars. Table 1 illustrates data about the effect of imposed tariffs on Chinese intermediate goods by the US on 11 different countries. It is evident from the information provided that Canada, Mexico, European Union and Russian – main trading partners of United States- are most hurt

from added tariffs by the US. While rest of the countries experienced negligible impact from that trend almost 0.02 %. Similarly, all the world's largest economies experienced nearly 150% indirect tariff growth rate from imports of the US, while Canada and Mexico showed significant increase 48% or $631 million and 42% or $508 million respectively. However, figure for rest of the world fluctuated between 4% and 14% or between $18 and $170 million respectively.

Findings of the author are showing the similar results with Anukoonwattaka (Anukoonwattaka W, 2021) – because of the export asymmetric in US-China relationship, there is more trade opportunity for third countries by US tariff imposition compared to China's. Similarly, results of Athukorala (Athukorala P, 2017) showed the almost same trend compared to author's work, main trade allies of the USA are more experienced negative effects of indirect tariff rates rather than rest of the world did, it can be seen from the figures that major percentage and value levels are belong to the EU, Canada and Mexico because of their trade partnership with the USA. Moreover, research conducted by Son (Son M, 2022) concludes that Chinese major suppliers: Korea and Vietnam have become the victim of US-China trade escalation, constituting negligible decrease in their GDP value.

Table 2. Effect of Indirect tariff imposed by US on Chinese imports

Countries	Indirect tariff rate added (%)		Indirect tariff growth rate		Indirect tariff burden (million $)	
	For imports from United States	For imports from the world	For imports from United States (%)	For imports from the world (%)	For imports from United States	For imports from the world
BRA	0.18	0.04	125.70	13.70	53.58	64.17
CAN	0.27	0.14	154.00	48.00	631.78	648.00
CHN	0.22	0.02	143.80	10.40	338.38	412.93
IDN	0.18	0.01	124.10	6.20	18.41	24.63
IND	0.19	0.01	133.40	8.40	75.59	83.84
JPN	0.19	0.02	137.10	10.60	162.88	184.76
KOR	0.21	0.03	145.90	13.80	124.50	136.57
MEX	0.24	0.11	139.70	41.90	508.69	522.16
RUS	0.27	0.02	145.70	7.30	33.92	45.80
USA	–	0.02	–	3.90	–	415.43
EU	0.22	0.02	144.10	7.20	766.64	1,043.12

Source: Calculated by author (tariff rates)

Regarding the indirect tariffs imposed by China on the US imports, there has no significant difference in numbers, almost 0.05% in imports from China and 0.01% imports from the rest of the world. Indirect tariff growth rate stayed same around 11% on imported goods from China and 5% from the rest of the world. It is important to mention tariff burdens from China on USA, EU and Japan, constituting $269 million or,

$213 million and $81 million respectively, while rest of the world experienced around $20 million tariff burden on imports from China, while India and Korea showed $45 million and $80 million respectively. According to the Table2, the same trend applied for the USA and EU, constituting $325 and $294 million respectively, while rest of the world stayed around $40 million dollars.

Table 3. Effect of Indirect tariff imposed by China on US imports

Countries	Indirect tariff rate added (%)		Indirect tariff growth rate		Indirect tariff burden (million $)	
	For imports from China	For imports from the world	For imports from China, %	For imports from the world, %	For imports from China	For imports from the world
AUS	0.05	0.01	11.45	5.35	27.72	29.71
BRA	0.05	0.01	11.65	4.08	17.39	19.14
CAN	0.05	0.01	11.02	2.59	27.79	34.91
CHN	–	0.00	–	1.28	–	50.49
IDN	0.05	0.01	12.36	5.78	22.14	23.11
IND	0.05	0.01	11.61	5.95	45.68	59.61
JPN	0.05	0.01	10.60	5.50	80.66	96.24
KOR	0.05	0.01	11.26	6.20	51.12	61.48
MEX	0.05	0.01	9.30	3.77	40.98	47.07
RUS	0.05	0.01	11.20	4.54	25.04	28.32
USA	0.05	0.01	10.52	3.04	269.44	325.07
EU	0.05	0.01	10.68	2.26	213.76	294.57

Source: Calculated by author (tariff rates)

Although there is a high uncertainty in trade policies between the USA and China, it is more likely the US is turning real income losses into real income gains because China is purchasing US-produced goods (Bekkers E, at, all, 2020). Besides, trade conflict influenced global investors making them to wait more restrictions to be applied as well as China also imposing higher tariffs on the US goods (Gorg H, 2020). On the hand, it is barely possible for both US and China to replace one another's trade position, while it is possible to shift some production sources from China to Vietnam, Chinese overall output of production cannot be replaced (Dollar D, 2022). Because China- US relations are based on core fundamentals, trade conflicts probable will continue in an uneasy equilibrium.

Conclusion and Policy recommendation. This paperwork aimed to investigate effects of US-China trade war on the international supply and value chains, analyzing individual tariff rates and values of the twelve different regions that is constituted because of the trade disputes between world's two giant economies. According to the results, indirect tariff rates were significantly high for the goods imported by the USA, while it has not showed considerable change for China. Moreover, because of these trade

conflicts, main trade partners of the US: Mexico, Canada and the EU had to encounter with major tariff burdens, on the other hand, China continued to supply goods and services to the remaining regions of the world at the relatively low prices, maintaining its low tariff rates because of its currency manipulation policy to hold cheap prices.

Empirical findings of the current research provide important results for policymakers and authorities of international organizations to achieve sustainable supply and value chain networks. According to the results, eliminating trade barriers, especially, tariff rates is the key indicator to achieve two-side-benefited foreign trade in supply chains. It would be highly recommendable for the authorities of the both the US and China to minimize tariff rates to prevent shortage of certain goods or at least provide these goods to the world at a relatively low and affordable prices. It is evident from the tariff rate tables that, sustainable supply chains can not only be achieved not through the group of countries that share same political interests, but also through open trade policy and tariff-free exchange of goods and services. By incorporating these findings, international organizations can achieve strong and reliable value chains that is the base for global economic growth.

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EMBRACING SUSTAINABILITY: THE ADOPTION OF GREEN TECHNOLOGIES IN THE OIL AND GAS INDUSTRY

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The oil and gas industry has long been a significant contributor to environmental degradation, with traditional technologies leading to various issues such as pollution, waste generation, and greenhouse gas emissions. However, in recent years, the industry has witnessed a growing emphasis on the adoption of "green technologies" to address these concerns and promote sustainable development (Oruwari, 2023; Piskulova, 2012). This shift has been driven by increasing environmental awareness, government regulations, and consumer demand for more eco-friendly products and services.

This article aims to provide a comprehensive analysis of the implementation of green technologies by leading international oil and gas companies, highlighting the benefits, challenges, and best practices. The study examines the definition and classification of green technologies, the advantages of green technologies over traditional approaches, and the practices of industry leaders in adopting and integrating these innovative solutions.

Defining and Classifying Green Technologies in the Oil and Gas Industry Green technologies, also referred to as "environmentally sound technologies," are those that focus on reducing pollution, managing and recycling waste, protecting the environment, and utilizing resources efficiently (Oruwari, 2023; Piskulova, 2012). According to the Organization for Economic Co-operation and Development (OECD), green technologies cover a wide range of areas, including general environmental management, the production of energy from renewable sources, and the mitigation of climate change effects (OECD, 2022).

In the context of the oil and gas industry, green technologies encompass a variety of solutions aimed at reducing the environmental impact of exploration, production, and refining activities. These include carbon capture and storage, biodegradable hydraulic fluids, renewable energy integration, enhanced drilling technologies, intelligent technologies and IoT, water management technologies, and waste reduction programs (GET Global Group, 2024; Energies Media, 2024).

Benefits of Green Technologies Compared to Traditional Approaches.

The adoption of green technologies in the oil and gas industry offers a range of benefits compared to traditional approaches. Firstly, these technologies significantly reduce the negative environmental impact of industry operations. They minimize the

release of pollutants, greenhouse gas emissions, and waste, contributing to the preservation of natural resources and the protection of ecosystems (Akpomuvie, 2011; Jardine, 2012).

Secondly, green technologies can lead to cost savings for oil and gas companies. The use of renewable energy sources, such as solar and wind power, can reduce the costs of electricity and fuel consumption, while advanced drilling techniques and smart well technologies can improve operational efficiency (Nikolai Efremov and Maria Efremova, 2022).

Furthermore, the adoption of green technologies can enhance the public image and reputation of oil and gas companies, demonstrating their commitment to sustainability and environmental responsibility. This can be particularly beneficial in an industry that has historically faced criticism for its environmental impact (Nikolai Efremov and Maria Efremova, 2022).

Additionally, green technologies can often improve the overall efficiency of oil and gas operations. For example, advanced drilling techniques and smart well technologies can help companies extract more resources with less environmental impact (Nikolai Efremov and Maria Efremova, 2022).

Practices of Leading International Oil and Gas Companies.

The oil and gas industry has witnessed a growing number of leading companies embracing green technologies to enhance their sustainability and environmental performance. This section examines the practices of three major industry players: Saudi Aramco, ExxonMobil and Royal Dutch Shell.

Saudi Aramco: Balancing Tradition and Innovation. As the world's largest producer of fossil fuels, Saudi Aramco has recognized the importance of balancing traditional and modern technologies to improve efficiency and minimize environmental impact (Energies Media, 2024). The company has implemented a Circular Economy approach to waste management, focusing on prevention, reuse, and recycling. Additionally, Saudi Aramco has established a comprehensive greenhouse gas emission management program to track and monitor methane emissions with accuracy (Aramco, 2025).

Saudi Aramco's investments in cutting-edge technologies, such as carbon capture and storage, reflect its understanding of the evolving energy landscape and the need to embrace new, cleaner solutions (Energies Media, 2024). The company's strategic decisions and influence on global oil prices have far-reaching implications, underscoring the importance of its role in shaping the future of the energy industry.

ExxonMobil: Diversifying the Energy Portfolio. ExxonMobil, a major player in the oil and gas industry, has made significant investments in renewable energy sources and sustainable technologies (Energies Media, 2024). The company has expanded its resource base through the use of hydraulic fracturing and is actively exploring

alternative energy solutions while enhancing the efficiency of traditional oil and gas operations.

ExxonMobil's commitment to sustainability is evident in its efforts to achieve net-zero Scope 1 and 2 greenhouse gas emissions in its operated assets by 2050 (Corporate ExxonMobil, 2024). The company's diversified portfolio and strategic partnerships have enabled it to maintain resilience in the face of market fluctuations, while its global presence and technological advancements position it as a key influencer in the evolving energy landscape.

Royal Dutch Shell: Embracing Renewable Energy. Royal Dutch Shell, one of the largest oil and gas companies, has placed a strong emphasis on the implementation of offshore wind projects and solar power (Energies Media, 2024). The company's efforts to reduce its carbon footprint have resulted in a 31% reduction in carbon emissions from its operations by the end of 2023, compared to 2016 (Shell, 2024).

Shell's diversification into the renewable energy sector, with significant investments in solar power and offshore wind projects, aligns with its vision to thrive in the energy transition and meet global energy demands sustainably (Energies Media, 2024). The company's project management expertise and vast experience in oil and gas operations have been instrumental in navigating the complexities of integrating new energy sources into its portfolio.

Drivers, Challenges, and Strategies for Successful Integration.

The adoption of green technologies in the oil and gas industry is driven by a combination of factors, including government policies, consumer demand, and corporate social responsibility (Nikolai Efremov and Maria Efremova, 2022; Energies Media, 2024).

Government policies, such as carbon pricing, emissions regulations, and incentives for renewable energy, have played a crucial role in incentivizing the industry to invest in green technologies (Piskulova, 2012). Additionally, growing consumer awareness and demand for environmentally friendly products and services have pressured oil and gas companies to prioritize sustainability in their operations.

However, the integration of green technologies in the industry is not without its challenges. The high upfront costs of some green technologies, the need for infrastructure and technological advancements, and the resistance to change within the industry can hinder the widespread adoption of these solutions (Nikolai Efremov and Maria Efremova, 2022).

To overcome these challenges, oil and gas companies have implemented various strategies, including:

1. Collaboration and partnerships: Forming strategic alliances with technology providers, research institutions, and other industry players to accelerate the development and deployment of green technologies (Energies Media, 2024).

2. Gradual transition: Adopting a phased approach to the integration of green technologies, allowing for a gradual shift from traditional to more sustainable practices (Energies Media, 2024).

3. Investment in research and development: Dedicating resources to the exploration and refinement of green technologies, ensuring their viability and cost-effectiveness (Corporate ExxonMobil, 2024).

4. Workforce upskilling: Investing in the training and development of employees to ensure they have the necessary skills and knowledge to effectively implement and maintain green technologies (Nikolai Efremov and Maria Efremova, 2022).

5. Stakeholder engagement: Fostering open communication and collaboration with regulators, communities, and other stakeholders to address concerns and build trust in the industry's sustainability efforts (Energies Media, 2024).

Thus, the oil and gas industry's adoption of green technologies is a critical step towards a more sustainable future. By embracing innovative solutions that reduce environmental impact, improve operational efficiency, and enhance public perception, leading international companies are positioning themselves to thrive in the evolving energy landscape.

The benefits of green technologies, ranging from environmental preservation to cost savings and enhanced public image, have driven the industry's shift towards sustainability. The practices of companies like Saudi Aramco, ExxonMobil, and Royal Dutch Shell demonstrate the industry's commitment to balancing traditional and modern approaches, diversifying energy portfolios, and investing in cutting-edge technologies.

However, the successful integration of green technologies in the oil and gas industry requires overcoming challenges related to high upfront costs, infrastructure requirements, and resistance to change. Strategies such as collaboration, gradual transition, investment in research and development, workforce upskilling, and stakeholder engagement can help address these obstacles and facilitate the widespread adoption of sustainable solutions.

As the global demand for energy continues to grow, the oil and gas industry must embrace the opportunities presented by green technologies to ensure its long-term viability and contribute to a more sustainable future. The industry's ability to navigate this transition will have far-reaching implications, not only for the environment but also for the economic and social well-being of communities worldwide.

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INTEGRATING GREEN TECHNOLOGIES IN UZBEKISTAN'S OIL AND GAS SECTOR: PATHWAYS TO SUSTAINABLE DEVELOPMENT

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Uzbekistan, a landlocked country in Central Asia, has emerged as a significant player in the global energy market, with a thriving oil and gas industry that contributes significantly to its economic growth (Energies Media, 2024). However, as the world grapples with the pressing challenges of climate change and environmental degradation, Uzbekistan has recognized the need to transition towards more sustainable practices in its energy sector. The implementation of green technologies in the oil and gas industry has become a crucial strategy for the country to balance economic development and environmental protection (Oruwari, 2023).

Green technologies, also known as "environmentally sound technologies," focus on reducing pollution, managing and recycling waste, protecting the environment, and utilizing resources efficiently (Piskulova, 2012). In the context of the oil and gas industry, the adoption of green technologies can have far-reaching benefits, including reducing negative environmental impacts, minimizing operational costs, and improving public perception (Jardine, 2012).

Uzbekistan's commitment to sustainable development is evident in its national policies and strategies, which prioritize the integration of green technologies across various sectors, including the oil and gas industry (Akpomuvie, 2011). This study aims to investigate the current state of green technology adoption in Uzbekistan's oil and gas sector, examining the key drivers, barriers, and potential benefits of this transition.

Uzbekistan has made significant strides in integrating green technologies into its oil and gas industry. The research identified several key areas where green technology adoption is taking place:

Carbon Capture and Storage (CCS). One of the prominent green technologies being implemented in Uzbekistan is carbon capture and storage (CCS). Companies like Uzbekneftegaz, the national oil and gas company, have invested in CCS projects to capture and store carbon dioxide emissions generated during oil and gas production (GET Global Group, 2024). These initiatives have helped Uzbekistan reduce its carbon footprint and contribute to global efforts to mitigate climate change.

Renewable Energy Integration. Uzbekistan has also been actively exploring the integration of renewable energy sources, such as wind and solar, into its oil and gas operations. Several major companies, including Lukoil Uzbekistan and Gazprom, have

implemented hybrid systems that combine traditional fossil fuel-based energy generation with renewable energy sources (Energies Media, 2024). This approach has helped reduce the industry's reliance on fossil fuels and improve its overall environmental performance.

Biodegradable Hydraulic Fluids. The adoption of biodegradable hydraulic fluids is another green technology that has gained traction in Uzbekistan's oil and gas industry. These fluids, derived from renewable sources, are readily biodegradable and have a lower environmental impact compared to traditional hydraulic fluids (GET Global Group, 2024). Companies like TotalEnergies have implemented the use of biodegradable fluids, contributing to the protection of the local ecosystem and improving the safety of their operations.

Water Management Technologies. Water is a critical resource in the oil and gas industry, and Uzbekistan has been proactive in implementing advanced water management technologies. These include wastewater treatment systems, water recycling and reuse initiatives, and the deployment of innovative technologies to minimize water consumption (Energies Media, 2024). These efforts have helped address the industry's impact on local water supplies and ensure the sustainable use of this vital resource.

Drivers of Green Technology Adoption. The research identified several key drivers that are propelling the adoption of green technologies in Uzbekistan's oil and gas sector:

1. Government Policies and Regulations: Uzbekistan's government has implemented a range of policies and regulations that incentivize the integration of green technologies in the energy sector. These include tax incentives, investment support, and stricter environmental standards (Oruwari, 2023).

2. Sustainability Commitments: Many of the major oil and gas companies operating in Uzbekistan have made sustainability a core part of their corporate strategies. These commitments have translated into tangible investments in green technologies to reduce their environmental footprint (Energies Media, 2024).

3. Stakeholder Pressure: Increasing public awareness and concern about environmental issues have put pressure on oil and gas companies to adopt more sustainable practices. Consumers, investors, and local communities are demanding greater accountability and environmental responsibility from the industry (Jardine, 2012).

4. Cost Savings and Operational Efficiency: The implementation of green technologies, such as renewable energy integration and water management solutions, can lead to significant cost savings and improved operational efficiency for oil and gas companies. This has become a key driver for adoption, as companies seek to enhance their competitiveness and profitability (Nikolai Efremov and Maria Efremova).

Barriers to Green Technology Adoption. Despite the progress made in green technology adoption, Uzbekistan's oil and gas industry faces several challenges and barriers:

1. Technological Limitations: Some green technologies, particularly those related to carbon capture and storage, are still in the early stages of development and may not be as efficient or cost-effective as traditional methods (Kalisz et al., 2022).

2. Financial Constraints: Implementing green technologies often requires significant upfront investments, which can be a barrier for some oil and gas companies, especially smaller players (Megia et al., 2021).

3. Lack of Skilled Workforce: The successful deployment of green technologies requires a skilled workforce with specialized knowledge and expertise. Uzbekistan may face challenges in developing and retaining this talent pool (Chen, 2020).

4. Regulatory Uncertainty: While Uzbekistan has made progress in developing policies and regulations to support green technology adoption, there is still a need for more consistent and comprehensive frameworks to provide a clear roadmap for the industry (US Department of Energy, 2025).

5. Industry Inertia: The oil and gas industry has a long history of reliance on traditional technologies and practices, and overcoming this inertia can be a significant challenge in driving the widespread adoption of green technologies (Repsol, 2025).

Potential Benefits and Impacts. The integration of green technologies in Uzbekistan's oil and gas sector has the potential to deliver significant benefits, both for the industry and the country as a whole.

Environmental Benefits. The adoption of green technologies, such as carbon capture and storage, renewable energy integration, and advanced water management solutions, can significantly reduce the industry's environmental footprint. This includes lowering greenhouse gas emissions, minimizing waste and pollution, and protecting natural resources (Akpomuvie, 2011).

Economic Benefits. Green technology implementation can also lead to cost savings and improved operational efficiency for oil and gas companies. This, in turn, can enhance their competitiveness and profitability, contributing to the overall economic development of Uzbekistan (Nikolai Efremov and Maria Efremova).

Social Benefits. The integration of green technologies in the oil and gas industry can have positive social impacts, such as improved public health and well-being, job creation in the renewable energy and sustainability sectors, and enhanced community relations (Repsol, 2025).

Sustainable Development. By successfully integrating green technologies into its oil and gas industry, Uzbekistan can make significant strides towards achieving its sustainable development goals. This includes reducing environmental degradation,

mitigating climate change, and ensuring the long-term viability of the energy sector (Megia et al., 2021).

Thus, we can conclude that Uzbekistan's oil and gas industry has made significant progress in adopting green technologies, demonstrating the country's commitment to balancing economic growth and environmental sustainability. The implementation of technologies like carbon capture and storage, renewable energy integration, and advanced water management solutions has helped reduce the industry's environmental impact and contribute to Uzbekistan's sustainable development goals.

However, the research has also identified several challenges and barriers that Uzbekistan must overcome to facilitate the widespread deployment of green technologies in the oil and gas sector. These include technological limitations, financial constraints, workforce development, regulatory uncertainty, and industry inertia.

To address these challenges, Uzbekistan should continue to strengthen its policy and regulatory frameworks, provide financial incentives and support for green technology investments, and foster collaboration between the government, industry, and academic institutions to develop a skilled workforce. Additionally, the country should actively engage with international partners and share best practices to learn from the experiences of other oil and gas-producing nations.

By overcoming these barriers and capitalizing on the potential benefits of green technology adoption, Uzbekistan can position its oil and gas industry as a global leader in sustainable energy production. This transition will not only contribute to environmental protection but also enhance the industry's long-term competitiveness and support the country's broader economic and social development goals.

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WORLD EXPERIENCE IN THE MANAGEMENT AND DEVELOPMENT OF PRIVATE HIGHER EDUCATIONAL INSTITUTIONS AND PROSPECTS FOR ITS APPLICATION IN UZBEKISTAN

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Annotation: In the context of globalisation, ensuring the competitiveness of the education system, introducing innovative approaches and increasing management efficiency have become urgent issues. Private higher education institutions play an important role in this process. They are actively participating in the development of the national education system by improving the quality of education, ensuring financial independence, and introducing modern knowledge and technologies. This thesis provides an in-depth analysis of the best practices of countries around the world in managing and developing private higher education institutions and assesses the prospects for their application in the conditions of Uzbekistan. The main focus is on educational policy, management mechanisms, financial models, and quality control systems in developed countries such as the USA, Great Britain, Germany, Finland, South Korea, Singapore, and Malaysia. Although the number of private higher education institutions is increasing in Uzbekistan, the study analysed the problems that hinder their sustainable development - the complexity of licensing and accreditation processes, insufficient human resources, and limited financial resources. The study also developed proposals for the development of private higher education in Uzbekistan, namely: improving the regulatory framework regulating the sector, introducing financial mechanisms to support the private sector, implementing international accreditation systems, and creating a competitive educational environment.

Keywords: Private higher education, educational management, innovative management, academic freedom, public-private partnership, educational quality assessment, accreditation system, global education system, financial independence, competitive educational environment.

World experience shows that today, the higher education system is in a state of transition from traditional education to innovative education. Higher education institutions are faced with the task of actively influencing the knowledge-based economy through the system of commercialisation of scientific research activities. The knowledge economy is aimed at the creation, dissemination and use of knowledge as the main resource of economic development. In the context of higher education, the knowledge economy implies its transformation into an important factor of production and development. In the second half of the 20th century, the first entrepreneurial-type higher education institutions appeared in developed countries of the world, the new

types of their activities were the production and transfer of innovative products, the stimulation of initiatives and developments of students and teachers, the commercialization of scientific results, the creation of innovative enterprises. It is worth noting that entrepreneurship and innovative activities increase the competitiveness of universities, as well as the efficiency of using capital that makes up the national innovation system.

The transition to the entrepreneurial model of universities is associated with the concept of the "triple helix" developed by G. Itzkowitz, which was defined as the evolution of the role of the university with the addition of a third mission to the traditional missions of the university (education and research) - to contribute to economic development by transferring research results from the laboratory to the economic system [1]. The entrepreneurial model suggests that universities should not only engage in educational activities but also actively participate in scientific research and development, cooperate with business entities and state organisations in the implementation of projects and programs, and create conditions for the development of entrepreneurial skills among students and teachers. One of the main principles of the Triple Helix is that all three participants - universities, business and government - should work together to achieve common goals and solve problems, without competing with each other [2]. This allows for a more efficient production system and is considered a key criterion for the dissemination of knowledge that contributes to the development of the economy and society as a whole. A modern entrepreneurial university is a form of higher education institution investment, where education will be more diverse. Such universities are manufacturers that train specialists, taking into account the culture of innovative entrepreneurship [3].

The study analyses the experience of developing entrepreneurial universities in the USA, England, Germany, Finland and China, and scientifically analyses the specific features and aspects of development and management. If we analyze the experience of the USA, the total number of entrepreneurial universities in the United States is more than 230, and the American higher education system is a center of fundamental sciences and applied research. The "American model" of the entrepreneurial university involves active cooperation between business and investors to create and commercialise new technologies and products. Universities in this model play a key role in the development of innovations. These universities not only provide educational services, but also carry out research and development.

Some of the famous US universities that provide education in the field of entrepreneurship were scientifically studied, and Stanford University was found to be a leading entrepreneurial university that demonstrates the connection between science and technology. As a result of the commercialisation of research at the university, companies such as Google, Yahoo, Cisco Systems, etc. were created.

Babson College in Massachusetts specialises in entrepreneurship and business education and is one of the most popular universities in this field. [4]. Marquette University in Wisconsin offers students the opportunity to work on real projects and gain experience in startups. In addition, partnerships with businesses allow universities to receive funding for research and development, as well as attract investment to create new companies and startup projects. This is achieved by allowing students to work on real projects, as well as by organising events where students can communicate with successful entrepreneurs and receive advice from them. Some universities also offer startup incubators, where students can receive funding and assistance in launching their projects. It is worth noting that the management mechanism of American entrepreneurial universities is characterized by a high degree of flexibility in response to changing market conditions. Many US entrepreneurial universities cooperate with various foundations and organizations that provide grants and financial support for scientific research and innovative projects.

Speaking about the UK experience, the UK is famous for its strong education and business sectors, which are reflected in its model for developing entrepreneurial universities. The "English model" of developing an entrepreneurial university has several features. Among them, we can highlight incubators and accelerators. A vivid example of this is venture capital financing and investment justification. Many universities in the UK are actively developing their startup incubators and accelerators, offering students and researchers resources, mentoring and financial support to create and successfully implement their business ideas. An example is the Cambridge Judge Business School, which has many successful startup and entrepreneurial projects. UK universities actively cooperate with local and international companies, industry and the business community. This cooperation includes consulting, research, internships and exchange of experience and business management practice. In addition, English universities are actively attracting investments in innovation and startup projects. They organise events to attract venture capitalists, which helps to commercialise ideas and develop entrepreneurship among students and faculty.

The University of Nottingham is a model for the entrepreneurial model. The structural divisions of this university are based on the commercialisation of scientific research. The university has an innovation park that provides offices and scientific equipment for bringing various startup projects and developments to the market.

Another example is the University of Warwick. The development of entrepreneurial activity at this university is carried out based on three groups of managers (research, project, and business managers) who form a system of project activities. Managers assist faculty members, develop interdisciplinary projects, and are actively engaged in fundraising. At the same time, it is worth noting that fundraising is the process of searching for and attracting resources, including investors, sponsors,

partners, and grants. This helps to attract additional resources for scientific research and the development of innovative technologies. In turn, the mechanism of management of entrepreneurial universities is based not only on state funding but also on financial support from private investors. Thus, the “English model” of an entrepreneurial university is characterised by active support for startup projects and innovations, as a result of which graduates and researchers have the opportunity to implement their ideas in real projects. Such universities create favourable conditions for the development of young entrepreneurs and contribute to economic growth and innovation in the country.

if we analyse the German experience scientifically, it is clear that universities in Germany have great autonomy and can independently determine their own research directions, as well as cooperate with industry and business. The “German model” of developing entrepreneurial universities is also of great interest and is considered one of the most successful universities in the world. Germany has a system of state grants and subsidies to support scientific research, which allows scientists to work on projects without seeking additional funds. This creates conditions for the development of innovation and for improving the quality of education in the country. The German model of an entrepreneurial university differs from the American model in that it is more focused on conducting fundamental scientific research and developing new technologies. It should be noted that Germany is famous for the integration of universities with industry. Many universities are actively developing industrial partnerships with leading companies, research centers and joint projects, which helps to more actively transfer knowledge and technologies into real industrial applications. Here are some examples of how some universities in Germany approach entrepreneurship. For example, the Technical University of Munich (Technische Universität München) has an entrepreneurship centre that helps students and researchers create their startups. The centre provides financing, assistance with developing business plans, and advice on legal issues. In addition, the university has a knowledge exchange centre that implements scientific projects with the financial support of Siemens AG, and a technology exchange centre that negotiates with the private sector and handles legal documents. The Technical University of Munich also has an office that deals with patents and licensing to create a favourable environment for researchers. The Karl-Ruprecht University of Heidelberg (Ruprecht-Karls-Universität Heidelberg) has an entrepreneurship centre that helps students and researchers create their own startups. The centre provides financing, assistance with developing business plans, and advice on legal issues. It should be noted that the mechanism for managing entrepreneurial universities in Germany is a complex, multi-tiered system. The Ministry of Education and Research is primarily responsible for the development and implementation of education and research. Federal politicians are involved in the financing and supervision of universities. In addition, each federal state has autonomy in matters of education and

science and offers its initiatives and programs to support entrepreneurial universities. Various associations, foundations and organisations support entrepreneurial universities in Germany.

If we look at the experience of Finland, another example of the development of entrepreneurial universities is the “Finnish model”. Universities in Finland are aimed at creating an entrepreneurial culture that supports students and employees in developing their own ideas and projects. They actively encourage student initiatives, which helps to develop entrepreneurial thinking. The main value of these universities is not only the number of startups created, but also their subsequent success in the global economic market. The most famous is Aalto University, which was founded on the basis of three universities: the Helsinki School of Economics, the Helsinki University of Technology and the University of Art and Design. This university helps to form business relationships between students and commercial organisations. The implementation of business ideas is carried out in an innovation centre established as part of the Demola Plant. The management structure of Finnish entrepreneurial universities is characterised by a high level of decentralisation and autonomy. The Finnish government actively supports the development of entrepreneurial universities through funding programs and tax incentives for companies operating in the field of innovation and high technology.

If we analyse the Chinese experience, today in China, entrepreneurial universities are also actively developing, forming innovative ecosystems. Within the framework of the “Chinese model”, there is a desire to become a high-tech economy. The government is actively supporting the development of entrepreneurial universities by allocating financial resources and creating special programs and initiatives to stimulate entrepreneurial activity.

Peking University has a Department of Finance and Awards. This department is of a practical nature and provides services for granting patents for various achievements. Another department, Technology Exchange and Licensing, is responsible for coordinating activities in the field of scientific and technical information exchange and licensing. The university has science parks where students and researchers can launch their projects and startups.

The University of Hong Kong has 80 research centres and institutes. The university has a technology transfer department that interacts with clients and deals with legal and regulatory issues. The University of Hong Kong operates an independent business entity, Versitech Ltd, which is engaged in the commercialisation of scientific research results. The management mechanism of China's entrepreneurial universities includes many components. China's education system is strictly supervised and regulated by the State Council for Education. At the same time, higher education institutions that want to obtain entrepreneurial status must undergo accreditation, which includes a system for assessing the quality of teaching, research, infrastructure and other

aspects. State-owned entrepreneurial university funding programs include grants and subsidies. Chinese universities have also established a process of cooperation with industry, and the Chinese government encourages students to start their businesses and develop innovative ideas.

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МЕХАНИЗМЫ УПРАВЛЕНИЯ КАПИТАЛОМ И РЕЗЕРВАМИ СТРАХОВЫХ ОРГАНИЗАЦИЙ: АДАПТАЦИЯ МЕЖДУНАРОДНЫХ СТАНДАРТОВ К НАЦИОНАЛЬНОЙ ПРАКТИКЕ

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Аннотация. Современный этап развития страхового рынка Республики Узбекистан требует внедрения эффективных механизмов управления капиталом и страховыми резервами, способствующих обеспечению долгосрочной финансовой устойчивости страховых организаций. Учитывая активизацию процессов либерализации экономики и интеграции в международную финансовую систему, особую актуальность приобретает адаптация международных стандартов регулирования, в частности директивы Solvency II, к национальной практике страхования. В данном контексте важным направлением научного анализа становится исследование взаимосвязи между риском неплатежеспособности (solvency risk) и корпоративной эффективностью страховых компаний.

Целью настоящего исследования является анализ влияния риска неплатежеспособности на финансовые результаты страховых компаний, а также выявление направлений совершенствования управления капиталом и резервами с целью повышения финансовой устойчивости. В основе исследования лежат теоретические положения международной практики и эмпирические данные зарубежных страховых компаний, функционирующих в условиях применения нормативов Solvency II. В рамках анализа особое внимание уделено оценке структуры капитала, эффективности распределения активов и обязательств, методологии расчета платежеспособности, а также механизмам внутреннего контроля и стресс-тестирования.

Результаты исследования свидетельствуют о том, что риск неплатежеспособности оказывает существенное влияние на корпоративную эффективность страховых компаний, снижая уровень рентабельности активов и капитала, а также ограничивая инвестиционную активность. При этом внедрение риск-ориентированных подходов к управлению капиталом и резервами, соответствующих стандартам Solvency II, способствует укреплению финансовой устойчивости, повышению прозрачности деятельности и усилению доверия со стороны клиентов и инвесторов. Для Республики Узбекистан, находящейся на этапе активного реформирования страхового сектора, данные выводы приобретают практическое значение в контексте разработки стратегий

устойчивого развития страховых компаний и повышения конкурентоспособности национального страхового рынка.

Научная новизна исследования заключается в адаптации зарубежных методологических подходов оценки риска неплатежеспособности к условиям развивающегося страхового рынка, а также в формулировании рекомендаций по совершенствованию системы управления капиталом и резервами в Узбекистане с учетом перспектив внедрения элементов Solvency II. Полученные результаты могут быть использованы при разработке национальных стандартов надзора за страховыми организациями, а также в практике корпоративного управления в страховых компаниях.

JEL Classification: G22, G32, G38, K22, M42.

Методология исследования. Методологическая основа настоящего исследования базируется на комплексном подходе, сочетающем элементы теоретического анализа, эмпирического моделирования и сопоставительной оценки. Исследование направлено на выявление взаимосвязи между риском неплатежеспособности и корпоративной эффективностью страховых компаний, а также на разработку предложений по совершенствованию управления капиталом и резервами в контексте адаптации международных стандартов Solvency II к условиям Республики Узбекистан.

В качестве исходной теоретической базы были использованы труды ведущих зарубежных исследователей в области страхового регулирования, корпоративных финансов и управления рисками. Особое внимание уделено результатам эмпирических исследований, представленных в научной работе «Solvency Risk and Corporate Performance: Evidence from Insurance Industry», в которой применены количественные методы оценки влияния показателей платежеспособности на финансовую результативность страховых организаций. Аналогичный аналитический инструментарий адаптирован к целям настоящего исследования с учетом специфики развивающегося национального страхового рынка.

Для количественной оценки взаимосвязей использовались методы регрессионного анализа, позволяющие определить степень влияния коэффициентов платежеспособности на показатели корпоративной эффективности, такие как рентабельность активов (ROA), рентабельность капитала (ROE), уровень страховых резервов и объемы инвестиционной деятельности. В качестве объясняющих переменных были выбраны показатели, характеризующие уровень капитала, структуру резервов, соотношение активов и обязательств, а также параметры риска, отражающие степень возможной неплатежеспособности в краткосрочном и долгосрочном периодах.

Выборка для эмпирического анализа основывается на данных международных страховых компаний, функционирующих в рамках Solvency II, что позволило получить обоснованные и репрезентативные результаты. В целях адаптации модели к условиям Узбекистана были учтены нормативные акты НАПП, а также статистические данные о деятельности национальных страховых организаций.

Применение сравнительного анализа позволило провести сопоставление уровня риска и финансовой устойчивости страховых компаний в различных юрисдикциях, включая страны Европейского союза, использующие директиву Solvency II, и Узбекистан. Это обеспечило возможность выделения общих закономерностей и выявления специфических проблем, препятствующих повышению эффективности управления капиталом и резервами в национальном контексте.

Результаты исследования. Проведённый анализ позволил выявить устойчивую взаимосвязь между уровнем риска неплатежеспособности и корпоративной эффективностью страховых компаний. На основе адаптированной регрессионной модели, построенной по аналогии с зарубежными исследованиями (в частности, с результатами, представленными в работе Solvency Risk and Corporate Performance), были установлены следующие ключевые зависимости.

Анализ международных данных показал, что увеличение коэффициентов риска (в частности, пониженного уровня SCR – Solvency Capital Requirement) существенно снижает показатели рентабельности активов (ROA) и собственного капитала (ROE). Компании с более высокой вероятностью несоблюдения нормативов платежеспособности демонстрируют худшие финансовые результаты и более высокий уровень волатильности прибыли. Эти выводы актуальны и для страхового сектора Узбекистана, где компании с нестабильной структурой капитала имеют тенденцию к снижению эффективности и инвестиционной привлекательности.

В компаниях, использующих риск-ориентированный подход к управлению капиталом, наблюдается более высокая стабильность и предсказуемость финансовых результатов. Моделирование показало, что оптимальное соотношение между базовым капиталом (Tier 1), дополнительным капиталом (Tier 2) и страховыми резервами прямо влияет на способность компаний противостоять стрессовым сценариям. Это подтверждает необходимость пересмотра нормативных требований к формированию резервов в Узбекистане с учетом стандартов Solvency II.

Таблица 1.

Влияние риска неплатежеспособности на показатели корпоративной эффективности страховых компаний (по международным данным Solvency II)

Показатели страховой компании	Группа с низким риском Solvency	Группа с высоким риском Solvency	Отклонение (%)	Анализ и интерпретация
ROA (рентабельность активов), %	4,2	1,5	-64,3%.	Высокий риск неплатежеспособности снижает общую доходность активов
ROE (рентабельность капитала), %	9,8	3,4	65,3%	Риск платежеспособности негативно влияет на возврат инвестиций акционеров.
Уровень страховых резервов, % активов	55	67	+21,8%	Компании с высоким риском накапливают избыточные резервы, что снижает эффективность капитала.
Инвестиционный доход, %	6,7	3,1	-53,7%	Консервативные стратегии инвестирования снижают доходность в условиях высокого риска.
Доля Tier 1 в структуре капитала, %	85	62	-27,1%	Недостаток высококачественного капитала усиливает уязвимость компаний.

Данные таблицы наглядно демонстрируют, что компании с высоким риском неплатежеспособности имеют значительно более низкие показатели рентабельности и инвестиционной активности. Существенное снижение доли высококачественного капитала (Tier 1) сопровождается ростом резервирования, что влечет за собой ухудшение эффективности использования активов и капитала. Полученные результаты подтверждают гипотезу о критической важности управления риском Solvency и сбалансированного подхода к формированию капитальной базы.

В выборке страховых компаний, функционирующих в рамках Solvency II, выявлена положительная корреляция между инвестиционной активностью и уровнем финансовой устойчивости. Компании, диверсифицирующие свои инвестиционные портфели, демонстрируют меньшую зависимость от операционных рисков и обладают большим потенциалом адаптации к внешним шокам. Это открывает перспективы для разработки новых инвестиционных стратегий в страховом секторе Узбекистана. Эмпирические данные подтвердили, что внедрение механизмов внутреннего аудита, стресс-тестирования и отчетности

в формате ORSA (Own Risk and Solvency Assessment) позволяет существенно повысить управляемость рисками и достоверность оценки финансового положения страховой компании. Применение аналогичных практик в Узбекистане может стать основой для повышения прозрачности и доверия к страховым организациям.

Хотя применение Solvency II в полном объеме может быть затруднительным для развивающихся рынков, отдельных его элементов — в частности, трехуровневой структуры капитала, оценки обязательств по принципу экономической стоимости, внедрения системы управления рисками — достаточно для достижения значимого прогресса в направлении повышения устойчивости страхового сектора Республики Узбекистан.Полученные результаты подчеркивают важность перехода к риск-ориентированной модели регулирования, соответствующей международным стандартам. Для Узбекистана внедрение адаптированных механизмов Solvency II позволит не только повысить финансовую устойчивость страховых компаний, но и усилить их конкурентоспособность на региональном и глобальном уровнях.

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THE IMPACT OF ECONOMIC GROWTH ON THE LEVEL OF AIR POLLUTION

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Abstract. Globally, air pollution is a major issue that has an adverse impact on both the environment and human health. Additionally, pollutants like PM2.5 deteriorate the quality of the air. Air pollution levels in Asia are changing significantly as a result of the region's rapid urbanization and industrialization. In light of this, the purpose of this study is to investigate how PM2.5 air pollution is affected by economic growth, industrial development, the use of renewable energy, urbanization, exports, and population expansion in 36 Asian nations between 2000 and 2020. The goal of the study was to determine the intricate connections between these variables and PM2.5 emissions using the Generalized Method of Moments (GMM) estimate. The findings indicate that air pollution rises with economic expansion. However, industrial development will help reduce PM2.5 levels as industry innovation and environmental standards lead to improved air quality. Renewable energy consumption, exports and population growth have no significant effect on PM2.5 levels. Along with prioritizing economic growth and production, it is also crucial to consider the issue of air pollution.

Introduction

During the past two centuries, as the economy and urban population have grown, the environmental quality is decreasing and causing the regular spread of small harmful particles in the air. Developing countries take leading positions in the air pollution index (Austin et al., 2017) and focus on maintaining human health and sustainable development (WHO, 2002). Fine particulate matter with a diameter of <2.5 micrograms per cubic meter (PM2.5) is the main cause of air pollution. PM2.5 in the air poses a serious threat to human health and the environment. PM2.5 typically comprises organic matter, sulfates, nitrates, and ammonium, resulting from emissions of different oxides of nitrogen and sulfur (Tsai et al., 2005), as well as smoke and dust particles (Zhang et al., 2018). Particle dispersion is mostly caused by human activities including driving cars, consuming raw materials, and burning fossil fuels like coal (Hu et al., 2016). Because of its small size, PM2.5 poses the greatest threat to human health. When PM2.5 levels rise, the risk of respiratory diseases, cardiovascular problems, and serious long-term illnesses increases (Pun et al., 2017). For example, such particles can lodge deep in the lungs and heart, causing lung cancer (Yeh et al., 2017) and non-fatal heart attacks (Xu et al., 2013).

Furthermore, regular energy consumption, increase in the number of buildings, industrialization are the main causes of air pollution. In populous countries such as

China and India, air pollution problems are evident and of concern to governments. As just one example, according to a new report from the World Health Organization's First Global Conference on Air Pollution and Health (WHO, 2018), ambient and household air pollution causes 7 million deaths each year. About 90 percent of people living in cities are exposed to particulate matter at concentrations that exceed WHO air quality guidelines. The situation may worsen in rapidly developing countries (Mannucci et al., 2017), and evidence suggests an association between PM2.5 pollution and respiratory disease-related mortality (Cao et al., 2017a, 2017b). diseases caused by PM2.5 also increase healthcare expenditure. This study examines the impact of industrial development, use of renewable energies sources, globalization (export) and urbanization and healthcare expenditures on air pollution.

The research hypothesis is that economic growth and population growth will increase your PM2.5 levels in the air. During the study, the influence of a number of independent variables on the independent variable of PM2.5 exposure was studied. The purpose of this work is to research the factors that cause the increase of harmful substances in the air and the activities that reduce the level of PM2.5, and based on the results, to give the necessary conclusions and to increase the effectiveness of the reforms currently being made to improve the air quality. In addition, the study of air pollution related to economic growth and population growth is a global problem (Chen et al., 2008), which means the need to combine economic development with environmental sustainability (Martins et al., 2018). The results of the research are expected to provide additional support not only in the formulation of national policies aimed at improving air quality, but also in the fight against global climate and health problems.

The study contributes to the fields of environmental policy in three ways. First, the study determines whether economic growth has a positive or negative effect on PM2.5 levels in the air. Secondly, this study covers 36 Asian countries over a period of 21 years (2000-2020) and makes the conclusions more reliable. And because of the research is done on a large scale, it can be widely applied to the countries and the Asian region. The approach used in the study is the System Generalized Method of Moments (GMM) estimator.

The remaining part of the paper proceeds as follows: Section 2 presents literature review, Section 3 consists of methodology, data description. Section 4 focuses on empirical results, Section 5 provides discussion, conclusion and policy recommendations.

Literature review

There have been conducted several literatures on the relationship between air pollution and economic growth. While one group of scientists says that the main cause of air pollution is energy consumption, others point to population growth as the main cause, and still others to the increase in the use of vehicles. A group of scientists have

emphasized that the use of renewable energy technologies will play an important role in reducing the level of harmful fine particles in the air, and researchers have used different approaches and models in their work. Xiao Ouyang et al. (2018) in their study examines the relationship between PM2.5 particles and health problems using a new method, the panel threshold model. In contrast to linear regression, this approach shows the non-linear effects of economic growth and environmental protection policies on air pollution. The results of the study show that although the tightening of environmental policies initially increases PM2.5, it eventually stabilizes. In addition, an increase in GDP per capita has a positive effect on PM2.5 reduction, while the expansion of the service sector contributes to improved air quality.

Ke Wang et al. (2020) in their study empirically analyzed the effects of environmental policy stringency (EPS) on air quality, specifically CO2, NOx, SOx, and PM2.5 pollution, based on 25 years of panel data from 23 OECD countries. Using the System Generalized Moments (SYS-GMM) method, the negative effects of EPS on pollutants such as CO2, NOx, and SOx have been determined, which means that strict measures against violators have been scientifically proven to reduce emissions. They used a new methodology and robustness test Least Significant Difference for Variance Component Based on Bootstrap (LSDVC_BB) to make sure your findings are reliable.

In the context of the EKC hypothesis, several empirical analyses have been conducted of the impact of the international trade on air pollution. For instance, Anna Kukla-Gryz (2008) researched the impact of economic growth and international trade (Kanemoto et al., 2014) on air pollution levels. Structural equation modeling (SEM) examines the relationship between growth and pollution, examining the effects of per capita income, international trade intensity, and the Freedom House index. According to her results, international trade and per capita income in developing countries change the structure of economic activity, which, in turn, increases air pollution. In developed countries, however, economic growth has a direct impact on air pollution, increasing pollution as a result of the combined effect of scale and income, which means that the scale effect is dominant.

The burning of fossil fuels, particularly coal, oil and natural gas, plays a major role in the release of PM2.5 particles into the air. The combustion of these fuels releases fine particles into the air, including PM2.5. Maciejczyk (2021) analyzed the adverse health effects of PM2.5 particles produced by the combustion of fossil fuels (Chow et al., 2002). The researchers found that particulate matter from fossil fuel combustion poses a significant health risk, and that the sulfur content and resulting acidity of these particulate matter make them readily bioavailable, which can lead to oxidative stress and systemic health problems.

Dongyang Yang et al. (2018) results show that PM2.5 increased with urbanization during the study period, but the relationship varied across countries and

regions. Researchers found that most countries in East Asia, Southeast Asia, South Asia and some African countries have developed with rapid urbanization and PM2.5. Empirical results show that other socio-economic factors, such as industrialization and economic growth, increase PM2.5 concentrations in many Asian countries and some African countries, while decreasing PM2.5 concentrations in most European and American countries. The results of this study reveal the spatial distributions of global urbanization and PM2.5 pollution and explain the evolution of the urbanization-PM2.5 relationship, implying that they can help to develop urbanization policies (Wang et al., 2018) aimed at controlling and reducing PM2.5 pollution.

Over the past decades, a number of studies have been conducted on the impact of economic growth on air pollution. However, a few of them used the GMM model and involved Asian countries. This study covers 21 years of panel data from 36 countries in Asia and 7 variables. The use of GMM model, strong instrumental variable and large number of observations increase the importance of this study.

Methodology

Theoretical framework

In the early stages of economic development, countries prioritize rapid industrialization and urbanization, which usually increases air pollution. The burning of fossil fuels, the expansion of manufacturing industries, and transportation networks cause an increase in pollutants such as CO_2, NO_x, SO_x, and particulate matter (PM2.5). A focus on economic gains over environmental sustainability often exacerbates pollution at this stage. Environmental Kuznets Curve (EKC) hypothesizes that as economic growth continues and per capita income rises, a tipping point or income threshold will be reached. At this stage, the economic structure moves to a more stable practice (Wang et al., 2023). Higher revenues lead to investments in advanced technologies and clean energy sources, while also funding environmental research and innovation.

Continued economic growth beyond the income threshold will help further reduce air pollution. Developed economies are often transitioning from manufacturing and heavy industry to a service-oriented structure, which typically produces fewer emissions. In addition, public awareness of environmental issues will increase, creating a demand for clean air and strict environmental policies (Farhar, 1993).

Model construction

Model is constructed by analyzing the impact of economic growth, industrial development, healthcare expenditure per capita, renewable energy consumption, export, urbanization and population growth on air pollution in 36 Asian economies from 2000 to 2020. Therefore, to estimate the effects of these determinants on air pollution, the study uses the following function:

$$EM_{i,t} = \alpha_0 + \alpha_1 GDPgrowth_{i,t} + \gamma Z_{i,t} + \mu_i + \vartheta_i + \varepsilon_{i,t} \quad (1)$$

Here, EM represents PM2.5 emissions; economic growth is main independent variable; and Z includes all independent variables that affect the environment. In this article, Z specifically refers to population growth, renewable energy, export, and urbanization; μ_i denotes time-invariant effect variable, γ - regional fixed effect variable; and $\varepsilon_{i,t}$ denotes other influencing factors is not captured in the model that is, the error term. You can see variable describtion and data sources in Table 1.

Table 1

Variable description and data sources

Variables	Description of variables	Sources
$PM_{2.5}$	It is PM2.5 air pollution, mean annual exposure (micrograms per cubic meter)	World Bank Data
GDP growth (GDPgrowth)	It is GDP growth (annual %)	World Bank Data
Healthcare Expenditure (HCE)	Current health expenditure per capita (current US$)	World Bank Data
Industrial Development (IDev)	It is the industry (including construction), value added (annual % growth)	World Bank Data
Renewable Energy Consumption (REC)	Renewable energy consumption (% of total final energy consumption)	World Bank Data
Export (Exp)	Exports of goods and services (% of GDP)	World Bank Data
Urbanization (URP)	It is urban population (% of total population)	World Bank Data
Population growth (POPgrowth)	It represents the population growth (annual %)	

A two-stage GMM method was used in this paper and dynamic variables were added to improve the effect of economic growth on air quality. The reason for supporting the two-stage GMM is that the one-stage GMM does not address the Sargan heteroskedasticity problem of the movement and therefore the estimated value may be biased (Bond et al., 2001). System GMM Estimation:

$$EM_{i,t} = \alpha_0 + \alpha_1 EM_{i,t-1} + \alpha_2 GDPgrowth_{i,t} + \gamma Z_{i,t} + \varepsilon_{i,t} \quad (2)$$

In equation (2), $EM_{i,t}$ 1 represents the lag of the dependent variable. Other variables have the same meaning as above.

Empirical results

This reseach aims to quantify the role of economic growth, industrial development, renewable energy consumption, export, population growth and other variables in encouraging air quality for selected Asian countries. This section provides the econometric outcomes, including descriptive statistics, cross-sectional dependency test, Panel unit root tests and System GMM.

Descriptive statistics

Table 2 shows the key statistics of our variables and provides an overview of analysis. Initially, the mean value of PM2.5 (pm25) was 32.508 with a standard deviation of 18.545. The smallest and largest values of this variable are 5.984 and 95.243, which means a large difference in environmental quality. and economic growth (GDPgrowth) is equal to 4.584 on average and spreads between -36.658 and 53.382, including negative and positive levels. This shows the differences in economic growth between different countries and periods. The Industrial Development (IDev) variable has a mean value of 4.967 and a standard deviation of 7.815 with negative values, reflecting differences in levels of economic development between countries. Renewable energy consumption (Rec) is on average equal to 21.505, and it is also distributed among countries in different values - the minimum value is 0 and the maximum value reaches 91.3. Exp is an indicator of spending in important sectors such as education and healthcare, with an average of 40,342, a minimum of 6,805 and a maximum of 228,994. It provides information on how countries allocate resources. The URP represents economic activity and is spread between 12.978 and 100, with a mean of 56.225 and a standard deviation of 24.777. Finally, PopGrowth shows demographic growth with an average value of 1.616, a minimum value of -6.852, and a maximum value of 18.128, respectively.

Table 2

Descriptive Statistics

Variable	bs	Mean	Std. Dev.	Min	Max
pm25	56	32.508	18.545	5.984	95.243
gdpgrowth	56	4.584	5.286	-36.658	53.382
idev	56	4.967	7.815	-57.978	50.181
rec	56	21.505	24.449	0	91.3
exp	56	40.342	33.008	6.805	228.994
urp	56	56.225	24.777	12.978	100
popgrowth	56	1.616	1.704	-6.852	18.128

Cross-sectional dependency

During the study, Friedman's and Pesaran's tests of cross-sectional independence were used to check cross-sectional dependency between variables. All variables depend on each other and have statistical significance at the 1% level.

Unit root test results

In this analysis, the Pesaran (CIPS) panel unit root test was used for the unit root test. This test assessed the stationarity level of each variable over time. The test included observations for 36 countries and 21 years of time, and the results provided CIPS values for each variable and their corresponding critical values at the 10%, 5%, and 1% levels. The results of the CIPS test showed that some variables, although non-stationary in level, appear to be stationary in first-order differences (Table 3).

Table 3

Unit Root test

Variables	Im Pesaran & Shin	
	Level	*1st Diff.*
PM2.5	2.489***	4.601***
GDPgrowth	2.839***	5.105***
IDev	3.296***	5.293***
REC	-1.875	3.682***
EXP	-1.999	3.703***
URP	-0.542	-0.592
POPgrowth	-1.771	-3.036***

Note: *p < 0.1, **p < 0.05, ***p < 0.01.

Two-step System GMM estimator results

One-Step System GMM and Two-Step GMM models were used to obtain the final results. Table 4 displays the One-Step and Two-Step results of the SYS-GMM model. The main factors affecting the PM2.5 indicator were analyzed through this model. The coefficients for L.PM2.5 are high and positive in both methods, indicating that pollution has a self-sustaining trend. This effect is significant at the 1% level. The GDP growth variable is also positive and significant in both methods, which means that economic growth has a significant impact on pollution. Additionally, the Industrial Development variable has a negative and significant effect in both methods, which can be seen to show that industrial development leads to a reduction in PM2.5 levels. Unfortunately, Renewable energy consumption, Export, and Population growth variables turned out to be insignificant, that is, they do not have a significant impact on the PM2.5 indicator. The AR(1) test shows first-order autocorrelation in both methods, but the AR(2) test indicates no autocorrelation, confirming that the SYS-GMM model is correctly applied. The results of the Sargan test indicate that the tools used in the model are correctly selected.

Table 4

Results of SYS-GMM

Variable	One-Step	Two-Step
	PM2.5	PM2.5
L.PM2.5	0.967***	0.919***
GDP growth	0.341***	1.223***
Industrial Development	-0.079**	0.537***
Renewable energy consumption	0.001	0.010
Export	-0.002	-0.108
Population growth	0.107	0.180
AR(1) (P-value)	0.000	0.052
AR(2) (P-value)	0.128	0.596
Sargan (value)	0.000	0.033
N	720	720

Discussion

The current study examines the role of economic growth, industrial development, renewable energy consumption, export and other economic variables on air pollution in Asian states. Research results show that economic growth causes an increase in harmful particles in the air, and this has been scientifically proven. In addition, Ke Wang et al. (2020) also conducted a study and proved that economic growth causes air pollution. However, their study found that there is a negative relationship between renewable energy consumption and PM2.5 emissions, which is statistically significant at the 1% level. Rathod et al. (2022) also found a negative relationship between renewable energy consumption and PM2.5 emissions in their study. On the other hand, Ul-Haq et al. (2023) concluded in their study that the use of renewable energy in South Asian countries does not have a significant impact on air pollution.

As for other variables, in the present study Industrial Development has been proven to reduce PM2.5 emission with statistically significant at 1% level. In another study, Li Q. et al. (2022) found a negative relationship between industrial development and air pollution in China, and it was statistically significant.

Conclusion

The purpose of the study is mainly to study the impact of economic growth and population growth on PM2.5 levels. PM2.5 is very small particles present in the air and it poses a great threat to human health. Therefore, this study focused on identifying and eliminating the problem of air pollution. 36 Asian countries were included in the study in 2000-2020. These countries are economically, ecologically and socially developed at different levels, which gives interesting results for research. The main variables considered in the study are economic growth (GDPgrowth), industrial development (IDev), renewable energy consumption (REC), exports (Exp), urbanization (URP) and population growth (POPgrowth) was cited. The study used the Generalized Method of Moments (GMM) model to analyze how these variables affect PM2.5 levels and obtained results. This method, given the complexity of the data, allows for a clearer view of the relationships between variables.

The results indicate that economic growth increases air pollution. The reason for this is often associated with economic development and the growth of industrial production, which also increases the number of harmful substances released into the air. However, industrial development will help reduce PM2.5 levels, as innovations in the industry and environmental standards will lead to improved air quality. Renewable energy consumption, exports and population growth do not significantly affect PM2.5 levels. The results of the study mean that due to the increase in the speed of economic and industrial development, it is necessary to pay attention to the problem of air pollution. Also, countries should develop strategies aimed at improving air quality in international and domestic policies. This is important not only for human health, but also

for overall economic stability and environmental sustainability. The results demonstrate that all countries need to work together to address air pollution.

Policy recommendation

Policymakers need to draft laws that support industry development. These laws should not only encourage economic growth, but also ensure air quality. Subsidies should be given to industrial enterprises if they emit harmful substances less than the established norm. Otherwise, strict measures may be necessary. It is also necessary to develop and propose policies aimed at reducing the use of fossil fuels, and to increase investments in renewable energies to replace them. These approaches contribute to economic growth and improved air quality.

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IMPROVING THE ATTRACTION OF FOREIGN DIRECT INVESTMENT TO INVESTMENT PROJECT IN UZBEKISTAN

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Abstract. The purpose of this study is to conduct an empirical study of the short-term and long-term relationship of factors affecting the economic development of the Republic of Uzbekistan. To study and analyze the positive and negative aspects of foreign direct investment in the economy of Uzbekistan. in order to achieve this goal, we have selected factors that are part of the country's economic potential and traditional economy in the period from 2004 to 2023. A quantitative approach was used to achieve this goal. In particular, econometric modeling of empirical studies has been widely used. That is, OLS (ordinary least square) and VAR (vector-autoregression) models were effectively used in time series.

Key words: investment, foreign direct investment, economic growth, Uzbekistan, society, economy, strategy

Introduction

The acceleration of the processes of globalization in the world requires increasing the possibility of attracting direct foreign investments in the economy of countries. "Foreign direct investment is one of the main factors in the development of the country's economy" [1]. According to the UN report on international investment, "The global flow of foreign direct investment in 2024 amounted to 26 billion US dollars, which is 1.7 times more than in 2023" for Uzbekistan ”[2]. However, three-fourths of the increase is mainly made up of transport, natural resources, and energy. In such conditions, the importance of determining priority directions for increasing the flow of direct foreign investments to our national economy is increasing. Effective use of production areas and facilities of state-owned and state-owned economic companies in attracting foreign direct investment in scientific research of countries of the world, creation of favorable conditions for active investment attraction , special attention is paid to issues of further support of new competitive productions and development of small enterprises. Its role in the development of the economy of Uzbekistan is extremely important. In the national economy, profit is one of the main problems of attracting investment, and distribution is their proper problem. "Complete registration of investments of the Republic of Uzbekistan, further improvement of the investment environment, quality production of annual investment programs, economic and financial institutions, legal documents of financial institutions, capital foreign companies, which are convenient for attracting investments." cooperation with banking structures,

attracting foreign investments, controlling their increase" [3]. For foreign companies, Uzbekistan is a promising, talented country with good economic and structural conditions, and it is also known for the quality of the education system and attention to innovation. The interest of such non-public organizations and the fact that they have a database for foreign investments are expected to increase and develop investments in the future.

Literature review

Economic growth and factors affecting it have always been interrelated. The concept of foreign direct investment has been given different definitions by local and foreign scientists. For this reason, many scientists have conducted research and studies on this topic. Simon Kuznets (1946) in his book "National Income" describes the issues related to ensuring the country's well-being by gross domestic product per capita. Russian-American development economist and statistician Simon Kuznets was awarded the Nobel Memorial Prize in Economics in 1971 for his research on economic growth. He defined the standard of national income accounting, which made it possible to calculate the first accurate estimates of the gross national product [4]. Arthur Okun (1962), one of the famous scientists who learned to calculate unemployment, wrote Okun's law in his book "Potential GDP: Its Measurement and Significance" that a 1% increase in unemployment leads to a 2% decrease in GDP [5]. For unemployment, Robert Lucas (1976) emphasized other factors, such as productivity. In his 1976 Econometric Policy Evaluation: Growth was more important to economic growth [6] . Robert argued against Okun's Law, which states that there is a negative relationship between unemployment and economic growth. As a result, there are different opinions about the relationship between indicators and economic growth. According to the Law of the Republic of Uzbekistan (2019) "On Investment and Investment Activities", direct foreign investment is the foreign investor's own funds without government guarantees and under risky conditions. or investments at the expense of loan funds [7].

According to A.Sh. Bekmurodov (2012), direct foreign investment is the direct export of capital that gives the investor the right to control the enterprise, and thus the main parent company of the enterprise. becomes a foreign subsidiary [8]. B.A. Vakhobov (2010) says that foreign direct investments are long-term investments that allow the investor to have effective control over economic activity, at least 10% of the company's share or shareholders' capital. points out [9]. A.S. Azizov (2021) emphasizes that the term foreign direct investment should be understood as an investment in a foreign enterprise by providing partial or complete control over economic activity [10] . According to A.A. Sotvoldiyev (2019), direct foreign investments in various objects, for the financing of socio-economic projects, with the aim of obtaining economic benefits and social benefits, on the basis of risk to the country or to another foreign country. defined as long-term capital investments made without guarantee [11]. In

addition, according to the New Uzbekistan Development Strategy for 2022-2026, the government aims to attract about 70 billion dollars of foreign investment over five years, which indicates commitment to institutional reforms and infrastructure improvement K. Husnitdinovna K.I (2024) [12]. At the same time, the effective regulation of innovative projects and the establishment of state support mechanisms, such as grant programs and tax incentives - ensure that investors reduce risk and thus increase their willingness to invest Shevchenko S (2023) [13]. By solving these important areas, Uzbekistan can significantly increase its attractiveness for foreign investments

Methodology

Theoretical framework. This study consists of determining the factors affecting the inflow of direct foreign investments into Uzbekistan and formulating scientific conclusions and proposals aimed at increasing the flow of direct foreign investments.The Eclectic Paradigm, also known as the Ownership, Location, Internalization (OLI) model or the OLI framework, is how companies can try to determine whether attracting foreign direct investment (FDI) is worthwhile. It is a three-tier evaluation system. This paradigm assumes that institutions will avoid transactions in the open market if the cost of performing the same actions domestically or in-house is lower. It is based on internalization theory and was first explained in 1979 by scientist John H. Dunning.To achieve this goal, he chose a quantitative approach. A more specific quantitative approach involves the use of a multivariate time series model. Foreign direct investment (this is the dependent variable) and the macroeconomic variables that affect it (that is, our independent variables) Export, Taxes, Unemployment, Industry, GDP per capita , and Inflation rates are calculated. The annual statistical indicator of foreign direct investments from 2004 to 2023 was analyzed by econometric modeling.

The data collected for the empirical research was used from the World Bank page on the world countries page and the set of statistical indicators for the Republic of Uzbekistan. Foreign direct investments were chosen as the dependent variable. The reason for this is that foreign direct investments are based on the World Bank's methodology of dividing countries into high, middle and low income countries according to their economic development. Accordingly, this variable was selected as the outcome factor. The reason for choosing them as independent variables is that, as we know from theories, industry and unemployment are directly related to each other, so we took these factorsIf industries stop working, unemployment will increase and have a strong impact on the economy, if unemployment rises, it will have a strong impact on GDP (per capita), and as unemployment rises, income will also decrease. This, in turn, will have a negative effect on exports. Based on these correlations, we obtained these factors.Stata 18, a widely used econometric program for working with time series, was of great help to us. Stata program was used to study the short and long-term relationships

of dependent and independent factors in OLS (Ordinary least squared) and VAR (Vector autoregression) models in time series.

Empirical framework

In this study, factor analysis was used to identify the hidden factors affecting Foreign Direct Investment of Uzbekistan. The data covers from 2004 to 2023 . The data was collected from the World Bank, National Statistic Agency, Stata.uz, Trading Economics and others. The data collection consist of 7 factors based on 20 years of data representing various aspects of Uzbekistan's FDI , including Inflation, GDP, Unemployent, Export, Taxes and Industry .

Variable name	Conventional designation	Variable type	Description
FDI	FDI	Dependent	Annual FDI flows rate
Inflation	lnInflation	Independent	Annual inflation rates
GDP	LnGDP	Independent	Annual GDP rates
Unemployment	LnUnemployment	Independent	Annual import volume figure
Export	LnExport	Independent	Annual export volume figure
Taxes	LnTaxes	Independent	Annual taxes rates
Industry	LnIndustry	Independent	Annual industry rates

H1o: There is no correlation between FDI and inflation
H1a: There is a correlation between FDI and inflation
H2o: There is no correlation between FDI and GDP
H2a: There is a correlation between FDI and GDP
H3o: There is no correlation between FDI and Unemployment
H3a: There is a correlation between FDI and Unemployment
H4o: There is no correlation between FDI and Export
H4a: There is a correlation between FDI and Export
H5o: There is no correlation between FDI and Taxes
H5a: There is a correlation between FDI and Taxes
H6o: There is no correlation between FDI and Industry
H6a: There is a correlation between FDI and Industry

Ho ~ is our null hypothesis And Ha ~ is our alternative hypothesis

The following models were used to study the relationship between Uzbekistan's direct foreign investments (FDI) and factors.

Linear log-log models

$\ln(FDI)=\beta0+\beta1\ln(Inflation)i+\beta2\ln(GDP)i+\beta3\ln(Unemployment)i+\beta4\ln(Taxes)i+\beta5\ln(Export)i+\beta6\ln(Industry)i+\epsilon i$ (1)

β0- is a regression model constant (intercept).

β1, β2, β3,β4,β5,β6- coefficients representing the impact of each predictor on FDI

ϵ - is the error term.

The VAR model specification is given as follows:

$Yt = \alpha + \beta1Yt\text{-}1 + \beta2Yt\text{-}2 + \cdots + \beta pYt\text{-}p + \varepsilon i$ (2)

Here, α is the intercept, a constant, and β1, β2, and β are the lag coefficients of Y to β. The order "p" means that Y is used up to p-lags, and these are the predictors in Eq. e_{t} is the error term, taken as white noise.

For the stationarity test, the OLS model is usually used based on the Dickey-Fuller test (**ADF - Augmented Dickey-Fuller test**). This test is used to determine whether the data in a time series is stationary or not. The general equation for the ADF test used in the OLS model is:

$\Delta Yt= \alpha + \beta t +\gamma Yt-1+ i=1\sum p\ \delta i\Delta Yt - i+ \epsilon t$ (3)

The hypothesis of the ADF test is expressed as follows:

Ho ~ null hypothesis the series is not stationary (y=0)

Ha ~ alternative hypothesis , the series is starionary (y< 0)

Also, before forecasting the model, we evaluate our model based on the 6 Gauss-Markov conditions. Including checking our model to satisfy the requirement of the central limit theory in terms of the number of observations, heteroskedasticity, autocorrelation, normal distribution of residuals.

Analysis and Results

For this study, we relied on secondary data from sources such as the official website of the World Bank to collect information about the independent and dependent variables. Data are collected from 2004 to 2023, with FDI, inflation, GDP, unemployment, exports, taxes, and industry as dependent variables as independent variables. The study used annual time series data.

Table 1. The value of foreign direct investment (FDI) and the value of each factor

Year	Inflation	GDP	Unemployment	Export	Taxes	Industry	FDI
2004	15,91827427	1,2261E+13	8,126	82,28286		2,7349E+12	
2005	21,43086656	1,59234E+13	7,074	81,44363		4,142E+12	2,13E+08
2006	23,46580829	2,11249E+13	6,026	79,42784		5,6696E+12	2,07E+08
2007	21,89709993	2,819E+13	4,99	103,5811		7,5726E+12	6,68E+08
2008	26,79158498	3,89698E+13	4,89	109,7008		1,13266E+13	5,48E+08
2009	17,26156513	4,93756E+13	5,04	134,3278		1,49868E+13	6,13E+08
2010	39,36864388	7,89366E+13	5,36	115,365		1,67579E+13	1,66E+09
2011	21,62650994	1,03233E+14	4,96	102,8067	1,11605E+13	2,04173E+13	1,62E+09
2012	15,3987947	1,2759E+14	4,87	96,64689	1,49814E+13	2,60641E+13	7,44E+08
2013	11,98789148	1,53311E+14	4,86	106,8196	1,91747E+13	3,26469E+13	6,92E+08
2014	14,02491763	1,86829E+14	5,09	106,2725	2,30194E+13	4,12349E+13	8,09E+08
2015	10,50069952	2,21351E+14	5,15	100	2,80048E+13	4,98492E+13	1,04E+09
2016	8,930368491	2,55422E+14	5,16	98,24054	3,19506E+13	5,85459E+13	1,66E+09
2017	19,06181471	3,17476E+14	5,83	101,6574	3,30192E+13	7,4799E+13	1,8E+09
2018	26,92239538	4,26641E+14	5,391	100,2152	5,49334E+13	1,16225E+14	6,25E+08
2019	17,8148511	5,32713E+14	4,945	135,7524	6,66934E+13	1,64636E+14	2,32E+09
2020	11,44242483	6,05515E+14	5,293	123,1422	8,94842E+13	1,8761E+14	1,73E+09
2021	13,54390113	7,38425E+14	5,345	77,96506	1,0963E+14	2,32536E+14	2,28E+09
2022	14,90899361	8,96618E+14	4,535			2,80058E+14	2,65E+09
2023	12,23307678	1,06657E+15	4,526			3,25378E+14	2,14E+09

Since our study is based on multivariate time series, we first analyze the variables to determine whether they are stationary or not using the Dickey-Fuller test.

	Test	Dickey–Fuller critical value		
	statistic	1%	5%	10%
Z(t)	-2.899	-3.750	-3.000	-2.630

MacKinnon approximate p-value for Z(t) = 0.0455

In Table 2, we can see that FDIs coming to Uzbekistan passed the Dickey-Fuller test. The resulting Z(t) test value is "-2.899", which is less than the critical values of -3.750, -3.000, and -2.630 for the 1%, 5%, and 10% levels, respectively. The statistical test value is only 5% of the critical value

since it is small, it indicates the existence of stationarity, which satisfies the criterion requirement of the Dickey-Fuller test. This value is less than 0.05, so H_0 is rejected at the 5% level, meaning the time series is stationary. Furthermore, the p-value of 0.0455 indicates the presence of stationary with a low value.

The econometric formula of regression and correlation representing factors affecting FDI (Foreign Direct Investment) is as follows:

$LnFDI_i = \beta 0 + \beta 1 LnInflation + \beta 2 LnGDP + \beta 3 LnUnemployment_i + \beta 4 LnExport_i + \beta 5 LnTaxes_i + \beta 6 LnInsustry_i + \varepsilon i$ (4)

Since the indicators for the dependent factor and independent factors are separate when creating the basic econometric model for regression and correlation, we transform them into natural logarithms and simplify to the basic econometric formula for regression and correlation:

Table 3.

Correlation

Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) lnFDI	1.000						
(2) lnIndustry	0.806*	1.000					
	(0.000)						
(3) lnTaxes	0.482	0.995*	1.000				
	(0.13)	(0.00)					
(4) lnExport	0.392	0.341	0.048	1.000			
	(0.12)	(0.16)	(0.88)				
(5) lnUnemployment	0.566*	0.605*	0.467	0.601*	1.000		
	(0.011)	(0.005)	(0.147)	(0.00)			
(6) lnGDP	0.823*	0.994*	0.994*	0.328	-0.609*	1.000	
	(0.000)	(0.000)	(0.000)	(0.18)	(0.004)		
(7) lnInflation	-0.338	-0.438	-0.067	0.034	0.187	-0.452*	1.000
	(0.157)	(0.054)	(0.845)	(0.89)	(0.431)	(0.045)	

**** p<0.01, ** p<0.05, * p<0.1*

Variables strongly related to lnFDI are lnIndustry (0.806) and lnGDP (0.823). A negative but statistically significant association for lnFDI is lnUnemployment (-0.566). Association between lnIndustry and lnGDP very high (r = 0.994). A strong positive correlation between these The lnInflation variable is not statistically significantly correlated with most other variables, but the negative correlation with lnIndustry (-0.438) and lnGDP (-0.452) is significant.

According to table 4 , 90.6% of the variance of the dependent variable is explained by the independent variables. Since the Prob > F value is 0.046, the model is completely statistically significant (at the 5% level). Inflation, industry, tax and export have a statistically significant effect on foreign direct investment (FDI) and these are inflation 0.01 ($p < 0.05$), industry 0.018 ($p < 0.05$), export 0.037 ($p < 0.05$) but negative The secret is taxes, its indicator is 0.009, and an increase in taxes significantly reduces foreign investment. This indicates a strong negative correlation ($p < 0.01$).. Gross Domestic Product (lnGDP) is only significant at the 10% level. The unemployment rate (lnUnemployment) is not statistically significant. The statistical explanatory power of

the model is high ($R^2 = 90.6\%$). In order to stimulate foreign investments, it is important to reduce inflation and taxes, effectively manage exports, and develop the industrial sector.

Table 4.

Linear regression

Linear regression

lnFDI	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
lnInflation	-2.028	.441	-4.60	.01	-3.251	-.804	**
lnGDP	-18.008	6.611	-2.72	.053	-36.365	.348	*
lnUnemployment	7.625	4.098	1.86	.136	-3.752	19.002	
lnExport	-2.485	.807	-3.08	.037	-4.726	-.244	**
lnTaxes	-8.397	1.785	-4.70	.009	-13.352	-3.441	***
lnIndustry	21.792	5.627	3.87	.018	6.168	37.415	**
Constant	192.002	54.58	3.52	.024	40.462	343.541	**

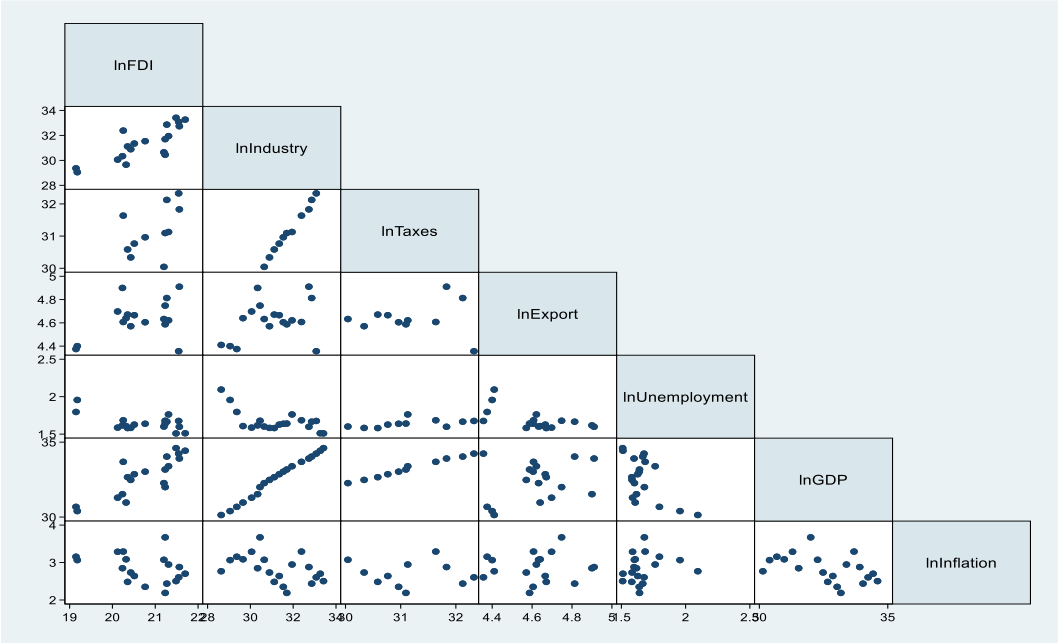
Mean dependent var	20.949	SD dependent var	0.495
R-squared	0.906	Number of obs	11
F-test	6.445	Prob > F	0.046
Akaike crit. (AIC)	2.656	Bayesian crit. (BIC)	5.441

*** *p<.01, ** p<.05, * p<.1*

After calculating the correlation and regression, a graph matrix was used to show the relationships between each variable and provide a visual representation of the relationship and distribution between variables.

Table 5. Graph matrix in half version

LnFDI and LnIndustry have an intermediate level of linkage. Strong and direct correlations are found in LnIndustry and LnTaxes, LnIndustry and LnGDP. Ln Inflation and LnExport are insignificantly correlated with other factors as seen. However, you can see that LnGDP and LnUnemployment are partially correlated with other factors as well



After the econometric model is developed, the next step is to perform a diagnostic analysis to check its reliability before forecasting. This analysis involves evaluating the model's compliance with the Gaussian Markov conditions commonly used in the field. A prerequisite is that our observations must be at least above 18. Since our observations are 20 years old, the Gaussian Markov satisfies the first condition. Unfortunately, according to the second condition of Gauss Markov, the empirical value of the model should be equal or close to the theoretical value of the model, but in fact, the number of our observations was less than 30, so the second condition was not satisfied.

According to Gaussian Markov condition 3, the residual must be unconnected to the model. If there is a connection, it is called a heteroscedastic condition. There are 3 different ways to check this, they are test method, correlation table and graphical method. We used the Breusch-Pagan and White tests to estimate our model for condition The results show that H_0 (null hypothesis): Assuming the error variance is constant (homo-scedastic), the P-value 0.6806>0.05 Since 0.6806>0.05, there is insufficient reason to reject the null hypothesis.

This means that the variance of the Errors is constant (no heteroscedasticity), the assumption of homoscedasticity is not violated in the model, the results of this test show that the regression model is not heteroscedastic, and we can continue to get reliable results from the model. Furthermore, our next step involves testing our model using the White test. This test, like the previously mentioned Breusch-Pagan test, requires a p-value greater than 0.05. The full IM-test results are consistent with White's test and confirm the absence of heteroskedasticity. Chi2 for model fit (5.060, df=6df = 6df=6): This part checks whether the model is correctly fitted. The P-value is 0.536>0.050.536 > 0.050.536>0.05, which means that the model is fitted. Chi2 for identification (0.050, df=1df = 1df=1): This part checks whether any special form of heteroscedasticity is detected. P-value 0.825>0.050.825 > 0.050.825>0.05, which means that there is no reason to reject the null hypothesis shows. General test (16.110, df=17df = 17df=17): The p-value of this part is 0.516>0.050.516 > 0.050.516>0.05, which also shows the absence of heteroscedasticity White's test: P-value 0.3575>0.050.3575 > 0.050.3575>0.05, which means accepting the null hypothesis. The variance of errors is constant. IM-test results: All components reject heteroskedasticity. The model is adaptive and the variance of the errors does not depend on the value of the variables.

According to the fourth condition of Gaussian Markov, the residuals of the model should not have autocorrelation problems. There are three different ways to test this situation: the graphical method, autocorrelation tables, and the Durbin-Watson and Breusch-Godfrey tests. We used Durbin-Watson and Breusch-Godfrey tests to test our model.

Table 7.

White's test

White's test H0: Homoskedasticity Ha: Unrestricted heteroskedasticity chi2(10) = 11.00 Prob > chi2 = 0.3575 Cameron & Trivedi's decomposition of IM-test chi2	df	p
11.000	10	0.357
5.060	6	0.536
0.050	1	0.825
16.110	17	0.516

According to the requirements of the Durbin-Watson test, its difficulty should be close to 2. If the value of the test is close to 2 to 4, there is no autocorrelation. After running the Durbin-Watson test on our model, we obtained a result of 2.41031, indicating that there is no autocorrelation. This is a good sign because the lack of correlation between the errors increases the reliability of the regression model. Our next step involves testing for autocorrelation problems in the residuals using the Breusch-Godfrey test.

Table 8 .

Breusch-Godfrey LM test for autocorrelation

BreuschвЂ“Godfrey LM test for autocorrelation chi2	df	Prob>Chi2
2.542	1	0.111

H0: no serial correlation From Table 8, we can conclude that according to the result of the Breusch-Godfrey test, no cases of autocorrelation were found among our residuals(Ho = hypothesis is accepted). Because R-square is greater than (p=0.111>0.05). This shows that there is no correlation between the residuals. We test our model on the normal distribution of residuals according to the fifth condition of Gaussian Markov. For this, we first use the Shapiro-Wilk test.

Table 9.

Shapiro – Wilk test

ShapiroвЂ“Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
myResiduals	11	0.924	1.228	0.372	0.355

When we tried the Shapiro-Wilk test, we got a result of 0.355. This result satisfies the fifth condition of Gaussian Markov since p> 0.05.

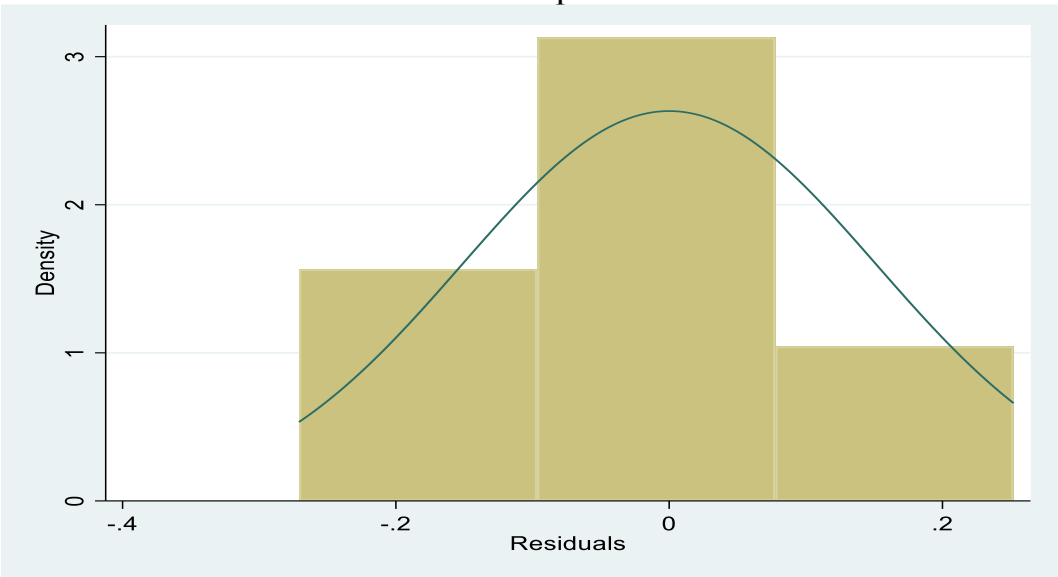


Figure 1. Test for normal distribution of residuals.

From the graph above, our residuals have a normal distribution according to the Shapiro-Wilk test and the Skewness and Kurtosis tests for the normal distribution of the residuals. According to the last condition of Gaussian Markov, independent variables should not affect each other. We can evaluate the OLS (Ordinary least squared) model as good only if the independent variables have no influence on each other.

Table 10.

VIF test

Variables	VIF	1/VIF
LnUnemployment	8.54	0.117
LnInflation	3.706	0.270
LnExport	2.221	0.450
Mean VIF	4.82	

Our VIF test shows that our independent variables did not influence each other. That is, according to the criterion of the VIF test, VIF should be less than 10 (VIF < 10), and the value of our independent variables is less than 10. We can see that our model passed this condition.

Projections for selected dependent and independent variables from 2004 to 2023 are presented in Table 11. The article aims to shed light on the influence of various

factors on direct foreign investments of Uzbekistan in 2004-2023. The main focus was on determining which factors help and which ones lead to a decrease in foreign direct investment. To achieve this, we used the methodology of the World Bank to determine the level of development of the country based on direct foreign investments. We assumed that Uzbekistan has moved from a low-income country to a middle-income country due to certain factors. To test this hypothesis, we analyzed the long-term and short-term development of these factors using multifactorial time series, including log-log model, VAR model and ARDL model. The reliability of the results was tested using Gauss-Marx in five conditions and all models passed the estimation tests.

The results presented in Table 11 indicate the presence of Granger causality, meaning that the excluded variables (Excluded = ALL) collectively have a statistically significant influence on lnFDI. This suggests that the past values of these variables are valuable in forecasting the current value of lnFDI. The null hypothesis (H_0) assumes that the excluded variables do not serve as Granger causes of the endogenous variable. However, with $p=0.027$ (where $p<0.05$), the null hypothesis is rejected.

Table 11.

Var Granger Casuality and Wald test

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob>Chi2
_	ALL	7.221	2	0.027

Our analysis, employing a multifactor time series model, revealed that variables such as inflation (lnInflation), GDP (lnGDP), exports (lnExport), unemployment (lnUnemployment), industry (lnIndustry), and taxes (lnTax) significantly influence the inflow of foreign direct investment (lnFDI) into Uzbekistan.

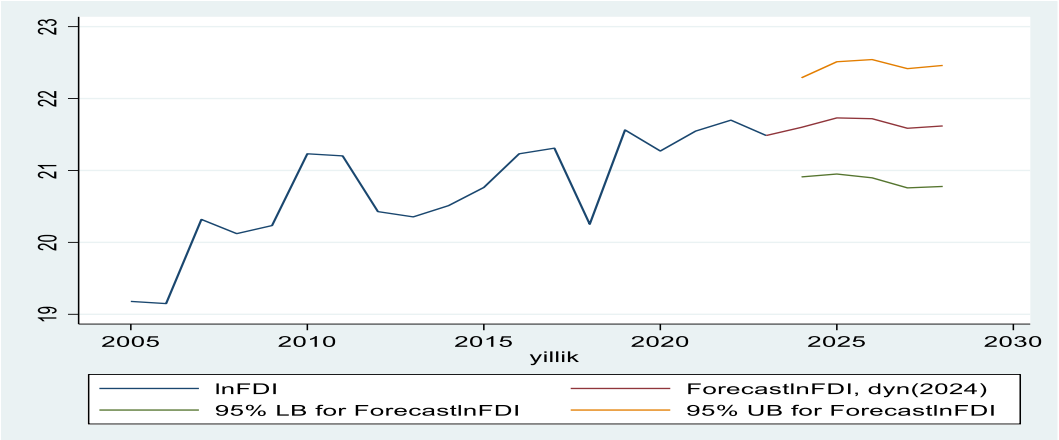


Figure 2. Forecasting and Linear graph results

Discussion. The results of the analysis show that the given factors have a significant impact on foreign direct investment, in particular, on Uzbekistan, both positively and negatively. Moreover, it is a two-way interaction between deepening FDI and a country's FDI. Based on this, there is a positive correlation between factors such as inflation, exports, unemployment and FDI. At the same time, the relationship between GDP, industry and taxes is negatively affected. The findings show that increasing inflation, exports and GDP can help Uzbekistan achieve its goal of increasing revenues. Our research confirmed the hypothesis that private factors have a positive effect on foreign direct investment in Uzbekistan, and other factors have a negative effect. Therefore, it is appropriate to pay attention to the development of factors that have a positive effect on increasing the income of the country's population. However, one should not forget to pay attention to the negative aspects, for example, the decline in unemployment and the level of industry will also lead to significant changes in the economy in a positive direction.

Conclusion

To complete our study, our variable FDI (FDI) is the five independent variables in the above two models, namely OLS (Ordinary Least Square) and VAR models. We studied the long- and short-run effects of GDP, inflation, unemployment, exports, industry, and taxes. For the long-run OLS (Ordinary Least Square) model, we used a short-run VAR model. Based on their results, we gave a 5-year forecast. According to our main hypothesis, taxes and unemployment have a direct effect on FDI. We would like to suggest to the government that in order to increase foreign investments, we have come to the conclusion that it is necessary to create opportunities for investors and exempt investors from certain taxes.

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YASHIL IQTISODIYOTNI QO`LLAB QUVVATLASH SHAROITIDA BANK MAJBURIYATLARI TUSHUNCHASI VA MOHIYATI

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Annotatsiya. Ushbu maqolada yashil iqtisodiyotni qo`llab quvvatlash sharoitida bank majburiyatlarining asosiy mohiyati, bank resurslarini tashkil etish bilan bog‘liq bo‘lgan operatsiyalarni, jalb qilingan mablag‘lar manbalarini, shuningdek, depozitlar, qarzlar va boshqa majburiyatlarni baholashda zarur bo‘lgan ma’lumotlar berilgan.

Kalit so‘zlar: bank, majburiyatlar, passiv operatsiyalar, jalb qilingan mablag‘lar, audit, depozitlar, jamg‘arma, kapital, likvidlik, hisobot, auditor.

Bugungi kunda mamlakatimizda yashil iqtisodiyotni qo`llab quvvatlash bo`yicha keng islohotlar olib borilmoqda. Jahon amaliyotida tijorat banklari majburiyatlari, uning hisobini yuritish va audit nazoratidan o`tkazish muhim vazifalardan bo`lib kelmoqda. Umuman olganda, bank resurslarini tashkil etish bilan bog’liq bo’lgan operatsiyalari bank majburiyatlari, ya`ni bank passiv operatsiyalar deyiladi.

«Bank faoliyatini boshqarishning bir qismi bo`lgan bank majburiyatlari hisobi va auditini yuritish usullarini doimiy takomillashtirmasligi oqibatida, nafaqat rivojlanayotgan mamlakatlar, balki rivojlangan mamlakatlar banklari ham iqtisodiy inqirozga yuz tutishi tabiiydir»1. Buni XX asrning ikkinchi yarmida Osiyo, Lotin Amerika, G’arbiy Yevropa, Rossiya moliya tizimi hamda 2008 yil sentyabrda AQSh moliya tizimida bo’lib o’tgan moliyaviy-iqtisodiy inqirozlar misolida ko’rish mumkin.

Bank majburiyatlarining tahlili va auditi bankning moliyaviy majburiyatlari va qarzlarini baholashni talab etadi. Bu bankning moliyaviy hisobotida qayd etilgan majburiyatlarining to‘g‘riligi, to‘liqligi va ishonchliligini ta’minlashning muhim jarayonidir. Audit bankning passiv hisobvaraqlaridagi har qanday mumkin bo‘lgan noto‘g‘ri ma’lumotlar, xatolar yoki qoidabuzarliklarni aniqlashga yordam beradi.

Bank majburiyatlarini o`rganish orqali manfaatdor tomonlar bankning moliyaviy risklari, likvidlikni boshqarish amaliyoti, moliyalashtirish manbalari va umumiy barqarorlik haqida qimmatli ma’lumotlarga ega bo‘lishadi. Ushbu ma'lumotlar investorlar va boshqaruv organlari uchun asosli qarorlar qabul qilish, hamda turli bozor sharoitlarida bankning barqarorligini baholash uchun juda muhimdir.[2]

[1]O’zbekiston Respublikasi Prezidentining Farmoni. O’zbekiton Respublikasini yanada rivojlantirish bo’yicha Harakatlar startegiyasi to’g’risida. O’zbekiston Respublikasi Adliya vazirligi. – Toshkent: “Alodat”, 2017. – 112 b.

Mahalliy olimlarimizdan A.J.Abdullaev, Z.A.Qayimova, Sh.Sh.Boltaev, D.M.Narzievalar o‘z tadqiqotlari natijasida, “passiv operatsiyalar bu bank resurslarini shakllantirilishi bilan bog‘liq operatsiyalardir. Passiv operatsiyalar aylanmadagi bo‘lgan, yangi resurslar jalb qilish (orqali) natijasida banklarning aktiv operatsiyalarini amalga oshirishga imkoniyat yaratiladi” – deb ta`kidlab o‘tishgan. [1]

Sh.Z.Abdullayeva o‘z ilmiy tadqiqotlarida “bankning passiv operatsiyasi - banklaming vaqtinchalik bo‘sh pul mablag‘larini jalb qilish bilan bog‘liq operatsiyalari passiv operatsiyalar hisoblanadi. Bankning asosiy vazifalaridan biri bo‘sh pul mablag‘larini mumkin qadar ko‘proq jalb qilish va ulami boshqa foyda keltiruvchi optimal aktivlarga joylashtirishdan iborat” – deb ta’kidlaydi.[3]

M.G‘.Kenjayev, N.S.Ernazarovlar tomonidan quyidagi fikrlar bildirib o‘tilgan, “bank resurslarini tashkil etish bilan bog‘liq bo‘lgan operatsiyalari – passiv operatsiyalar deyiladi. Passiv operatsiyalar bank oborotiga chetdan mablag‘lar jalb etish va o‘z mablag‘larini tashkil etish bilan bog‘liq operatsiyalardan iboratdir. Bank resurslari uning majburiyatlari va o‘zining kapitalidan tashkil topadi. Bank faoliyatining yana bir asosiy o‘ziga xos xususiyatlaridan biri shundan iboratki, uning resurslari asosan chetdan jalb etilgan majburiyatlaridan tashkil topadi” .[5]

A.J.Abdullaev, Z.A.Qayimova, Sh.Sh.Boltaev, D.M.Narzievalar tomonidan quyidagicha fikr bildirib o‘tilgan, “depozit operatsiyalar – banklarning depozitorlar bilan tuzgan shartnomalari asosida depozit maqsadlariga ko‘ra muayyan muddatga jalb etish hamda saqlashga doir operatsiyalardir” .

Z.Mamadiyarov, M.Maxmudova, M.Kurbonbekovalar o‘z ilmiy tadqiqotlarida, “majburiyatlar – bank tomonidan jalb etilgan mablag‘lar hisobidan, kapital – bankning o‘z mablag‘lari hisobidan shakllanadi. Ushbu mablag‘larning barqaror manbalar hisobidan shakllantirilishi tijorat banklarining samarali ishlashini va iqtisodiy jihatdan baquvvatligini ta’minlaydi. Tijorat banklari balansi passivining asosiy ulushini majburiyatlar tashkil etib, ular 80– 90 foizdan iborat bo‘ladi. Majburiyatlarni muddati va vujudga kelish manbasiga qarab barqaror va nobarqaror, ular uchun to‘lanadigan xarajatlar qiymatidan kelib chiqib, arzon va qimmat mablag‘larga ajratish mumkin” – deb fikr bildirib o‘tishgan.[4]

Banklar, shuningdek, boshqa moliya institutlaridan qarz olish, obligatsiyalar chiqarish yoki boshqa qarz vositalari orqali mablag‘ jalb qilishlari mumkin. Ushbu ssudalar shartlari, stavkalari va muddatlarini tahlil qilish bankning mablag‘lar qiymatini va qayta moliyalash risklarini baholash uchun muhimdir.

Bank kapitalini tahlil qilishda shuningdek, bank kapitali tarkibini, jumladan, o‘z kapitali, taqsimlanmagan foyda va kapitalning boshqa shakllarini baholashni ham o‘z ichiga olishi mumkin. Bu bankning yo‘qotishlarni o‘zlashtirish va tartibga soluvchi kapital talablarini qondirish qobiliyatini tushunishga yordam beradi.

Majburiyatlarni to‘lash muddatini tahlil qilish bankning likvidlik holatini baholashga yordam beradi. Banklar o‘zgaruvchan moliyalashtirish manbalariga tayanmasdan, qisqa muddatli majburiyatlarni bajarish uchun yetarli likvid aktivlarga ega bo‘lishini ta’minlashi kerak.

Bankning majburiyatlarini o`rganish natijalari odatda moliyaviy hisobotlarda, normativ hujjatlarda va investor taqdimotlarida taqdim etiladi. Ushbu tahlildan olingan asosiy ko‘rsatkichlar quyidagilarni o‘z ichiga olishi mumkin:

- Depozitlar tarkibi (masalan, talab qilib olinguncha depozitlar, muddatli depozitlar, jamg‘arma depozitlar va omonat depozitlari nisbati).
- Mablag‘lar qiymati (depozitlar va qarzlar bo‘yicha to‘lanadigan o‘rtacha foiz stavkasi).
- Likvidlik koeffitsientlari (kreditning depozitga nisbati, likvidlikni qoplash koeffitsienti).
- Kapitalning yetarlilik koeffitsientlari (1-darajali kapital nisbati, umumiy kapital nisbati).

Ushbu natijalar manfaatdor tomonlarga, shu jumladan investorlar, tartibga soluvchilar hamda, bankning moliyaviy sog‘lig‘iga va majburiyatlarni boshqarish samaradorligini baholashda yordam beradi. Shuningdek, banklar faoliyati mustahkamligi va barqarorligini ta’minlash uchun eng avvalo ular faoliyatini ichki va tashqi audit tekshiruvlari orqali doimiy nazorat qilib borish talab etiladi.

Depozit operatsiyalari ichki auditining asosiy maqsadlari quyidagilardan iboratdir.

- omonatchilar manfaatlarini himoya qilish, bank o’z faoliyati davomida erishgan va maqsad qilgan natijalarni saqlab qolish;
- taqdim etilayotgan hisobotlarni haqqoniyligi, to’liqligi va ishonchliligini aniqlash;
- taqdim etilgan hisobotlar amaldagi qonunchilik, buxgalteriya hisobi va moliyaviy hisobotlarga qo’yilgan talablarga muvofigligini tekshirishdan iboratdir.

Bank majburiyatlarini tahlil qilish tavakkalchilikni baholash, likvidlikni boshqarish, qoidalarga rioya qilish, investor ishonchini uyg‘otish va moliyaviy hisobotlarni har tomonlama tahlil qilish uchun juda muhimdir. U manfaatdor tomonlarga bankning moliyaviy ahvoli, faoliyati va o‘z majburiyatlarini bajarish qobiliyatini tushunishga yordam beradi, risklarni samarali boshqarish va qarorlar qabul qilishga hissa qo‘shadi.

1-jadvalda 2024 yil 4 chorak yakunlari bo‘yicha moliyaviy hisobotlarning statistik ko‘rsatkichlariga asoslangan “Kpitalbank” ATBning jami majburiyatlari ko`rsatkichlari aks etgan.

1-jadval

T/R	MAJBURIYATLAR	JAMI	Milliy valyutada	Xorijiy valyutada (so`m ekv.)
1	Talab qilib olinguncha saqlanadigan depozitlar	12 080 615 479	4 885 329 349	7 195 286 130
2	Muddatli depozitlar	24 276 205 819	17 588 357 100	6 687 848 719
3	Markaziy bankka to'lanishi lozim bo'lgan mablag'lar	44	44	0
4	Boshqa banklar va moliyaviy tashkilotlarning hisobvaraqlari	851 953 510	602 818 261	249 135 249
5	REPO bitimlari bo'yicha sotilgan qimmatli qog'ozlar	0	0	0
6	Kredit va lizing operatsiyalari bo'yicha majburiyatlar	933 950 619	206 713 816	727 236 803
7	Bank tomonidan chiqarilgan qimmatli qog'ozlar	0		0
8	Subordinar qarz	1 719 622 115	155 455 905	1 564 166 210
9	To'lanishi lozim bo'lgan hisoblangan foizlar	68 201 960	44 496 090	23 705 870
10	Hisoblangan soliqlar bo'yicha majburiyatlar	17 958 010	17 958 010	0
11	Kliring tranzaktsiyalari	52 344 720	3 126 644	49 218 076
12	Standart deb tasniflangan balansdan tashqari moddalarga yaratilgan zaxiralar	3 913 935	3 913 935	0
13	Boshqa majburiyatlar	972 671 971	793 933 919	178 738 052
	Jami majburiyatlar	**40 977 438 182**	**24 302 103 073**	**16 675 335 109**

"Kapitalbank" Aksiyadorlik tijorat bankining jami majburiyatlari 2024-yil 4-chorak bo'yicha 40,9 trln. so'mni tashkil etib, shundan eng asosiy majburiyati bo`lib jami muddatli depozitlari 24,2 trln. so`mni tashkil etganini ko`rishimiz mumkin. Bunda, hisoblangan soliqlar bo`yicha majburiyatlar 17 mln so`m, boshqa banklarning mablag'lari 851 mln so`mni tashkil qilganini ko`rishimiz mumkin. Talab qilib olinguncha saqlanadigan depozitlar jami bank majburiyatlarining 29.5 %ini tashkil qilmoqda.

Bank majburiyatlarining tahlili va auditi bankning moliyaviy majburiyatlari va qarzlarini baholashni o'z ichiga oladi. Bu bankning moliyaviy hisobotida qayd etilgan majburiyatlarining to'g'riligi, to'liqligi va ishonchliligini ta'minlashning muhim jarayonidir. Tahlil va audit bankning passiv hisobvaraqlaridagi har qanday mumkin bo'lgan noto'g'ri ma'lumotlar, xatolar yoki qoidabuzarliklarni aniqlashga yordam beradi.

Bankning majburiyatlari bank operatsiyalarini moliyalashtirishda asosiy rol o‘ynaydi. Majburiyatlarning muddati va barqarorligini tahlil qilish banklarga ularning likvidligini samarali boshqarishga yordam beradi. Mijozlarning omonatlari va banklararo qarzlar kabi qisqa muddatli majburiyatlar bankning bevosita majburiyatlarini bajarish uchun yetarli mablag‘ga ega bo‘lishini ta’minlash uchun qattiq nazorat qilinishi kerak. Majburiyat tuzilmasini tahlil qilish orqali banklar o‘zlarining likvidlikka bo‘lgan ehtiyojlarini rejalashtirishlari, qisqa muddatli va uzoq muddatli moliyalashtirish manbalari o‘rtasida tegishli muvozanatni saqlashlari va likvidlik risklarini kamaytirishlari mumkin.

Umuman olganda, bank majburiyatlarini tahlil qilish moliyaviy hisobot tahlilining ajralmas qismi hisoblanadi. Bank majburiyatlarining tahlili va auditi moliyaviy ma’lumotlarning ishonchliligini ta’minlash va manfaatdor tomonlarning bank faoliyatiga ishonchini saqlashda hal qiluvchi rol o‘ynaydi. Bu bankning moliyaviy sog‘lig‘iga ta’sir qilishi mumkin bo‘lgan har qanday potentsial majburiyatlarni aniqlashga yordam beradi, risklarni boshqarish va moliyaviy hisobotlar bo‘yicha asosli qarorlar qabul qilishga yordam beradi.

Xulosa qilib aytganda, bank majburiyatlarini tahlil qilish tavakkalchilikni baholash, likvidlikni boshqarish, qoidalarga rioya qilish, investor ishonchini uyg‘otish va moliyaviy hisobotlarni har tomonlama tahlil qilish uchun juda muhimdir. U manfaatdor tomonlarga bankning moliyaviy ahvoli, faoliyati va o‘z majburiyatlarini bajarish qobiliyatini tushunishga yordam beradi, risklarni samarali boshqarish va qarorlar qabul qilishga hissa qo‘shadi.

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THE ROLE OF FISCAL POLICY IN THE TRANSITION TO A GREEN ECONOMY

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Abstract The transition to a green economy represents a critical pathway for addressing environmental challenges while fostering sustainable development. This paper examines the role of fiscal policy in facilitating this transition, focusing on Uzbekistan's evolving framework of taxes, subsidies, and environmental payments. The study highlights how well-designed fiscal instruments can incentivize renewable energy adoption, improve resource efficiency, and reduce pollution by drawing on international best practices- such as the European Green Deal and Nordic carbon taxation systems.

Transitioning to a green economy is one of the key directions in the modern world to address environmental problems and ensure sustainable development. This process requires not only technological innovation but also the state's effective economic policy, especially in fiscal regulation. Fiscal policy's role in the green transition is related to environmentally oriented taxation, subsidies, public spending, and investments.

International experience (e.g., the European Green Deal or the carbon tax system in the Nordic countries) shows that well-designed fiscal mechanisms play an essential role in incentivizing renewable energy, improving resource efficiency, and protecting the environment. At the same time, unclear policies or lack of financial support can slow the adoption of green technologies. This study analyses the effectiveness of fiscal policy in the transition to a green economy, reviews global best practices, and offers recommendations for Uzbekistan. The theoretical framework includes analyses of the interaction between green economy and fiscal policy, while the empirical part examines successful international cases using comparative methods.

The effectiveness of government fiscal policy in transitioning to a green economy depends on several economic and environmental factors. In Uzbekistan, the system of taxes and subsidies being implemented is already yielding positive results in some respects, but further improvements require in-depth analysis and strategic approaches.

Table 1.

Fiscal instruments in Uzbekistan

Instrument	Status	Application	Effectiveness	Problems
Carbon tax	Planned	Not yet introduced (2024)	–	Lack of legislative framework
Renewable energy subsidies	Active	Tax incentives for solar, wind, and bioenergy projects	Medium	Small-scale projects, weak private investor participation
Fossil fuel subsidies	Partially reformed	Gradual price increases for gasoline, diesel, and gas	Low	Social discontent, inflation risks
Pollution taxes	Active	Fees for water and air pollution	Low	Insufficient rates, weak enforcement
Energy efficiency tax incentives	Active	Reduced import duties on energy-saving equipment	Medium	Limited adoption by corporations
Green bonds & concessional loans	Developing	Eco-project loans from "Uzsanoatqurilishbank"	Early stage	Limited funding availability
Natural resource tax	Limited	Royalties on mineral extraction	Low	Lack of downstream processing industries

Although the country is working on introducing a carbon tax, the lack of a legal framework remains a significant obstacle. International experience shows that a carbon tax not only contributes to environmental protection but also creates an opportunity for additional budget revenue. However, the transition to such a tax should be gradual and accompanied by social protection measures for businesses and the population.

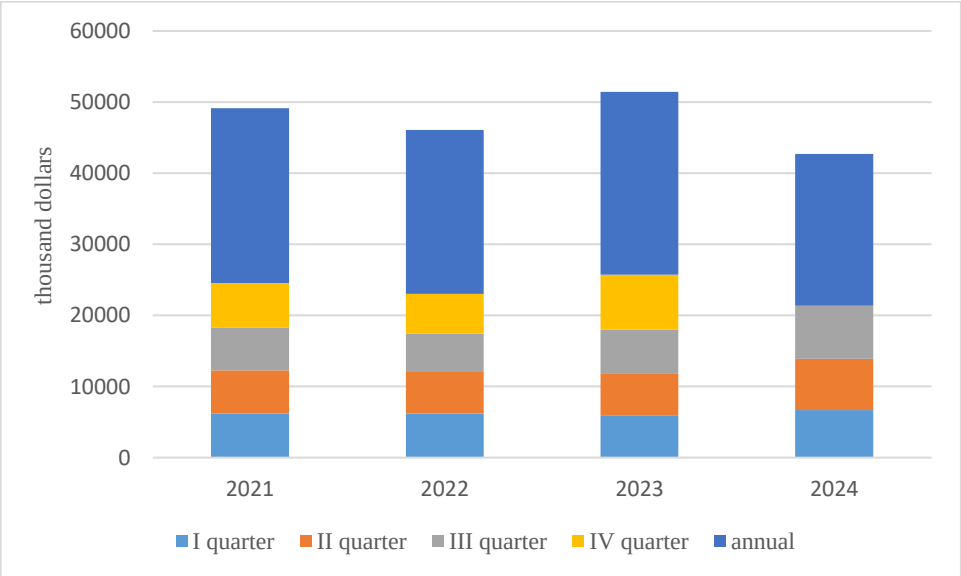

Figure 1. Dynamics of Excise Taxes on Environmentally Harmful Products

The dynamics of the environmental payments in 2021-2024 reflect serious efforts in environmental protection. The growth observed every quarter, especially the sharp jump in the fourth quarter of 2024 (49 thousand dollars), indicates accelerating the transition to a green economy. These trends show that environmental payments are becoming an essential factor not only for environmental protection but also for economic stability. Incentivizing green technologies and financial support for businesses can translate this growth into social and economic benefits. A sustainable future is dependent on smart investments and balanced policies.

Subsidies promoting renewable energy sources (RES) exist but mainly focus on large projects. Limited financial incentives for SMEs and private investors slow down the development of this sector. Developed regions like the European Union have successfully applied for special grants and loans for small-scale solar and wind energy projects. Uzbekistan can also increase the share of RES by introducing similar mechanisms.

Phasing out fossil fuel energy subsidies should be done carefully to avoid inflation and social discontent. For example, in countries such as India and Indonesia, fuel price increases are accompanied by direct cash payments to low-income households, which helps ensure social equity.

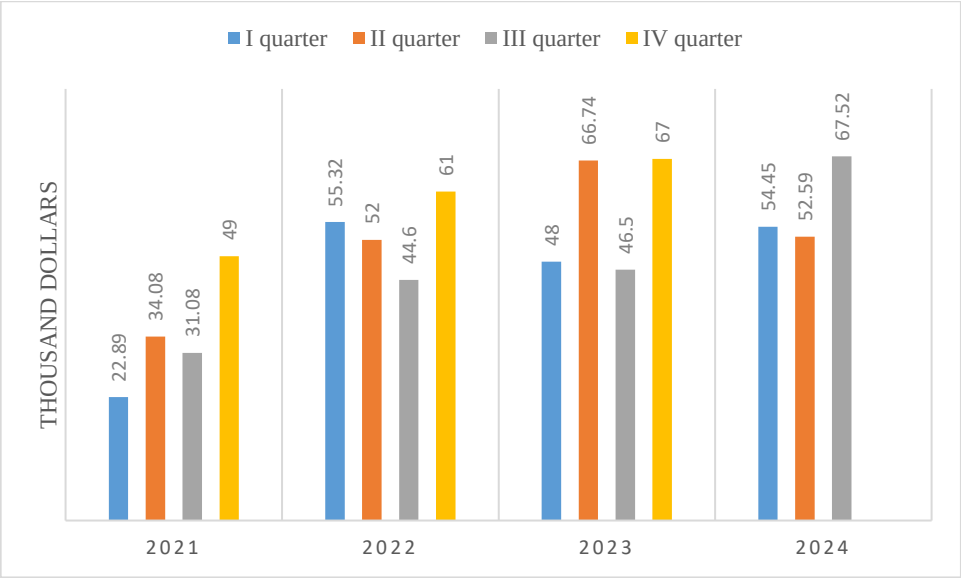

Figure 1. Environmental Revenues

The graph shows that environmental fees are increasing. While in 2021, the lowest rate was in the first quarter, there was a significant increase towards the end of the year. In the following years, steady growth continued in all quarters, reaching the highest level in the second and fourth quarters of 2023. This shows the increasing role of green fiscal policy and its impact on economic growth.

Environmental payments from industrial enterprises are still challenging to describe as effective in reducing pollution. The reason is low rates and weak controls. High environmental taxes force companies to switch to clean technologies in countries

like Sweden and the Netherlands. Uzbekistan should also increase payments while channeling them to renewable energy projects.

Tax incentives for energy efficiency are currently underutilized. In addition to tax incentives, technical support for enterprises introducing new technologies is important. In China and Germany, additional subsidies to companies installing energy-saving equipment have yielded good results.

The market for green bonds and soft loans in Uzbekistan is emerging but has excellent potential. Increased cooperation with international financial institutions, such as the Green Climate Fund or the World Bank, could increase opportunities for financing environmental projects.

Summary. Uzbekistan's fiscal policy must adapt to various economic and environmental factors in transitioning to a green economy. By improving carbon taxation, renewable energy subsidies, and ecological payments—while leveraging international best practices—the country can balance environmental protection with economic development.

Strengthening the legal framework, supporting small businesses and private investors, and enhancing collaboration with international financial institutions are critical to promoting a green economy in Uzbekistan. These measures can help the country achieve its sustainable development goals.

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THE IMPORTANCE OF INCREASING THE EFFICIENCY OF THE AGRICULTURAL SECTOR IN THE ECONOMY OF THE REGION

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Agriculture is one of the important branches of strategic importance in ensuring the country's economic development. Agriculture has already made a great contribution to ensuring the economic well-being of developed countries, and it will play a vital role in the economic development of developing and less developed countries[1].

It is known from the history of England that there was an agricultural revolution before the industrial revolution. This production is seen as the organizing principle of the personal agrarian history of the agricultural revolution that took place in Britain 1560-1850 as important as the industrial revolution[2].

The same situation can be observed in the experience of the USA and Japan, that is, the development of agriculture in these countries contributed greatly to their industrialization process[3].

It is known that the less developed countries implementing the industrialization policy today should not only pay attention to the development of industry, but also look at the issue of ensuring the development of agriculture. Because it is necessary to take into account that the development of the industrial sector, which is considered as a perspective direction for them in increasing the real income per capita, is directly related to agriculture. That is, industry and agriculture are sectors that complement each other and it is required to ensure their balanced development. Based on this, it can be noted that agriculture remains one of the important sectors in improving the well-being of the population, including ensuring employment, increasing real per capita income, and providing necessary benefits. In short, agriculture is the basis of the economy, acting as the sole source of food supply and the base of raw materials necessary for industrialization.

Today, the importance and role of agriculture in the economy can be explained by the following circumstances. These are:

1. Contribution to formation of national income;
2. Source of food supply and means of ensuring food safety;
3. Supplier of raw materials in industrialization;

[1] L. Praburaj. "Role of Agriculture in the Economic Development of a Country." Shanlax International Journal of Commerce, vol. 6, no. 3, 2018, pp. 1–5.
[2] Clark, Gregory. (2002). The Agricultural Revolution and the Industrial Revolution: England, 1500-1912.
[3] Kapur, Radhika. (2020). Significance of Agriculture and Food Production

4. One of the important sources in ensuring a positive balance of payments;
5. Development of human capital;
6. Formation of necessary infrastructure;
7. Eliminating the problem of capital shortage;
8. Creation of effective demand;
9. A source of attracting foreign currency in the country;
10. Means of formation of initial capital;
11. A source of ensuring employment of the population in rural areas;
12. To improve the welfare of the villagers;
13. Expansion of the market of industrial products;
14. Source of economic growth.

Agriculture is one of the important sectors in the economy of Uzbekistan, 25.1% of the gross added value, 22.8% of the economically active population, and 24.9% of the total employment are accounted for by the sector. it is considered as one of the important resources in increasing the well-being of life[1].

In the country, special attention is being paid to the issues of reorganization of the agricultural development sector on the basis of market laws, increasing the efficiency of land and water resources use, and the use of intensive technologies.

Because, during the previous system, the country inherited a monoculture agriculture, the main purpose of which was to grow cotton. In addition, most of the fruits and vegetables were exported from other republics. As a result of the measures taken to achieve grain independence in the initial period, approximately seventy percent of the cultivated area was cotton and grain, and 40 percent of the labor force was employed in agriculture. caused two main problems. First of all, it is necessary to preserve cotton cultivation, which is considered financially profitable, and secondly, it is necessary to ensure food safety[2]. At the same time, agriculture in the country had to be reorganized on the basis of a new system, that is, the laws of the market economy. The initial stage of reforms began with the development of an effective private sector and the implementation of land reform. As a result, special attention was paid to the issues of privatization of state property, formation of private property, increasing the sense of land ownership and creation of its legal basis in agriculture.

In order to determine the factors affecting the production of agricultural products in the Khorezm region and form their classification, we will look at the important factors affecting agriculture, having first formed a general classification. Summarizing the results of research conducted in this direction, the following groups of factors can be cited (Figure 1).

[1] https://stat.uz/uz/rasmiy-statistika/national-accounts-2
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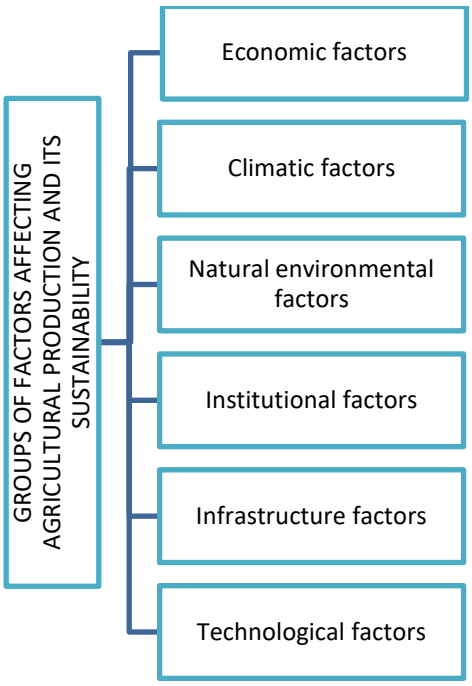

Figure 1. Groups of factors affecting production and its stability in agriculture

The above is a classification of the factors influencing the production of products in agriculture, and it covers a number of factors.

Because agriculture is unprofitable compared to other industries, investors are reluctant to invest in this industry. In addition, problems arise for those engaged in this field. For this reason, agriculture throughout the world is supported by the state on the basis of various economic incentives. One of the methods widely used in world practice is subsidization. In this case, farms receive subsidies from the state for growing crops. At the same time, the state provides financial incentives to farmers for growing certain types of crops.

If we look at the example of our country, a number of measures have been implemented, such as the provision of preferential loans for the production of products such as cotton and wheat, and the supply of mineral fertilizers necessary for the production of these products at fixed prices. However, the inability of farmers, producers of important agricultural products, fruits and vegetables, sugarcane products to use such opportunities can be considered as one of the important problems in ensuring the development of the sector. In our opinion, it would be appropriate to offer economic assistance to farmers, taking into account their role in the production of agricultural products.

Product price factors can be understood as follows. Changes in the weather and climate, various speculations made by investors, changes in the prices of non-food products and raw materials used in the production of products affect the volume and price of agricultural products. In such cases, farmers who are producers of products or members of society who are consumers suffer. Some countries use minimum price

policies to prevent farm losses and economic fluctuations in agriculture. However, in order to implement this policy, it is required to purchase the surplus product at the specified price.

In other cases, maximum price policy is used to protect consumers. Even in this case, if the product that is in short supply in the market is not offered at the specified price, it is not only impossible to achieve the desired result, but the situation can become even worse than before. If we look at the example of our country, the maximum price policy for beef products was implemented in the region and it did not give the expected effect. In our opinion, it is better for the government to do this only if it is able to offer the quantity of the product in short supply at a fixed price after fully assessing the market situation before implementing this policy.

Among climate factors, wind is of particular importance. Because the wind provides air movement due to the formation of different temperatures and pressures and helps to pollinate the flowers of plants, as a result, the development of fruits and seeds is ensured. When a light wind blows, gas exchange occurs in plants, but strong winds can cause damage to crops by increasing water consumption. In addition, if we look at the example of the Khorezm region, which is considered the object of research, the presence of strong winds causes the spread of salt along the Aral Sea and increases the level of land degradation. As a result, the increase in soil salinity reduces crop productivity.

The composition of the soil and the amount of humus in it are important factors in the growth of plants. In addition, it is necessary to have a well-formed drainage system for the development of plants and effective soil composition in Khorezm region. Because plants absorb nutrients and water from the soil through their roots, the irregular composition of the soil creates a problem with their getting enough nutrients. Therefore, the reduction of solid chemicals in the soil is one of the urgent problems of today.

Non-availability of necessary infrastructure for the production of agricultural products is one of the main sources of decrease in productivity and efficiency. Because the timely implementation of the necessary agrotechnical measures in agriculture reduces productivity and causes the death of crops. In addition, the lack of necessary infrastructure for harvesting, transportation and storage of cultivated products leads to a high degree of insecurity. If we look at the example of Khorezm region, which is the object of the study, it is precisely the obsolescence of irrigation facilities that causes the efficiency of water resources to remain low. Also, the large number of interruptions in the supply of electricity prevents agrotechnical activities from being carried out on time. It was found that electricity supply depends only on traditional sources, and there are problems in the implementation of alternative green energy options.

According to the results of the analysis, i.e. identifying and classifying the factors affecting the production of agricultural products, changing the influence of

institutional, technological, infrastructure and socio-economic factors in the region in a positive direction, including land ownership and improving the organizational and legal basis of problems related to the organization of rent will help to increase efficiency. In addition, an important factor in the production of agricultural products in the region is to increase the efficiency of water resources use, for this it is necessary to improve the system, build the necessary facilities, and introduce modern technologies.

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КОНЦЕПЦИЯ ЗЕЛЕНОЙ ЭКОНОМИКИ КАК ПОДХОД К УСТОЙЧИВОМУ РАЗВИТИЮ

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Аннотация. В работе рассматривается концепция зелёной экономики как подход к устойчивому развитию. Описаны её основные принципы, а также влияние на различные сферы экономики, такие как энергетика, транспорт и сельское хозяйство. Особое внимание уделено проблемам и вызовам, с которыми сталкиваются страны на пути перехода к зелёной экономике.

Ключевые слова: зелёная экономика, устойчивое развитие, экология, возобновляемые источники энергии, зелёные рабочие места.

Введение. Современный мир сталкивается с серьёзными экологическими и экономическими вызовами: изменение климата, истощение природных ресурсов, загрязнение окружающей среды. В этой связи всё больше стран и компаний обращаются к концепции зелёной экономики как к альтернативе традиционной модели роста. Как студент, я считаю важным изучить, что представляет собой зелёная экономика, какие задачи она решает, и какие перспективы она открывает для устойчивого развития.

Зелёная экономика - это модель экономического развития, которая обеспечивает устойчивый рост при одновременном снижении экологических рисков и дефицита природных ресурсов. Её основная цель - повысить благосостояние общества, не нанося вреда окружающей среде.

Программа ООН по окружающей среде (UNEP) определяет зелёную экономику как экономику, способствующую улучшению человеческого благополучия и социальной справедливости при существенном сокращении экологических рисков и экологического дефицита.

Основные принципы зелёной экономики:

- Рациональное использование ресурсов: отказ от чрезмерного потребления невозобновляемых ресурсов, переход на возобновляемые источники энергии.

- Снижение выбросов и загрязнений: внедрение «чистых» технологий, утилизация отходов, переход на замкнутые производственные циклы.

- Социальная справедливость: учёт интересов уязвимых слоёв населения, доступ к «зелёным» рабочим местам.

- Инновации и образование: развитие экологической науки, внедрение новых подходов в обучение, подготовка специалистов в сфере устойчивого развития.

Сферы применения зелёной экономики:

1. Энергетика — переход от ископаемого топлива к возобновляемым источникам энергии (солнечная, ветряная, гидроэнергия).

2. Транспорт — развитие общественного транспорта, электромобилей, велосипедной инфраструктуры.

3. Сельское хозяйство — экологически чистые методы производства, органическое земледелие.

4. Строительство — энергоэффективные технологии, переработанные материалы, системы водосбережения.

5. Переработка отходов — создание цикличной экономики, где отходы становятся ресурсами.

Переход к зелёной экономике создаёт так называемые зелёные рабочие места — в таких отраслях, как экотуризм, переработка, альтернативная энергетика, устойчивое строительство. Это открывает новые перспективы для занятости, особенно среди молодёжи.

Однако, одновременно возникает необходимость в переподготовке кадров: не все профессии будущего будут соответствовать традиционным стандартам. Поэтому важную роль играют образовательные программы, направленные на формирование экологического мышления. Примеры стран, внедряющих зелёную экономику: Германия - программа Energiewende нацелена на отказ от угля и атомной энергии; Швеция - устойчивый транспорт, переработка отходов, биотопливо; Китай - инвестиции в солнечные и ветряные электростанции; Казахстан - концепция перехода к зелёной экономике до 2050 года; Россия - национальные проекты, переработка отходов, экотуризм.

Переход к зелёной экономике сталкивается с рядом проблем:

- высокие начальные инвестиции: для того, чтобы внедрить новые технологии, требуются значительные финансовые вложения. Многие страны, особенно развивающиеся, не могут себе позволить эти затраты.

- сопротивление традиционных отраслей: Крупные нефтегазовые и угольные компании часто противятся изменениям, так как это угрожает их прибыльности и рабочим местам.

- технологический разрыв: в некоторых странах не хватает специалистов и технологий для перехода к более экологичным методам производства.

- политическая нестабильность: Политические изменения и недостаток координации на международном уровне могут затруднить реализацию зелёных инициатив.

Зелёная экономика имеет большие перспективы. Ожидается, что в ближайшие десятилетия количество стран, которые перейдут к углеродной нейтральности, значительно возрастет. Появление новых технологий, таких как улавливание углерода и возобновляемые источники энергии, поможет уменьшить углеродный след и улучшить состояние окружающей среды.

На международном уровне важную роль в продвижении зелёной экономики играет климатическая повестка, где страны активно подписывают соглашения, такие как Парижское соглашение, направленное на ограничение роста температуры планеты.

Роль государственных институтов в переходе к зелёной экономике невозможно переоценить. Правительства играют ключевую роль в разработке и внедрении политики и законодательства, направленных на стимулирование устойчивого развития. На международной арене важно участие в таких соглашениях, как Парижское соглашение по климату, которое обязывает страны стремиться к углеродной нейтральности и снижению выбросов парниковых газов.

В странах с развитыми рынками также важно создание и поддержка зеленых субсидий и налоговых льгот для компаний, работающих в области возобновляемых источников энергии, эффективного использования ресурсов и переработки отходов. В то же время государственные программы по образованию и информированию населения о важности зелёной экономики способствуют созданию экологической культуры в обществе.

Бизнес в условиях зелёной экономики сталкивается с новыми вызовами, но также получает новые возможности. Компании, ориентированные на устойчивое развитие, начинают внедрять инновации, которые уменьшают их углеродный след и повышают социальную ответственность. Например, компании внедряют системы энергосбережения, используют переработанные материалы и переходят на возобновляемые источники энергии.

Тенденция к устойчивому бизнесу открывает новые рыночные ниши, такие как «зелёные» инвестиции, экотуризм, производство экологически чистых продуктов и услуг. Зелёная экономика может способствовать созданию новых рабочих мест, особенно в таких сферах, как разработка и производство зелёных технологий, переработка отходов и возобновляемая энергетика. Важно, чтобы бизнес осознавал долгосрочную выгоду от внедрения зелёных практик, включая улучшение репутации компании, снижение затрат на энергопотребление и повышение лояльности потребителей.

Зелёная экономика — это не просто тренд, а необходимость. Она предлагает устойчивую альтернативу традиционной модели роста. Как студенты, мы убеждёны, что нашему поколению предстоит реализовать эти принципы.

Переход к зелёной экономике — это шанс создать более справедливый и безопасный мир.

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THE IMPACT OF WTO ACCESSION ON UZBEKISTAN'S TRADE POLICY: IN THE CASE OF KAZAKHSTAN

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Abstract. This study investigates the impact of World Trade Organization (WTO) accession on Kazakhstan's trade policy and economic growth, which provides insights **for** Uzbekistan's future accession journey. This studusy Uses Ordinary Least Squares (OLS) regression analysis, the study analyzes how exports, imports, tariff rates, foreign direct investment (FDI), unemployment, inflation, and exchange rate variations on Kazakhstan's Gross Domestic Product (GDP) before and after WTO membership. The WTO membership does not appear to significantly affect GDP growth in relation to FDI or unemployment. Correlations analysis shows some links between WTO membership and exchange rate adjustments, indicating that trade liberalisation has lead macroeconomic changes.

Furthermore, studies using Variance Inflation Factor (VIF)highlight potential multicollinearty, especially when it comes to the exchange rate variable. Exchange rate stability, tariff modifications, and export promotion tactics all play a significant role in determining Kazakhstan's post-accession economic course. The analysis provides Uzbekistan with helpful policy recommendations to enhance WTO benefits and minimize economic risks.

Keywords: *Kazakhstan, Uzbekistan, World Trade Organization, Export, Import , GDP.*

Introduction. Uzbekistan's WTO entry marks a significant turning point fot its economic development and integration into global trade. As a landlocked country in transition, Uzbekistan has enacted substantial policy changes to align to WTO standarts. To expand export markets, attract foreign investment, and liberalise trade, certain steps are being taken. To join WTO, significant changes in adjustments to domestic market structures, regulatory frameworks, and tariff policies are also needed. Given the physical and economic parallels between Kazakhstan and Uzbekistan, it is helpful to look at historical data. This can help to understand these possible changes. After over 20 years of discussions, Kazakhstan joined the WTO in 2015. This marked a significant revision to its trade policy. Among them were:

- Kazakhstan lowered its average import tariff rates from 6.5% to 5.1% to meet its WTO obligations. Kazakhstan faces difficult issues with tariff alignment. As a member of the Eurasian Economic Union (EAEU), it must also consider regional trade agreements.At the same time, it needs to balance between these commitments with its WTO responsibilities.
- Kazakhstan needed to remove barriers to international investment in important sectors. This included areas like financial services and telecommunications to become a member of the WTO.

- Kazakhstan's WTO participation has improved its access to international markets. However other industries, like manufacturing and agriculture, have struggled to compete with cheaper imports. Through new law and subsidies, the government supported local bussinesses.
- Kazakhstan had to align its laws with WTO regulations. This included steps to support trade, protect intellectual property rights, and settle disputes. These reforms required a significant increase in institutional capacity. They also helped to improve the nation's economic climate and transparency.

Uzbekistan's post-WTO membership direction can be effectively assessed just like Kazakhstan's trade policy changes. By observing Kazakhstan's experience, this article targets to research the potential effects of WTO membership on Uzbekistan's trade policies. It also explores its impact on competitiveness, and regional trade ties. Among the important questions are: How will Uzbekistan modify its regulations and tariffs? What obstacles could domestic industries encounter? How much can Uzbekistan's integration into international markets be improved by WTO membership? These issues must be resolved in order to comprehend Uzbekistan's possible WTO admission. This paper will investigate these concerns by examining Kazakhstan's trade policy reforms and their applicability to Uzbekistan. To further understand how WTO accession affects Central Asian transition economies, the study looks at trade liberalisation trends, sectoral changes, and policy adjustments.

Literature review. Kazakhstan to join the World Trade Organisation (WTO) in 2015. To do so, the country made significant changes to it’s trade policy. Lowering tariffs, enhancing transparency, and conforming to international standarts are the main changes. These changes not only increased market accessibility and FDI inflows. They also posed challenges for domestic businesses that were up against international competition (Pomfret, 2019).

Mukhamediyev et al. (2020) claim that trade liberalisation didn’t help overall; it only benefited some industries. For instance, while the service industry benefited from foreign direct investments, agriculture struggled due to intense competitive with imported goods. According to Kassassenova (2018), Joining the WTO helped Kazakhstan diversify its economic by reducing reliance on oil exports and promoting other industries.

Kazakhstan's experience can teach Uzbekistan about potential and challenges. Turdikulov (2021) highlights the significance of preserving stability between domestic industry protection and international trade. Uzbekistan's trade strategy needs to consider the regulatory challenges. These challenges arise Kazakhstan's membership in the Eurasian Economic Union (EAEU) and its impact on meeting WTO obligations (Vinokurov 2020).

There is not much research on the long-term economic effects for Kazakhstan after joining the WTO. Especially regarding to changes in trade balance and sectoral competitiveness. Furthermore, there are few studies that directly compare Kazakhstan's experiences with Uzbekistan’s current accession process. How Uzbekistan might maximise the advantages of WTO membership while minimising any potential drawbacks has not been thoroughly examined in the literature to yet.. Addressing this

gap, this study aims to provide a more focused comparative analysis, offering policy recommendations based on Kazakhstan's post-accession challenges and successes.

Theoritical framework. Using econometric modelling and a quantitative research methodology, this paper explores how Kazakhstan's trade policy and economic performance are affected by WTO membership. I chose Kazakhstan because of similarities to Uzbekistan's economic structure, trade dependences, and regional integration within the post-Soviet area. This study aims to clarify on how Uzbekistan's trade policies might be affected by WTO membership. To do this, it compares Kazakhstan's macroeconomic data before and after WTO entrance. A time-series analysis is carried out using macroeconomic data from 1993 to 2023, covering pre- and post-accession eras. This helps assess how WTO membership impacts policy and economic trends.

This study focuses on key economic factors including GDP trade flows tariffs investments employment inflation and exchange rates. These metrics helps us to understand how WTO membership impacts competitiveness economic stability and trade policies. This study measures the impact of Kazakhstan's WTO entrance on its economic performance using an econometric model. The effects of changes to trade policy on GDP growth can be estimated using a regression model Ordinary Least Squares (OLS)..

Empirical framework

The study utilizes **secondary data** sourced from:

- **World Bank** (World Development Indicators)
- **IMF (International Monetary Fund) databases**
- **WTO and Kazakhstan's government reports**

Using this dataset we are able to capture both short- and long-term effects associated with Kazakhstan's accession to the WTO (1993-2023).

The core hypothesis of the study is formulated as follows:

- **H_0 (Null Hypothesis):** WTO accession has no significant impact on Kazakhstan's economic performance and trade indicators.
- **H_1 (Alternative Hypothesis):** WTO accession has a significant impact on Kazakhstan's economic performance and trade indicators, influencing GDP, exports, imports, tariff rates, FDI, unemployment, inflation, and exchange rates.

They study analyzers have Kazakhstan's WTO membership effects its economy by using a multiple linear regression model, using the Ordinary Least Squares (OLS) method. A simple OLS regression helps analyse how trade and economic factors impact GDP by showing the relationship between multiple factors and one main outcome. GDP in current US dollars is used as a dependent variable to measure Kazakhstan's overall economic performance. Exports, imports, tariffs, FDI, unemployment, inflation, and the

official exchange rate are examples of independent variables. It is anticipated that each of these factors will significantly impact GDP, either positively or negatively.

The model takes the following form:

$GDP=\beta0+\beta1WTO_Dummy+\beta2EX+\beta3TAR+\beta4FDI+\beta5UNEMP+\beta6EXR+\epsilon$

where:

- **GDP** = Gross Domestic Product (Dependent Variable)
- **WTO_Dummy** = Dummy variable for WTO accession (1 if post-accession, 0 otherwise)
- **EX** = Exports
- **TAR** = Tariff rates
- **FDI** = Foreign Direct Investment
- **UNEMP** = Unemployment rate
- **EXR** = Exchange rate
- **ε (epsilon)** = Error term (accounts for unobserved factors)

Table-1.

Describtion

signs	Variables	Measuring units	Sources
GDP	Gross Domestic Product	Annual total GDP in Usd	WB
EX	Export of goods and services	Annual total export in Usd	WB
IM	Import of goods and services	Annual total import in Usd	WB
TAR	Tariff rate, applied, weighted mean, all products(%)	Average tariff applied on imports	WB
FDI	Foreign direct investment, net flows(BoP, current US$	Total FDI inflows in Usd	WB
UNEMP	Unemployment, total(%)	Unemployment rate as a percentage of total labor force	WB
INF	Inflation, consumer prices	Annual inflation rate	WB
EXR	Official exchange rate	Annual average exchange rate	WB

To ensure the accuracy of estimation, a Variance Inflation Factor (VIF) analysis will be applied to detect multicollinearity between independent variables. This will ensure that there is no strong correlation distorting regression estimates. The expected results of this study suggest that WTO accession has had a significant impact on Kazakhstan's economic performance, influencing key macroeconomic indicators in various ways. WTO membership typically improves a country's access to international markets and improves investor confidence, so exports and foreign direct investment (FDI) should correlate with GDP. If trade barriers were reduced and the country

integrated more into the global economy, economic growth would have improved. This would have increased export revenues and attracted more investment.

On the other hand, tariff reductions are expected to have mixed effects. Lower tariffs generally promote trade openness and economic efficiency. However, they can also expose domestic industries to greater competition, which may cause short-term disruptions in certain sectors. Imports are likely to increase as a result of tariff liberalization, making foreign goods more accessible and affordable. However, domestic industries may face difficulties if they cannot compete effectively. This could temporarily impact employment, especially sectors that wew previously protected by higher tariffs.

Since more trade and investment are anticipated to result in job growth, unemployment is predicted to show a negative relationship with GDP. However, certain industries may have lost jobs as a result of structural changes made after WTO entry, at least initially. Since inflation can reduce purchasing power and undermine economic stability, it is also anticipated to have a negative impact on GDP.

Finally, it is anticipated that Kazakhstan's trade dynamics will be significantly influenced by changes in the currency rate. Currency devaluation can boost exports but also raise import prices, leading to inflation. On the other hand, a currency increase may result in lower export earnings and lower import prices, which would impact trade balances.

Overall, the findings are expected to confirm that WTO accession has had both positive and negative effects on Kazakhstan’s trade policy and economic performance. Study insights will be particularly valuable in forecasting Uzbekistan's economy's response to WTO membership, as well as providing policy recommendations for minimizing risks and maximizing benefits.

Analysis and research. The study examines Uzbekistan's trade policy under WTO accession using Kazakhstan as a case study. Trade liberalization and economic growth can be boosted by membership in the WTO, but there are also challenges associated with it. Exchange rate volatility and tariff adjustments cam be example. By analyzing Kazakhstan’s economic shifts pre- and post-WTO, this research identifies key trends relevant to Uzbekistan. Using OLS regression, correlation analysis, and VIF tests, the study assesses the role of GDP, exports, imports, FDI, and labor market dynamics. The findings highlights both benefits and risks and emphasizing the need for strategic trade policies and macroeconomic stability. As Uzbekistan plans to join the WTO, this discussion explores statistical results, policy implications, and lessons learned.

Table-2

Descriptive Statistics Summary

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	31	1.13e+11	8.31e+10	1.69e+10	2.63e+11
EXP	31	4.46e+10	3.19e+10	6.72e+09	9.37e+10
IMP	31	3.36e+10	2.08e+10	6.77e+09	7.19e+10
TAR	31	2.942	.6223461	1.91	4.85
FDI	31	6.05e+09	5.00e+09	40000	1.72e+10
UNEMP	31	7.404613	3.196331	1.11	13.46
INF	30	77.87302	341.2813	5.195683	1877.372
EXR	31	198.7026	127.6227	35.53833	460.165

According to table 2, descriptive statistics are presented for a number of key economic variables. Currently, the inflation rate averages 77.87 % with a range of 5.19 % to 1,877.37 %, indicating that there are significant fluctuations in the rate. Exports (44.6 billion usd) and imports (33.6 billion usd) show substantial variation, reflecting trade policy changes. The tariff rate remains stable at 2.94% (1.91% to 4.85%). Fdi averages 6.05 billion usd but fluctuates widely (40,000 to 17.2 billion usd). There is a moderate variation in the unemployment rate (7.40%) (1.11% to 13.46%). Exchange rate volatility is evident, averaging 198.70 (35.53 to 460.16). As a result of these trends, trade, investment, and macroeconomic stability have fluctuated.

Final OLS regression results: WTO accession and GDP

This regression examines the impact of WTO accession and key economic indicators on Kazakhstan's GDP. Based on these findings, we can gain a comprehensive understanding of the degree to which trade policies, economic integration, and macroeconomic factors impact the nation's economic performance over time.

The model exhibits strong explanatory power, with an **R-squared of 97.84%**, meaning that nearly all variations in GDP can be explained by the included variables. The **F-statistic (173.59, p = 0.0000)** confirms that the overall model is statistically significant. Based on the number of predictors and the adjusted R-squared value of 97.28%, the model is robust, accounting for the number of predictors and eliminating the effects of overfitting.

Table-3.

Regression model

Source	SS	df	MS	Number of obs	=	30
				F(6, 23)	=	173.59
Model	1.9483e+23	6	3.2471e+22	Prob > F	=	0.0000
Residual	4.3023e+21	23	1.8706e+20	R-squared	=	0.9784
				Adj R-squared	=	0.9728
Total	1.9913e+23	29	6.8665e+21	Root MSE	=	1.4e+10

GDP	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
WTO_Dummy	4.05e+10	1.64e+10	2.47	0.021	6.61e+09	7.43e+10
EX	2.133402	.1908823	11.18	0.000	1.738532	2.528272
TAR	1.28e+10	5.03e+09	2.54	0.018	2.35e+09	2.32e+10
FDI	-.3925037	.7063752	-0.56	0.584	-1.853752	1.068745
UNEMP	-7.79e+08	1.88e+09	-0.41	0.683	-4.67e+09	3.11e+09
EXR	2.91e+07	6.85e+07	0.42	0.675	-1.13e+08	1.71e+08
_cons	-2.93e+10	2.82e+10	-1.04	0.310	-8.77e+10	2.91e+10

The high explanatory power of the independent variables indicates that they can be used successfully to explain Kazakhstan's GDP fluctuations. However, the importance of individual variables varies, which necessitates more analysis to understand their role in economic growth.

The regression results reveal the following insights:

- **WTO Accession (WTO_Dummy)**: Statistically significant (**p = 0.021**) and positively impacts GDP. There has been an increase in GDP of approximately $40.5 billion USD as a result of WTO membership. This finding aligns with expectations that WTO accession improves trade conditions, encourages foreign investment, and integrates Kazakhstan into the global economy.
- Exports (EX): Highly significant (p = 0.000), indicating that exports strongly drive GDP growth. A dollar increase in exports increases the GDP by about $2.13 USD for each additional dollar invested in exports. Kazakhstan's economy relies on export-led growth strategies, which reinforces the importance of maintaining competitive trade policies and expanding access to international markets.
- Tariff Rate (TAR): Statistically significant (p = 0.018) with a positive coefficient, suggesting that higher tariffs may have supported certain industries, contributing to GDP growth. Kazakhstan may have benefitted from higher tariffs by shielding its domestic industries from foreign competition, resulting in the expansion of the economy in key sectors, despite the fact that tariffs typically hinder trade.

Kazakhstan's WTO accession resulted in significant increases in GDP, primarily through the expansion of trade. However**, FDI, unemployment, and exchange rate fluctuations do not appear to play a major role in GDP determination.** Export

promotion and strategic tariff policies play an important role in shaping Kazakhstan's economic growth, according to the results.

Correlation Matrix analysis

The correlation matrix provides insights into the relationships between **GDP, trade variables (EX, IM, TAR), investment (FDI), labor market (UNEMP), macroeconomic stability indicators (INF, EXR), and WTO membership (WTO_Dummy).** The key observations from the correlation analysis are as follows:

Table-4.

Correlation.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
(1) GDP	1.000								
(2) EX	0.9594	1.000							
(3) IM	0.9749	0.9793	1.000						
(4) TAR	0.1609	0.1396	0.1396	1.000					
(5) FDI	0.4862	0.5930	0.5930	0.0886	1.000				
(6) UNEMP	-0.8692	-0.9792	-0.8403	-0.0580	-0.5364	1.000			
(7) INF	-0.2381	-0.2495	-0.2462	-0.0019	-0.2425	0.0212	1.0000		
(8) EXR	0.6920	0.5541	0.6265	-0.3110	0.0895	-0.6394	-0.2618	1.0000	
(9) WTO_Dmy	0.5943	0.4067	0.5007	-0.2368	0.0075	-0.5852	-0.1336	0.9184	1.0000

Strong Positive Correlations:

A very high correlation between GDP and Exports (0.9594) suggests that exports play a dominant role in driving Kazakhstan’s economic growth. In a similar way, GDP and imports (0.9749) show a strong correlation,indicating Kazakhstan's economy is heavily reliant on international trade. Trade expansion appears to affect both variables simultaneously (0.9793), which could raise multicollinearity concerns in regression models.

Moderate Positive Correlations:

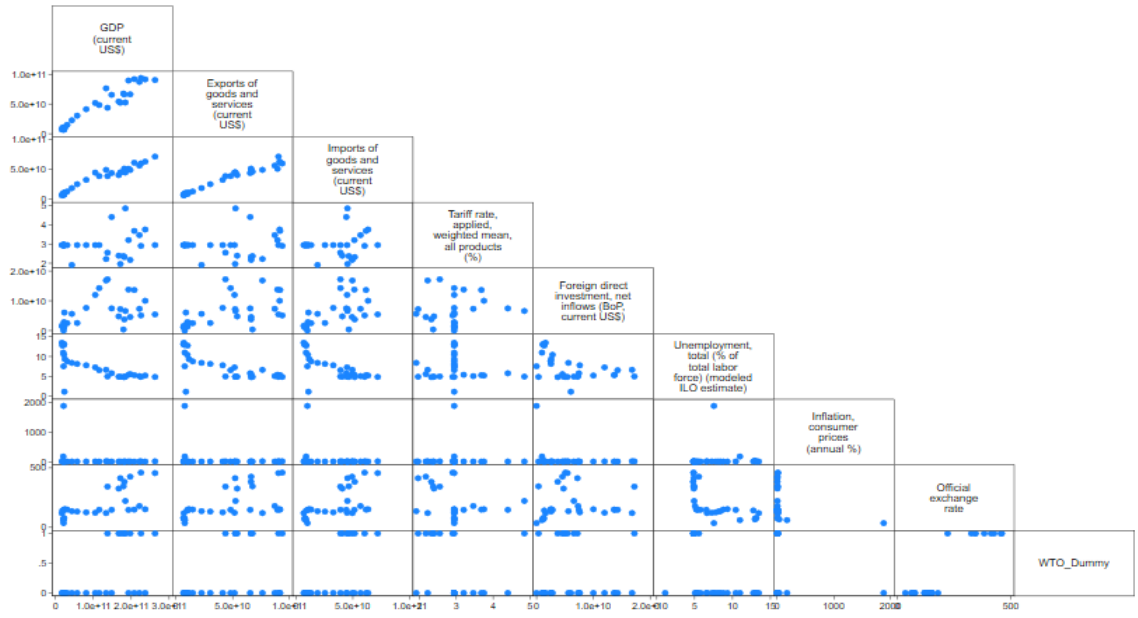
WTO accession is correlated with GDP (0.5943), but the effect is not as strong as that of trade-related variables. The correlation between GDP and Exchange Rate (0.6920) implies that exchange rate fluctuations may influence economic performance, potentially through their impact on trade competitiveness. Furthermore, the strong correlation between Exchange Rate and WTO_Dummy (0.9184) suggests that

Kazakhstan's WTO accession may have played a role in stabilizing or adjusting exchange rates.

Negative Correlations:

A strong inverse relationship between GDP and Unemployment (-0.8692) indicates that higher unemployment is associated with lower GDP, reinforcing the importance of labor market stability for economic growth. GDP and inflation have a negative correlation of -0.2381, which indicates that inflation has only a minor influence on GDP. Additionally, the correlation between Exchange Rate and Unemployment (-0.6394) indicates that a weaker currency (higher exchange rate) may help reducing unemployment, possibly by improving export competitiveness.

Table-5. Scatterplot matrix analysis.



WTO accession and its correlation

Correlation analysis reveals the relationship between WTO accession and key economic indicators. The strong correlation between WTO_Dummy and Exchange Rate (0.9184) suggests that Kazakhstan's WTO accession was accompanied by significant exchange rate adjustments, likely to align with global trade regulations. According to the correlation between WTO_Dummy and GDP (0.5943), WTO accession contributed to GDP growth, but trade liberalization and investment also played a role. A moderate positive correlation is also seen between WTO_Dummy and Imports (0.5007), suggesting WTO membership influenced trade flows but did not determine import dynamics exclusively. In spite of this, the near-zero correlation between WTO_Dummy and FDI (0.0075) supports the hypothesis that WTO accession did not directly impact foreign direct investment inflows, challenging the assumption that trade liberalization encourages foreign capital.

Variance Inflation Factor (VIF) Analysis

The **Variance Inflation Factor (VIF)** test was conducted to assess the presence of **multicollinearity** among the independent variables in the regression model. Multicollinearity takes place when two or more explanatory variables are highly correlated, contributing to inaccurate coefficient estimates. The results of the VIF test are presented in the table above, and they are summarized in the table as well.

Table-6. VIF.

Variable	VIF	1/VIF
EXP	11.84	0.084455
WTO Dummy	9.03	0.110801
EX	5.68	0.176000
UNEMP	5.02	0.199050
FDI TAR	2.00 1.57	0.500199 0.637078
Mean VIF	5.86	.

Multicollinearity among some independent variables is revealed by the Variance Inflation Factor (VIF) analysis, which could compromise the validity of the regression results. The Exchange Rate (EXR) variable is the most concerning since its VIF of 11.84, which is higher than the generally recognised cutoff of 10, indicates serious multicollinearity. Consequently, the significant correlation of the exchange rate variable with other variables may affect coefficient estimates and standard errors.

Another variable that contributes significantly to variance is WTO_Dummy, which has a VIF value of 9.03.

Also it's below the critical threshold of 10, it's still quite high, indicating a correlation between WTO accession and factors like trade and exchange rates this could add redundancy to the model and reduce the accuracy of estimates.

A moderate multicollinearity is also demonstrated by Exports (EX) and Unemployment (UNEMP), with VIF values of 5.68 and 5.02, respectively These values are within an acceptable range but they still show moderate correlation with other factories. This could affect the models accuracy and its ability to explain key relationships.

FDI and Tariff Rate have low VIF values, meaning there is a little multicollinearity. This shows that these factors contribute to the model independently without redundancy

Due to its high multicollinearity, Exchange Rate (EXR) might need further analysis since it could make the model unstable. The WTO dummy variable should also

be monitored especially if new interaction times are added. To improve reliability, the model may need adjustments like modifying or removing the exchange rate.

Uzbekistan Joining the WTO: Opportunities and Challenges of its Trade Policy. This paper has used Kazakhstan's experience and explores the economic transition after the accessions and outlines an upgraded possible route for the transformation of Uzbekistan into the global trading system. The results suggest that joining the WTO promotes trade liberalization, growth in GDP and macroeconomic adjustments, but also requires comprehensive policy strategies to deal with the potential short-term transitional costs.

The introduction of the WTO into Kazakhstan has broken the terms of trade between suppliers and consumers in favour of the latter. Our correlation analysis showed trade expansion as a major driver of GDP growth, continuously proving the need for integration into global markets. WTO membership did not instantly bring in foreign direct investment (FDI), showing that just being a member does not mean getting foreign capital easily. The country needs to work on enhancing the investment environment, fixing the legal system, and stabilizing the economy to attract more FDI from WTO nations.

The study also pointed out that changes in exchange rates are very important after joining the WTO. There is a strong link between exchange rate changes and WTO membership, indicating that a stable currency is essential for keeping trade competitive and gaining investor trust in international markets. Kazakhstan’s experience shows that poor exchange rate management can cause economic instability, even with increased trade from WTO membership. As Uzbekistan joins the WTO it must focus on maintaining monetary stability.

Another key lesson from Kazakhstan is tariff reduction. Lowering tariffs boosted trade but had only a small impact on GDP. To protect local industries, managing tariff policies carefully is essential. Uzbekistan must balance opening its market and protecting key factors that may struggle with foreign competition. Temporary safeguards and government support can help this transition.

Furthermore, joining the WTO needs the country to be well-prepared institutionally. To meet WTO standards Kazakhstan made several changes, like improving intellectual property rights, speeding up customs, and simplifying trade processes. The country must also be ready institutionally to join the WTO. Kazakhstan strengthened intellectual property rights, speed up customs, and simplify trade to meet WTO requirements.

To get the most out of the WTO membership and follow global trade rules, Uzbekistan must ensure its legal and institutional system are prepared. The labour market is also a key to economic adjustment after joining. Kazakhstan’s experience shows that GDP grows in unemployment were negatively linked, sourcing the need for

job-focused policies during economic transitions. Uzbekistan should create sectoral development plans and workforce training initiatives to stop employment losses brought on by heightened foreign competition.

From a broader proposed perspective, joining the WTO can help Uzbekistan improve economic efficiency, attract foreign investors, and strengthen trade partnerships. However successful integration also requires smart exchange rate management, proactive government support and well planned tariff policies. To fully benefit, Uzbekistan should focus on boosting exports, upgrading trade in infrastructure, and developing competitive industries learning from Kazakhstan's experience.

To sum up, Uzbekistan's WTO membership offers a revolutionary chance to become part of the world economy. Kazakhstan's experience shows the advantages of trade liberalisation, but it also emphasises the difficulties associated with macroeconomic changes. Uzbekistan can successfully negotiate WTO entry and promote long-term economic growth by implementing focused policy measures, bolstering institutional capacity, and maintaining economic stability. Maximising the benefits of WTO participation while lowering potential hazards would require strategic planning, regulatory harmonisation, and investment in important industries.

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ВЛИЯНИЕ PM2.5 НА ЗДОРОВЬЕ МОЗГА И УСТОЙЧИВЫЕ РЕШЕНИЯ ДЛЯ ЗЕЛЕНОЙ ЭКОНОМИКИ

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Аннотация. Загрязнение воздуха, особенно мелкодисперсными частицами (PM2.5), является одной из основных проблем общественного здравоохранения, оказывающей значительное влияние на здоровье мозга. Исследования показывают, что длительное воздействие PM2.5 может привести к нейродегенерации, повышая риск развития таких психических заболеваний, как болезнь Альцгеймера и деменция.

В данной статье рассматривается вредное воздействие PM2.5 на функции нейронов, его последствия для психического благополучия и качества жизни, а также предлагаются инновационные решения по снижению уровня загрязнения воздуха с помощью устойчивого городского планирования и зеленых экономических стратегий. Интегрируя "зеленые" технологии, оптимизируя транспортные системы и укрепляя политику управления отходами, города могут значительно сократить выбросы PM2.5, улучшая при этом здоровье населения и способствуя развитию более устойчивой экономики.

Введение. Загрязнение воздуха - одна из самых актуальных экологических проблем XXI века. Из-за своего небольшого размера PM2.5 может проникать глубоко в легкие и кровоток, что приводит к серьезным нарушениям здоровья, включая когнитивное снижение. Всемирная организация здравоохранения (ВОЗ) назвала PM2.5 одним из ведущих экологических факторов риска, долгосрочное воздействие которого связано с нейродегенеративными заболеваниями, такими как болезнь Альцгеймера, деменция и депрессия (WHO, 2022). Учитывая быструю урбанизацию и растущий уровень загрязнения в таких городах, как Ташкент, решение проблемы выбросов PM2.5 с помощью устойчивого городского дизайна и политических мер является крайне важным.

Обзор литературы. Недавние исследования продемонстрировали связь между воздействием PM2.5 и ухудшением здоровья мозга. Исследование Гарвардского университета показало, что повышение уровня PM2.5 на 10 мкг/м³ связано с увеличением риска снижения когнитивных способностей у пожилых людей на 8 % (Harvard Public Health, 2021). Кроме того, исследования, проведенные в сильно загрязненных районах Китая и Индии, выявили прямую зависимость между загрязнением воздуха и снижением когнитивных способностей у детей (Nature Neuroscience, 2020). Страны, успешно сократившие выбросы PM2.5, такие как Германия и Южная Корея, служат примером для

внедрения эффективных мер по борьбе с загрязнением. Более того, недавние лонгитюдные исследования начали рассматривать не только снижение когнитивных функций, но и структурные изменения в мозге, вызванные загрязнением воздуха. Например, исследование, опубликованное в *Brain and Cognition* (Calderón-Garcidueñas et al., 2011), показало, что у детей, проживающих в сильно загрязнённых городах, наблюдается воспаление мозга и уменьшение объёма белого вещества. Подобные неврологические изменения выявлялись даже у людей без клинических симптомов, что свидетельствует о потенциальной роли загрязнения воздуха как раннего триггера нейродегенеративных заболеваний.

Методология.В данном исследовании оценивается эффективность вмешательства городской политики в снижение уровня PM2.5 путем анализа конкретных примеров из Германии, Южной Кореи и других городов с успешными экологическими стратегиями. Источники данных включают отчеты ВОЗ, исследования в области городского планирования и статистику выбросов Европейского агентства по окружающей среде (EEA).

Выводы и обсуждение. Управление городским движением как решение проблемы Одним из наиболее значительных факторов, способствующих выбросам PM2.5 в городских районах, являются дорожные заторы. Агентство по охране окружающей среды США (EPA) утверждает, что один автомобиль, работающий на бензине, выбрасывает более 400 граммов CO_2 в минуту, а также вредные оксиды азота и частицы PM2.5. В среднем за год один автомобиль выбрасывает до 4,6 метрических тонн CO_2 (EPA, 2023). В городах с интенсивным движением автомобильные выхлопы составляют до 80 % от общего загрязнения воздуха (ВОЗ, 2022). Дополнительно, по данным Европейского агентства по окружающей среды, загрязнение воздуха от транспорта является причиной почти 50 % преждевременных смертей, связанных с качеством воздуха в городах (EEA, 2021).

Для решения этой проблемы можно использовать инновационные градостроительные решения:

- замена светофоров пешеходными мостами в местах с высокой интенсивностью движения, чтобы минимизировать время простоя автомобилей и тем самым снизить выбросы;

- интеллектуальные системы управления дорожным движением, внедренные в Южной Корее, которые оптимизируют время сигналов и сокращают количество ненужных остановок, что привело к снижению выбросов на 15 % в течение двух лет (Корейский транспортный институт, 2021);

- инвестиции Германии в эффективный общественный транспорт, например, безлимитный транспортный билет стоимостью 49 евро, который привел к снижению использования автомобилей в крупных городах на 20 % (UBA,

2023). В результате концентрация диоксида азота в центре Берлина снизилась на 12 % в первые шесть месяцев реализации программы (Министерство охраны окружающей среды Германии, 2023).

Сортировка и управление отходами в устойчивом развитии городов Помимо организации дорожного движения, важнейшую роль в устойчивом развитии городов играют правила сортировки отходов. В Ташкенте введены штрафы за несоблюдение сортировки мусора, что отражает политику таких стран, как Германия и Южная Корея. Однако отсутствие строгого контроля за соблюдением правил и надлежащей инфраструктуры значительно снижает их эффективность. По оценкам муниципальных служб, только около 30 % домохозяйств в Ташкенте регулярно сортируют мусор (Статистика муниципалитета Ташкента, 2023).

Примеры успешных международных проектов.

Германия:

в стране действуют строгие законы о разделении отходов - Закон об упаковке (VerpackG) и Закон о циркулярной экономике (KrWG);

домашние хозяйства должны разделять отходы как минимум на пять категорий (бумага, пластик, биоотходы, стекло и остаточные отходы);

контроль за соблюдением требований осуществляется с помощью автоматизированных систем отслеживания отходов и регулярных проверок, а штрафы за неправильную утилизацию составляют от 10 до 2 500 евро;

система "Зеленая точка" возлагает финансовую ответственность на производителей, требуя от них финансировать программы утилизации, что позволило добиться показателя утилизации в 67 % — одного из самых высоких в мире. Более 97 % пластиковых бутылок возвращаются через систему Pfand.

Южная Корея:

Внедрена система оплаты за объём отходов (VBWF), где жители платят за мешки для несортированного мусора, стимулируя их к правильной сортировке;

Умные мусорные контейнеры с RFID-чипами фиксируют вес отходов и автоматически начисляют плату, что обеспечило 95%-ное соблюдение правил в Сеуле;

Видеонаблюдение с ИИ анализирует сортировку мусора в общественных местах и позволяет выписывать штрафы за несоблюдение правил. В 2022 году уровень переработки бытовых отходов в Южной Корее превысил 85 % (Министерство окружающей среды Южной Кореи, 2022).

Рекомендации для Ташкента Для повышения эффективности системы сортировки отходов Ташкент может принять следующие стратегии:

Развитие инфраструктуры и доступность

Увеличить количество контейнеров для мусора с цветовой маркировкой в жилых районах, на рынках и в общественных местах.

Организовать пункты раздельного сбора пищевых отходов по примеру Южной Кореи, чтобы стимулировать компостирование и сократить количество отходов на свалках.

Технологии и мониторинг

Установить камеры с искусственным интеллектом или контейнеры с радиометками, чтобы эффективнее отслеживать и штрафовать нарушителей.

Разработать мобильное приложение, с помощью которого жители смогут сообщать о несоблюдении правил, находить ближайшие пункты приема вторсырья и получать образовательные материалы.

Информирование общественности и стимулы.

Проведение обязательных обучающих курсов по сортировке мусора.

Введение системы возврата депозитов (подобно немецкой системе "Pfand"), когда жители получают деньги за возврат пластиковых бутылок и банок.

Применение налоговых скидок и бонусных программ для добросовестных граждан.

Заключение. Загрязнение PM2.5 представляет собой серьезную угрозу здоровью мозга, что требует немедленного принятия мер в рамках устойчивого развития городов. Города могут значительно снизить уровень загрязнения воздуха, оптимизировав управление дорожным движением, введя более строгую политику сортировки отходов и инвестируя в зеленую инфраструктуру. Уроки Германии и Южной Кореи дают ценное представление об эффективных стратегиях управления отходами и сокращения выбросов. Если Ташкент примет аналогичные меры, он сможет перейти к более чистой и устойчивой городской среде, что благоприятно скажется как на здоровье населения, так и на экономической устойчивости. Комплексный подход, включающий жёсткий контроль, современные технологии и систему поощрений, поможет Ташкенту перейти к экологичной модели управления отходами, снизить уровень загрязнения и создать более комфортную городскую среду.

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YASHIL IQTISODIYOTNI RIVOJLANTIRISHDA SUG‘URTA KOMPANIYALARINING INVESTITSIYA FAOLIYATI SAMARADORLIGINI OSHIRISH

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Biznes va tadbirkorlik oliy maktabi tinglovchisi

So‘nggi yillarda atrof-muhit muhofazasi va barqaror rivojlanishga bo‘lgan ehtiyoj global miqyosda keskin ortib bormoqda. Iqlim o‘zgarishi, ekologik muammolar va tabiiy resurslarning cheklanganligi zamonaviy iqtisodiyotni yangi yo‘nalishga – yashil iqtisodiyotga o‘tishni taqozo etmoqda. Yashil iqtisodiyot konsepsiyasi nafaqat ekologik barqarorlikni, balki iqtisodiy o‘sish va ijtimoiy farovonlikni ham o‘z ichiga oladi. Shu nuqtai nazardan, iqtisodiyotning barcha subyektlari, jumladan, sug‘urta kompaniyalarining ham ushbu jarayonda faol ishtirok etishi muhim ahamiyatga ega.

Sug‘urta kompaniyalari moliyaviy vositachi sifatida katta investitsiya salohiyatiga ega bo‘lib, ularning kapitali ekologik toza texnologiyalar, qayta tiklanuvchi energiya manbalari va boshqa yashil loyihalarga yo‘naltirilishi mumkin. Bunday investitsiyalar nafaqat atrof-muhitni muhofaza qilish, balki barqaror iqtisodiy o‘sishni ta’minlashda ham muhim rol o‘ynaydi. Shu bilan birga, sug‘urta kompaniyalari o‘z investitsiya portfellarini diversifikatsiya qilish va uzoq muddatli barqaror daromad olish imkoniyatiga ega bo‘ladilar.

O‘zbekistonda yashil iqtisodiyotni rivojlantirish davlat siyosatining ustuvor yo‘nalishlaridan biri sifatida e’tirof etilgan. So‘nggi yillarda qayta tiklanuvchi energiya manbalarini joriy etish, ekologik standartlarni kuchaytirish va atrof-muhitni muhofaza qilishga qaratilgan qator dasturlar amalga oshirilmoqda. Biroq, yashil iqtisodiyotni qo‘llab-quvvatlashda moliyaviy sektor, xususan, sug‘urta kompaniyalarining ishtiroki hali yetarlicha samarali emas.

Sug‘urta kompaniyalarining yashil loyihalarga investitsiya jalb etishdagi imkoniyatlari mavjud bo‘lsa-da, quyidagi asosiy muammolar ularning faoliyatini cheklab kelmoqda:

Tartibga soluvchi mexanizmlarning yetarli emasligi. O‘zbekistonda sug‘urta kompaniyalarining ekologik yo‘naltirilgan investitsiyalarini qo‘llab-quvvatlovchi aniq va samarali huquqiy-me’yoriy baza hali to‘liq shakllanmagan. “Yashil” investitsiyalarni tavsiflovchi mezonlar, standartlar va soliq imtiyozlari tizimi yetarlicha rivojlanmagan.

Moliyaviy savodxonlik va risklarni baholashdagi cheklovlar. Sug‘urta kompaniyalari yashil loyihalarning risk darajasini aniq baholash, ularning uzoq muddatli rentabelligini oldindan prognoz qilish borasida tajriba va bilimga yetarli ega emas. Bu esa investitsiya qarorlarida ehtiyotkorlikni kuchaytiradi.

Yashil loyihalarning past rentabelligi va uzoq muddatlilik xususiyati. Aksariyat yashil loyihalar dastlabki bosqichda katta xarajatlarni talab etadi va investitsiya daromadi uzoq muddatdan keyin yuzaga chiqadi. Bu esa tez foyda izlaydigan sug‘urta kompaniyalarini bunday loyihalardan chetlatadi.

Tashqi investitsiyaviy hamkorlikning sustligi. Sug‘urta sektorining xalqaro moliyaviy institutlar, xususan, ekologik yo‘naltirilgan fondlar va grantlar bilan hamkorligi zaif rivojlangan. Bu esa xorijiy tajriba va moliyaviy qo‘llab-quvvatlashdan foydalanish imkoniyatlarini cheklaydi.

Axborot va tahliliy infratuzilmaning sustligi. Yashil investitsiyalarning iqtisodiy samaradorligini baholash uchun zarur bo‘lgan statistik ma’lumotlar, monitoring tizimlari va indikatorlar tizimi to‘liq shakllanmagan.

Sug‘urta kompaniyalarining investitsiya faoliyati va yashil iqtisodiyot o‘rtasida muhim bog‘liqlik mavjud. Sug‘urta kompaniyalari uzoq muddatli majburiyatlarga ega bo‘lib, katta miqdordagi aktivlarni boshqaradi. Bu esa, ularga yashil iqtisodiyotga investitsiya kiritish orqali sezilarli ta’sir ko‘rsatish imkoniyatini beradi. Shu jihatdan, sug‘urta kompaniyalari investitsiya faoliyatining yashil iqtisodiyotga ta’siri quyidagi yo‘nalishlarda namoyon bo‘ladi:

- yashil loyihalarni moliyalashtirish: sug‘urta kompaniyalari qayta tiklanadigan energiya (quyosh, shamol, gidroenergetika), energiya samaradorligi, barqaror transport, chiqindilarni qayta ishlash va ekologik toza qishloq xo‘jaligi kabi yashil loyihalarga investitsiya kiritishi mumkin;

- ESG (Environmental, Social, Governance) tamoyillarini qo‘llash: sug‘urta kompaniyalari investitsiya qarorlarini qabul qilishda ESG tamoyillarini qo‘llashi mumkin. Bu ularga investitsiyalarining atrof-muhitga, ijtimoiy sohalarga va korporativ boshqaruvga ta’sirini hisobga olishga imkon beradi;

- uglerod izini kamaytirish: sug‘urta kompaniyalari uglerod izini kamaytiradigan kompaniyalarga investitsiya kiritish orqali o‘z portfellarining uglerod intensivligini kamaytirishi mumkin;

- iqlim o‘zgarishiga moslashish loyihalarini qo‘llab-quvvatlash: sug‘urta kompaniyalari iqlim o‘zgarishiga moslashish loyihalariga (suv ta’minoti, infratuzilmani himoya qilish) investitsiya kiritishi mumkin;

- barqaror rivojlanish maqsadlariga (SDGs) erishishga hissa qo‘shish: sug‘urta kompaniyalari o‘‘z investitsiyalari orqali BMTning Barqaror rivojlanish maqsadlariga (SDGs), xususan, atrof-muhitni muhofaza qilish va iqlim o‘zgarishiga qarshi kurashish maqsadlariga erishishga hissa qo‘shishi mumkin.

Shu o‘rinda ta’kidlash lozimki, sug‘urta kompaniyalari uchun yashil investitsiyalarning afzalliklari quyidagilardan iborat:

• Uzoq muddatli barqaror daromad: Yashil loyihalar odatda uzoq muddatli daromad keltirishi mumkin, bu esa sug‘urta kompaniyalari uchun muhimdir.

• Risklarni diversifikatsiya qilish: Yashil investitsiyalar portfelga yangi aktivlarni qo‘shish orqali risklarni diversifikatsiya qilishga yordam beradi.

• Obro‘ni yaxshilash: Yashil investitsiyalar kompaniyaning obro‘sini yaxshilaydi va mijozlar, investorlar va xodimlar uchun jozibador qiladi.

• Hukumat tomonidan qo‘llab-quvvatlash: Ko‘pgina hukumatlar yashil investitsiyalarni qo‘llab-quvvatlaydi, bu esa soliq imtiyozlari va subsidiyalar ko‘rinishida bo‘lishi mumkin.

• Ijtimoiy mas’uliyatni namoyon qilish: Yashil investitsiyalar kompaniyaning ijtimoiy mas’uliyatli ekanligini ko‘rsatadi.

Boshqa tomondan qaraganda, sug‘urta kompaniyalari uchun yashil investitsiyalarning qiyinchiliklari ham mavjud bo‘lib, ularni quyidagicha tavsiflash mumkin:

• Yashil loyihalarni topish qiyinligi: Yashil loyihalar soni cheklangan bo‘lishi mumkin.

• Yashil loyihalarning risklari: Yashil loyihalar odatda yangi va innovatsion bo‘lib, ularning risklari yuqori bo‘lishi mumkin.

• Yashil investitsiyalarning standartlarining yo‘qligi: Yashil investitsiyalarning umumiy qabul qilingan standartlari hali to‘liq ishlab chiqilmagan.

• Yashil investitsiyalarning murakkabligi: Yashil investitsiyalar odatda murakkab va ularni tushunish uchun maxsus bilim talab etiladi.

Sug‘urta kompaniyalari yashil iqtisodiyotga investitsiya kiritish orqali barqaror rivojlanishga sezilarli hissa qo‘shishi mumkin. Yashil investitsiyalar sug‘urta kompaniyalari uchun uzoq muddatli barqaror daromad, risklarni diversifikatsiya qilish, obro‘ni yaxshilash va ijtimoiy mas’uliyatni namoyon qilish kabi afzalliklarni taqdim etadi. Biroq, sug‘urta kompaniyalari yashil investitsiyalarning qiyinchiliklarini ham hisobga olishlari kerak. Hukumatlar, xalqaro tashkilotlar va tartibga soluvchi organlar yashil investitsiyalarni rag‘batlantirish va ularning standartlarini ishlab chiqishda muhim rol o‘ynashi mumkin.

Sug‘urta kompaniyasining investitsiya qo‘yilmalarini samaradorligi hamda sifatini aniq va operativ baholash sug‘urta kompaniyasining investitsiya siyosati va investitsiya strategiyasining kamchiliklarini aniqlash usuli bo‘lib hisoblanadi. Bu usul ularga zarur tuzatishlar kiritish imkonini beradi. Shuning uchun sug‘urta kompaniyalarining investitsiya faoliyati samaradorligi va sifati ko‘rsatkichlarini tizimlashtirish maqsadga muvofiq hisoblanadi. Ushbu ko‘rsatkichlarni kompleks tahlil qilish sug‘urta kompaniyalari faoliyatidan samarali foydalanish imkoniyatini beradi.

Sug‘urta kompaniyasi investitsiya faoliyatining sifat va samaradorlik ko‘rsatkichlari tizimini shakllantirish uchun ularni quyidagi to‘rtta guruhga ajratish taklif etilgan:

a) investitsiya portfelini boshqarishning sifat ko‘rsatkichlari;

b) investitsiya qo‘yilmalari rentabelligini oshirish ko‘rsatkichlari;

v) investitsiya portfelini tashkil qiluvchi aktivlarning sifatini baholash ko‘rsatkichlari;

g) investitsiya faoliyati natijalariga bog‘liq bo‘lgan moliyaviy barqarorlik ko‘rsatkichlari.

Ushbu usullar yordamida aniqlangan ko‘rsatkichlar faol strategiyaga tavsif berish hamda shakllantirilgan portfel samaradorligini bozordagi o‘rtacha ko‘rsatkichlar bilan solishtirish imkonini beradi.

Bizning fikrimizcha, sug‘urta kompaniyasining investitsiya faoliyatidagi faolligini oshirishning ichki mexanizmlaridan samarali foydalanishga erishish uchun quyidagi tadbirlarni amalga oshirish zarur:

1. Sug‘urta kompaniyasi tomonidan investitsiyaga yo‘naltirilayotgan aktivlar hajmini oshirish uchun uzoq muddatli hayot sug‘urtasi xizmatlari bozoriga xususiy resurslarni jalb qilishning faolligini oshirish maqsadida mijozlarning xohishlarini hisobga olgan holda sug‘urta xizmatlari uchun mukofotlar to‘lashning zamonaviy sxemalarini shakllantirish; shu maqsadda vaqt oralig‘ida ko‘payib yoki kamayib boruvchi sxemalarni ishlab chiqish va amalda qo‘llash maqsadga muvofiq bo‘ladi:

investitsiya munosabatlariga nisbatan e’tibori yuqori bo‘lgan sug‘urtalanuvchilar bilan tuzilgan sug‘urta shartnomalaridan shakllantirilgan sug‘urta zaxiralari mablag‘larini investitsiyalashda mazkur sug‘urtalanuvchilarning xohishlarini e’tiborga olish; shu maqsadda sug‘urta kompaniyasini investitsiya faoliyatining aniq maqsadlaridan kelib chiqqan holda alohida aktivlar portfellarini shakllantirish va ular uchun alohida hisob yuritish;

sug‘urta faoliyatini amalga oshirish jarayonida sug‘urta zahiralarini joylashtirish qoidalariga asoslangan holda mijozlarga polisli qarzlar berishni ko‘paytirish; shu maqsadda sug‘urta kompaniyasi darajasida ushbu xizmatni ko‘rsatish qoidalarini qayta ko‘rib chiqish, ularni sug‘urta qoidalariga kiritish va berilgan polisli qarzlarning qat’iy hisobini yuritish;

sug‘urta biznesi milliy amaliyotida sug‘urta sohasidan chiqib ketayotgan mablag‘lar ustidan sug‘urta kompaniyasining nazorat funksiyasi mexanizmini shakllantirish, shu maqsadda sug‘urta kompaniyalariga qimmatli qog‘ozlar bozorida investitsiya vositachisi sifatida professional faoliyatni amalga oshirishga ruxsat berish to‘g‘risidagi O‘zbekiston Respublikasi Prezidentining 2008 yil 21 maydagi PQ-872-son qaroriga qo‘shimcha ravishda sug‘urta kompaniyalarining qimmatli qog‘ozlarni boshqarish sohasidagi ishtirokiga ham ruxsat berish masalasini kiritish.

2. Investitsiya operatsiyalariga yo‘naltirish maqsadida xususiy resurslarni ko‘paytirish uchun sug‘urta kompaniyalari investitsiya sohasidagi samarali siyosatni amalga oshirishlari zarur.

3. Sug‘urta kompaniyalarining investitsiya aktivlarini joylashtirishning natijadorligini oshirish asosida sug‘urta kompaniyalarini faoliyat ko‘rsatishining sifatini oshirish uchun moliyaviy nazorat va rejalashtirish mexanizmlaridan unumli foydalanish zarur.

Bizning fikrimizcha, sug‘urta kompaniyalarining investitsiya faoliyati samaradorligini oshirishning ustuvor yo‘nalishlari quyidagilardan iborat:

1. O‘zbekiston iqtisodiyotini investitsiya bilan ta’minlash yo‘nalishlarini tadqiq qilish shundan dalolat bermoqdaki, milliy sug‘urta xizmatlari bozorida faoliyat ko‘rsatayotgan sug‘urta kompaniyalarining moliyaviy resurslarini jalb qilish va investitsiyaga yo‘naltirish bilan bog‘liq faoliyati moliya bozorida sezilarli darajada o‘z o‘rniga ega emas. Sug‘urta kompaniyalarining investitsiya jarayonlaridagi ishtirokini kengaytirish mamlakat iqtisodiyotida sug‘urtaning nufuzi oshishiga olib keladi.

2. Sug‘urta kompaniyalarining moliyaviy resurslarini joylashtirish faoliyati ularning mustahkam moliyaviy holati va o‘z vaqtida qabul qilingan hamda muvaffaqiyatli tarzda amalga oshirilayotgan investitsiya siyosati va investitsiya strategiyasi bilan to‘g‘ridan - to‘g‘ri bog‘liq bo‘lib, ushbu faoliyatning samaradorligi sug‘urta kompaniyasining kelajakda to‘lovga qobilligini va yuqori daromadliligini ta’minlash kafolatini beradi. Sug‘urta kompaniyasining vaqtinchalik bo‘sh pul mablag‘larini investitsiya qilish sug‘urta kompaniyasining sug‘urta bozorida faoliyat ko‘rsatishining sifatini oshirish va moliyaviy barqarorligini ta’minlashning asosiy sharti hisoblanadi.

3. Sug‘urta kompaniyasini investitsiya faoliyatining mohiyati to‘g‘risidagi nazariy tasavvurlar sug‘urta biznesi uchun kerak bo‘lgan investitsiyaviy imkoniyatning mazmunini aniqlashtirish bilan bog‘liqdir. Investitsiyaviy imkoniyat deganda sug‘urta kompaniyasining investitsiya imkoniyatlarini qamrab olgan moliyaviy imkoniyatining bir qismi tushuniladi. Sug‘urta kompaniyasining investitsiya imkoniyatlari quyidagilardan, ya’ni: sug‘urta majburiyatlaridan vaqtincha holi bo‘lgan mablag‘lar, shuningdek ekzogen va endogen omillarga bog‘liq bo‘lgan mablag‘larni tashqaridan jalb qilishga mo‘ljallangan imkoniyatlardan iborat.

4. “Investitsiyaviy resurslar transformatsiyasi” tushunchasi boshqa ta’riflarga qaraganda investitsiyaviy resurslarini investitsiyaviy aktivlarga o‘tishdagi vaqt parametrlari o‘zgarganligi to‘g‘risidagi ma’lumotni ochib berishni nazarda tutadi. “Vaqtinchalik investitsiyaviy uzilish” tushunchasi investitsiyaviy resurslarini joylashtirishda vaqt parametrlarida uzilish mavjudligini ifodalaydi, bu esa investitsiya faoliyatining samaradorligini oshirish instrumentlari bilan investitsiyaviy risklarni pasaytirishga imkon beradi.

Yashil investitsiyalarning iqtisodiy samaradorligini oshirishda mavjud muommolar va ularnining tavsifi quyidagi jadvalda keltirilmoqda. 1-jadval.

1-jadval

T/R	Muammo	Tavsif	Yechim (Tavsiya)
1	Huquqiy-me’yoriy bazaning yetarli emasligi	Yashil investitsiyalarni tartibga soluvchi aniq qonunlar va normalarning yo‘qligi	“Yashil investitsiya” tushunchasini aniqlovchi milliy klassifikator va qonunchilikni ishlab chiqish
2	Risklarni baholashdagi murakkablik	Yashil loyihalarning moliyaviy va ekologik xavflarini baholash tajribasi sust	Maxsus metodikalarning joriy etilishi va ekspertlar tayyorlash
3	Loyihalarning past rentabelligi va uzoq muddatlilik xususiyati	Investitsiya foydasining kechikib qaytishi suqurta kompaniyalarini to‘xtatadi	Soliq imtiyozlari, davlat kafolatlari va subsidiyalar orqali riskni kamaytirish
4	Xalqaro moliyaviy institutlar bilan hamkorlik zaifligi	Tashqi grant va moliyalashtirish manbalaridan foydalanish darajasi past	Xalqaro moliya institutlari bilan hamkorlik dasturlarini yo‘lga qo‘yish
5	Tahliliy infratuzilmaning sustligi	Yashil loyihalar bo‘yicha statistik ma’lumotlar, indikatorlar tizimi yetarli emas	Ma’lumotlar bazasi va monitoring tizimini yaratish
6	Moliyaviy savodxonlik va mutaxassislar malakasining pastligi	Yashil iqtisodiyot va ekologik investitsiyalar bo‘yicha bilimlar yetarli emas	Treninglar, malaka oshirish dasturlari va xalqaro tajriba almashinuvi

Mavjud muammolarni bartaraf etish bo‘yicha takliflar va xalqaro tajriba tahlili asosida yashil iqtisodiyotni rivojlantirishda sug‘urta kompaniyalarining samarali investitsiya faoliyatini ta’minlash maqsadida quyidagi chora-tadbirlarni amalga oshirish maqsadga muvofiq:

1. Huquqiy va me’yoriy bazani takomillashtirish

Xalqaro tajribadan kelib chiqib, yashil investitsiyalarni aniqlovchi va tartibga soluvchi me’yoriy-huquqiy hujjatlarni ishlab chiqish talab etiladi. Masalan, Yevropa Ittifoqida “EU Taxonomy” deb nomlangan klassifikatsiya tizimi ishlab chiqilgan bo‘lib, u yashil faoliyat turlarini aniq belgilab beradi. O‘zbekistonda ham shunday “yashil investitsiya klassifikatori” joriy qilinishi lozim.

2. Sug‘urta kompaniyalari uchun soliq imtiyozlari va rag‘batlantiruvchi mexanizmlar

Yashil loyihalarga investitsiya kirituvchi sug‘urta kompaniyalariga soliq imtiyozlari berish, subsidiyalar ajratish va davlat kafolatlari bilan ta’minlash orqali ularni ushbu sohada faollashtirish mumkin. Masalan, Kanadada “Green Investment Tax Credit” orqali ekologik investitsiyalarni qo‘llab-quvvatlash mexanizmi samarali qo‘llanilmoqda.

3. Kadrlar salohiyati va moliyaviy savodxonlikni oshirish

Sug‘urta sohasida ishlayotgan mutaxassislar uchun maxsus treninglar, malaka oshirish dasturlari orqali yashil iqtisodiyot va ekologik tahlil sohasida bilim va

ko‘nikmalarni shakllantirish zarur. Bundan tashqari, loyihalarning moliyaviy va ekologik xavfini baholay oladigan ekspertlar tayyorlash muhim.

4. Xalqaro moliyaviy institutlar bilan hamkorlikni kuchaytirish

Yashil loyihalarni moliyalashtirishda Jahon banki, Osiyo taraqqiyot banki, Global Green Growth Institute (GGGI), va boshqa xalqaro tashkilotlar bilan hamkorlikni rivojlantirish lozim. Bu orqali moliyaviy resurslar, texnik ko‘mak va xalqaro tajriba jalb etilishi mumkin.

5. Investitsiya muhitini yaxshilash va ma’lumotlar ochiqligini ta’minlash

Sug‘urta kompaniyalarining investitsiya qarorlarini osonlashtirish uchun yashil loyihalar to‘g‘risidagi ma’lumotlarni yig‘ish, tahlil qilish va oshkora platformalarda taqdim etish tizimi yo‘lga qo‘yilishi kerak. Misol tariqasida, Britaniyada “Green Finance Observatory” ma’lumotlar bazasi faoliyat yuritadi.

Yashil iqtisodiyotni rivojlantirish – bu nafaqat ekologik barqarorlikni ta’minlash, balki mamlakatning iqtisodiy o‘sish modelini sifat jihatdan qayta ko‘rib chiqish demakdir. Bu jarayonda sug‘urta kompaniyalari muhim moliyaviy vositachi sifatida faol ishtirok etishi lozim. Ular o‘z investitsiya salohiyatini ekologik toza va barqaror loyihalarga yo‘naltirish orqali ham atrof-muhit muhofazasiga, ham iqtisodiy samaradorlikka hissa qo‘shishi mumkin.

Ammo hozirgi paytda sug‘urta kompaniyalarining yashil investitsiyadagi ishtiroki cheklangan bo‘lib, bu ayrim institutsional, moliyaviy va axborotga oid to‘siqlar bilan bog‘liq. Maqolada ushbu muammolar atroflicha tahlil qilindi va ularni hal etish bo‘yicha aniq taklif va tavsiyalar ilgari surildi.

Jumladan, sug‘urta kompaniyalarining yashil investitsiyaga qiziqishini oshirish uchun qulay huquqiy va me’yoriy muhit yaratish, soliq imtiyozlari joriy etish, malakali kadrlar tayyorlash, xalqaro tajribalardan foydalanish, shuningdek, tahlil va monitoring tizimlarini rivojlantirish muhim sanaladi.

Xulosa qilib aytganda, sug‘urta kompaniyalari yashil iqtisodiyotni rivojlantirishning muhim drayverlaridan biriga aylanishi mumkin. Buning uchun davlat, xususiy sektor va jamiyat o‘rtasida samarali hamkorlik va strategik yondashuv talab etiladi. Ana shundagina O‘zbekistonda barqaror va ekologik mas’ul iqtisodiy taraqqiyotga erishish mumkin bo‘ladi.

Foydalanilgan adabiyotlar ro‘yxati:

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YASHIL IQTISODIYOTGA YO‘NALTIRILGAN TA’LIM TIZIMINI MOLIYALASHTIRISHNING O‘ZIGA XOS XUSUSIYATLARI

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Ta’lim tizimi va yashil iqtisodiyot o’rtasida chambarchas bog’liqlik mavjud. Yashil iqtisodiyot deganda resurslardan samarali foydalanish, atrof-muhitga zarar yetkazmaslik va barqaror rivojlanishga yo’naltirilgan iqtisodiyot tushuniladi. Ta’lim tizimi esa yashil iqtisodiyot uchun zarur bo’lgan bilim, ko’nikma va qadriyatlarni shakllantiruvchi asosiy omil hisoblanadi.

Iqtisodiy o‘sish va mamlakatda ta’limning rivojlantirilishi uzviy bog‘liqligini inobatga olib, ta’lim tizimi rivojlantirish yuzasidan prognozlar berish davlatning kelajakdagi iqtisodiy o‘sishini prognozlash uchun muhim hisoblanadi. Ta’lim tizimini isloh qilish va uning sifatini oshirish, mehnat bozorini malakali kadrlar bilan ta’minlanishini va innnovatsiyalarni rivojlantirish, shuningdek, iqtisodiy samaradorlikni oshirishga olib keladi.

Bizning fikrimizcha, ta’lim tizimining yashil iqtisodiyotga ta’siri quyidagilar orqali namoyon bo‘ladi:

- kadrlarni tayyorlash masalasi, ya’ni yashil iqtisodiyot sohalari uchun (masalan, qayta tiklanuvchi energiya, ekologik toza texnologiyalar, chiqindilarni qayta ishlash) yuqori malakali mutaxassislar zarur. Ta’lim tizimi bu sohalar uchun kerakli bilim va ko’nikmalarga ega kadrlarni tayyorlashi lozim;

- ekologik ongni shakllantirish masalasi, ya’ni ta’lim orqali aholining ekologik ongini oshirish, atrof-muhitga mas’uliyatli munosabatni shakllantirish muhim. Bu yashil iqtisodiyotning asosiy tamoyillaridan biri hisoblanadi;

- ilmiy tadqiqotlarni rivojlantirish yo‘nalishi, ya’ni ta’lim tizimi yashil texnologiyalar, resurslarni tejash, atrof-muhitni muhofaza qilish kabi sohalarda ilmiy tadqiqotlarni qo’llab-quvvatlashi kerak. Ta’lim tizimi innovatsiyalarni yaratish uchun platforma bo‘lishi kerak;

- innovatsion fikrlashni rivojlantirish masalasi, ta’lim tizimi o’quvchilarda innovatsion fikrlashni rivojlantirishi, ularni yashil iqtisodiyot sohasida yangi yechimlar yaratishga undashi lozim.

Yashil iqtisodiyotga yo‘naltirilgan ta’lim tizimini moliyalashtirishning o‘ziga xos xususiyatlari quyidagilardan iborat:

• Davlat byudjetidan moliyalashtirish: Ta’lim davlat tomonidan moliyalashtiriladigan ustuvor yo‘nalishlardan biri bo‘lishi kerak. Byudjet mablag‘lari o‘quv dasturlarini takomillashtirish, o‘qituvchilarni tayyorlash va qayta tayyorlash,

ilmiy tadqiqotlarni qo‘llab-quvvatlash, ta’lim infratuzilmasini yaxshilash kabi maqsadlarga yo‘naltirilishi lozim.

• Xususiy sektor investitsiyalari: Xususiy kompaniyalar va fondlar yashil iqtisodiyot sohasida ta’lim loyihalarini moliyalashtirishga jalb qilinishi mumkin. Bu stajirovkalar, grantlar, homiyliklar, qo‘shma ilmiy tadqiqotlar ko‘rinishida bo‘lishi mumkin.

• Xalqaro grantlar va kreditlar: Xalqaro tashkilotlar (BMT, Jahon banki, Osiyo taraqqiyot banki) yashil iqtisodiyot sohasidagi ta’lim loyihalarini moliyalashtirish uchun grantlar va kreditlar ajratishi mumkin.

• Jamg‘armalar va fondlar: Ekologik jamg‘armalar va fondlar ta’lim loyihalarini moliyalashtirishda muhim rol o‘ynashi mumkin.

• Innovatsion moliyalashtirish mexanizmlari: Yashil obligatsiyalar, ekologik soliqlar, uglerod kreditlari kabi innovatsion moliyalashtirish mexanizmlaridan ta’lim tizimini moliyalashtirish uchun foydalanish mumkin.

• Talabalar kreditlari va grantlari: Talabalarga yashil iqtisodiyot sohasida ta’lim olish uchun imtiyozli kreditlar va grantlar berish.

• Davlat-xususiy sheriklik: Davlat va xususiy sektor o‘rtasida ta’lim loyihalarini amalga oshirish bo‘yicha sheriklikni rivojlantirish.

• Moliyalashtirishning shaffofligi va hisobdorligi: Ta’lim tizimini moliyalashtirish jarayonida shaffoflikni ta’minlash va mablag‘lardan oqilona foydalanishni nazorat qilish muhim.

• Moliyaviy resurslarni samarali taqsimlash: Mablag‘larni taqsimlashda yashil iqtisodiyotning ustuvor yo‘nalishlari va ta’lim tizimining ehtiyojlarini hisobga olish lozim.

• Doimiy monitoring va baholash: Ta’lim tizimini moliyalashtirishning natijadorligini doimiy ravishda monitoring qilish va baholash.

Yashil iqtisodiyot sohasida bilim va ko‘nikmalarni ta’minlash, ekologik ongni shakllantirish, ilmiy tadqiqotlarni qo‘llab-quvvatlash kabi muhim vazifalarni bajaruvchi ta’lim tizimini moliyalashtirish davlat, xususiy sektor, xalqaro tashkilotlar va jamg‘armalar tomonidan amalga oshirilishi mumkin. Moliyalashtirishning shaffofligi, samaradorligi va innovatsion moliyaviy mexanizmlardan foydalanish ta’lim tizimining yashil iqtisodiyotga qo‘shadigan hiss asini oshirishga yordam beradi.

Ta’lim sanoatda texnologik imkoniyatlar va texnik o‘zgarishlarni rivojlantirishning muhim omili hisoblanadi. Albatta, ta’limning yolg‘iz o‘zi iqtisodiyotni o‘zgartira olmaydi. ichki va xorijiy investitsiyalar hajmi va sifati, shuningdek, umumiy siyosiy muhit iqtisodiy ko‘rsatkichlarni belgilovchi boshqa muhim omillardir. Biroq, inson taraqqiyoti darajasi ham bu omillarga ta'sir qiladi. Siyosatni

ishlab chiqish va investitsiya qarorlarini qabul qilish sifati muqarrar ravishda menejerlarning bilim darajasiga bog‘liq. inson kapitali darajasi yuqori bo‘lsa, ichki va xorijiy investitsiyalar ko‘proq bo‘lishi mumkin.

Mamlakatimizda ham ta’lim tizimini rivojlantirish borasida, son ko‘rsatkichidan sifat ko‘rsatkichiga o‘tish tizimini joriy etish orqali bir qator o‘zgarishlar amalga oshirildi. Aniqroq qilib aytganda, oliy ta’lim sohasida ta’limni yanada samarali va sifatli o‘quv mashg‘ulotlarini yo‘lga qo‘yish, shu bilan bir qatorda, oliy ta’lim muassasalari o‘rtasida raqobatni oshirish maqsadida bir qator chora-tadbirlar joriy etildi. Shu maqsadda, 2023-yilning 24-may kuni O‘zbekiston Respublikasi Prezidentining “Oliy tashkilotlariga qabul qilish va davlat buyurtmasini joylashtirish tizimini takomillashtirish to‘g‘risida”gi PF-81-sonli1 farmoni hamda “oliy va professional ta’lim tashkilotlari talabalari va o‘quvchilariga byudjet mablag‘lari hisobidan ta’lim kreditlarini ajratish tartibini takomillashtirish to‘g‘risida”gi PF-82-sonli2 farmoni qabul qilindi. Aytib o‘tilgan farmonlarning ijrosi natijasida davlatimizning oliy ta’lim sohasini yanada sifat va samaradorlik jihatidan yangi bosqichga chiqarishga imkoniyat yaratmoqda.

Albatta bunday islohotlarni amalga oshirish uchun ushbu sohani yetarlicha mablag‘ bilan ta’minlash, uni moliyalashtirishning samarali mexanizmini ishlab chiqish lozim. Davlat rivoji uchun qilinayotgan islohotlar doirasida ta’lim tizimini yanada takomillashtirish maqsadida moliyaviy ta’minlashni takomillashtirishga yo‘naltirilgan chora-tadbirlar quyidagilar hisoblanadi:

- ta’lim va kadrlar tayyorlash sohasiga ajratilgan yalpi ichki mahsulot ulushini bosqichma-bosqich ko‘paytirish;
- budjet va budjetdan tashqari manbalardan foydalangan holda kadrlar tayyorlash tizimini moliyalashtirishning turli shakllarini joriy etish;
- oliygohlarni bosqichma-bosqich o‘zini o‘zi moliyalashtirish tizimini o‘tkazishni amlaga oshirish;
- oliy ta’lim tizimiga xususiy va xorijiy sarmoyalarni jalb etishni qo‘llab quvvatlash;
- O‘zbekiston Respublikasi fuqarolari uchun ta’lim kreditlari berish tartibini takomillashtirish;
- oliy ta’lim sohasini yanada rivojlantirish yo‘lida donorlar va homiylar ulushini oshirishni yo‘lga qo‘yish;
- xususiy va DXSH asosida oliygohlar sonini oshirish;

[1] Mirziyoyev Sh.M. “Oliy ta’lim tashkilotlariga o‘qishga qabul qilish va davlat buyurtmasini joylashtirish tizimini takomillashtirish to‘g‘risida”gi PF-81

[2] Mirziyoyev Sh.M. “Oliy va professional ta’lim tashkilotlari talabalari va o‘quvchilariga budjet mablag‘lari hisobidan ta’lim kreditini ajratish tartibini takomillashtirsh to‘g‘risida”gi PF-82

- olingan daromadlarga soliq imtiyozlarini joriy etish va shu kabi boshqa chora-tadbirlar.

Yuqori malakali mutaxassislarning sonini ortishi natijasida mehnat bozorining holati shakllanadi va albatta, hududda ushbu malakali mutaasssislar o‘rtasidagi raqobatni oshirib, ularga bo‘lgan talabni oshiradi. Shular asosida, hududiy mehnat bozorining rivojlanishiga ijobiy ta’siri oshadi. Yuqoridagi holatlarning barchasini ta’limning mamlakat iqtisodiyotiga ta’sir ko’tsatishining iqtisodiy yo‘nalishi sifatida e’tirof etish mumkin.

Oliy ta’lim muassasalarining mavjudligi aholi sonining o‘sishiga va hududdagi demografik harakatchanlikka ijobiy ta’sir ko‘rsatadi. Shu bilan birga, talabalarning sifat tarkibi natijasida hududlardagi aholi sifat ko‘rsatkichlarining yaxshilanishiga samarali xizmat qiladi. Bular esa bevosita mamlakat iqtisodiy o’sishiga ta’sirning demografik yo‘nalishi hisoblanadi.

Ijtimoiy yo‘nalish. Avvalo xalq farovonligi ortadi, aholining savodxonlik darajasini ortishi natijasida jinoyatchilik kamayib, ta’lim olgan aholi ijtimoiy ma’suliyatni chuqurroq anglaydi.

Madaniy yo‘nalish. Maorif muassasalari xalq madaniy va axloqiy darajasini takomillashtirishning yuksak hissadori hisoblanadi. Darhaqiqat, madaniy hayotning jonlanishi jamiyatning iqtisodiy rivojlanishiga turtki beradi.

Bozor iqtisodiyotiga o‘tish jarayonida Respublikamizda oliygohlar o‘z moliyaviy siyosatini belgilashlari va taijorat asosida faoliyatni tashkillashtirishlarida bir qator erkinlikka erishdilar. Bugun oliygohlar tomonidan taklif etilayotgan xizlamtlar va xizmat narxlari mustaqil ravishda oliygohlar tomonidan belgilanishi mumkin. Tegishli xizmatlarning sifat va narxining asoslanganligi oliygohlarning natijadorligi, maqomi va moliyaviy-iqtisodiy barqarorligiga bilvosita bo‘lmagan tarzda ta’sir o‘tkazadi. Qo‘shimcha ravishda shuni aytishimiz kerakki, davlat tomonidan o‘rnatilgan nazoratlar muhimligi shundaki, oliy ta’lim sohasi mamlakatning iqtisodiy-siyosiy barqarorligiga hamda jamiyatning hayotiga salmoqli ta’sir ko‘rsatadi.

Fikrimizcha, eng samarali mexanizmlardan biri oliy bilim yurtlariga davlat mulkidan foydalanish huquqining taqdim etilishi hisoblanadi. Ularga bu mulk negizida tadbirkorlik faoliyatini olib borishiga berilgan imkoniyatlar esa ularning davlat budjetidan tashqari daromad manbai sifatida muhim yo‘nalish sanaladi. Shu asosda oliygohlar o‘z iqtisodiy mustaqilligini oshiradilar va moliyaviy resurslarini kengaytirish imkoniyatiga ega bo‘ladilar.

Bundan ko‘rinadiki, bugun oliy ta’lim tizimini samarali rivojlantirish uchun o‘z oldidagi bir qator vazifalarini eng yuqori aniqlikda samarali barajarishi uchun nafaqat davlat budjeti mablag‘laridan, balki davlat budjeti mablag‘lari bilan bir qatorda budjetdan tashqari mablag‘lardan foydalanishlari muhim ahamiyat kasb etmoqda. Natijada bunday qo‘shimcha moliyaviy resurslar oliygoglarning moliyaviy

barqarorligini ta’minlash va ularning mustaqil ravishda rivojlanishlariga zamin hozirlash uchun dastak bo‘lmoqda.

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YASHIL IQTISODIYOTDA TADBIRKORLIK FAOLIYATINI TASHKIL ETISH OMILLARI

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Annotatsiya: *Ushbu maqolada O‘zbekiston sharoitida “yashil” iqtisodiyotga o‘tish jarayonida kambag‘allikni kamaytirish, biznes va tadbirkorlikni rivojlantirishdagi mavjud muammolar hamda aholi turmush darajasini oshirish va hayotni barqarorlashtirish, zaruriy shart-sharoitlar bilan ta’minlash borasidagi sa’iy-harakatlar dunyo hamjamiyati diqqat markazidagi dolzarb masalalardan biri bo‘lib kelayotganligiga urg‘u berilgan holda “yashil iqtisodiyot”ning drayveri hisoblangan energetika, ilm-fan va innovatsiyalar, turizm kabi sohalarga doir qonun osti hujjatlari asosida tahlil etilgan.*

Kalit so‘zlar: kambag‘allik, mehnat bozori, “yashil” iqtisodiyot, mehnat resurslari, inson kapitali, iqlim o‘zgarishi.

Kirish. 2019 yil qabul qilingan O‘zbekistonning “Yashil iqtisodiyot”ga o‘tish strategiyasida[1] mamlakatda amalga oshirilayotgan tuzilmaviy islohotlarga “yashil” iqtisodiyot tamoyillarini integratsiya qilish orqali ijtimoiy rivojlanishga, issiqxona gazlarining ajratmalari darajasini pasaytirishga, iqlim va ekologiya barqarorligiga imkon beruvchi mustahkam iqtisodiy taraqqiyotga erishish hamda ta’limga investitsiyalar kiritishni rag‘batlantirish, yetakchi xorijiy ta’lim muassasalari va ilmiy-tadqiqot markazlari bilan hamkorlikni rivojlantirish hisobiga “yashil” iqtisodiyotdagi mehnat bozori bilan bog‘liq kadrlarni tayyorlash va qayta tayyorlash tizimini rivojlantirish kabi masalalar belgilangan.

Tahlillarga ko‘ra, iqlimning o‘zgarishi sharoitida samarali, resurs tejamkor va ekologik xavfsiz iqtisodiyotni ta’minlashda o‘zaro bog‘liq muammolar va ehtiyojlar mavjudligini ko‘rsatmoqda. Shuningdek, “yashil iqtisodiyot”ni rivojlantirish uchun innovatsion yechimlarni joriy etishda kichik biznes ishtirokining yetarli emasligi mamlakatni barqaror rivojlantirish sohasidagi ustuvor milliy maqsadlar va vazifalarga erishishga to‘sqinlik qilmoqda. “Yashil” texnologiyalarni joriy etish va “yashil” iqtisodiyotga o‘tish bo‘yicha tizimli choralar ko‘rishni talab etmoqda.

Asosiy matn: O‘zbekiston Respublikasi Prezidentining 2023 yil 11 sentabrdagi “O‘zbekiston – 2030” strategiyasi to‘g‘risida”gi gi PF 158-son Farmoni[2] bilan tasdiqlangan Strategiya 5 ta ustuvor yo‘nalish bo‘yicha 100 ta muhim maqsadni o‘z ichiga oladi.

2025 yil 7 fevral kuni Prezident Shavkat Mirziyoyev tomonidan imzolangan yangi O‘zbekistonda "O‘zbekiston – 2030" strategiyasini amalga oshirishga oid davlat dasturida[3] quyidagilar belgilandi:

mahallalarning ekologik qiyofasini yaxshilash, ko‘chalarda yashillik darajasini oshirish, ekologik jihatdan qulay va farovon yashash muhitini shakllantirish;

aholining salomatligini yaxshilash, ekologik turmush tarzini shakllantirish va inson salohiyatini ro‘yobga chiqarish uchun shart-sharoitlarni yaratish;

tabiiy resurslarni tejash va ulardan oqilona foydalanish, ekologik barqarorlikni ta’minlash;

o‘simlik va hayvonot dunyosini asrash, ko‘paytirish va keyingi avlodga yetkazish hamda biologik xilma-xillikni saqlash;

“yashil iqtisodiyot” tamoyillarini keng joriy qilish, iqtisodiyotni iqlim o‘zgarishiga moslashtirishga qaratilgan loyihalarni barqaror moliyalashtirish;

respublika energobalansida qayta tiklanuvchi energiya ulushini oshirish, shu jumladan, davlat-xususiy sheriklik asosida yirik “yashil energiya” stansiyalarini barpo etish, hududlarda kichik va mikro gidroelektr stansiyalari tarmog‘ini kengaytirish, aholi xonadonlarida quyosh panellarini o‘rnatishni rag‘batlantirish;

iqtisodiyot tarmoqlari va ijtimoiy sohada zamonaviy energotejamkor texnologiyalarni keng qo‘llash orqali iqtisodiyotda “uglerod izi»ni kamaytirish (*Uglerod izi – bu inson, korxona, mahsulot, shahar va davlat tomonidan to‘g‘ridan-to‘g‘ri yoki bilvosita ishlab chiqariladigan barcha issiqxona gazlari chiqindilarining yig‘indisidir*);

ekologik barqarorlikka yo‘naltirilgan hududlar va tarmoqlararo muvofiqlashtiruvni ta’minlash.

“Yashil” tarmoqlarni qo‘llab-quvvatlash hamda ko‘p uglerod va resurs talab qiladigan iqtisodiyot yo‘nalishlaridan voz kechish investitsiyalash va ish o‘rinlari yaratish tarkibiga ta’sir ko‘rsatadi, bu esa ushbu transformatsiyadan foyda qilganlar hamda farovonligi salbiy ta’sir ko‘rganlarning bo‘linishga olib keladi.

O‘zbekistonda “yashil” iqtisodiyotga o‘tish ish o‘rinlarining sezilarli qisqarishiga olib kelmaydi, lekin ish o‘rinlari turlari o‘zgaradi. Qolaversa, mamlakatdagi energiya ishlab chiqaruvchi quvvatlarning salkam yarmi eskirgan. Ularni tiklash yoki modernizatsiyalash katta mablag‘ni talab qiladi. Buning o‘rniga ham iqtisodiy, ham ekologik jihatdan samarali hisoblangan “yashil energetika”ga o‘tish ming chandon afzal. Axir, butun dunyo shu yo‘lni tanlayapti. E’tiborlisi, O‘zbekiston Markaziy Osiyo davlatlaridan birinchi bo‘lib mazkur harakatga qo‘shildi. Mohiyatan olib qaraganda, ikki yil avval qabul qilingan “Yashil iqtisodiyot”ga o‘tish strategiyasi” yurtimizning “yashil taraqqiyot” sari yuz burganini anglatadi.

Albatta, “yashil iqtisodiyot” faqat energetika sohasini isloh qilishdan iborat emas. Uning ichiga toza ichimlik suvi muammolari, oziq-ovqat xavfsizligi, qishloq

xo‘jaligidagi innovatsiyalar, barqaror shaharlar, chiqindilarni oqilona boshqarish, o‘rmon hududlarini kengaytirish, cho‘llanishni qisqartirish kabi ko‘p qirrali va keng tarmoqli chora-tadbirlar kirib ketadi. Yana bir muhim qayd. “Yashil iqtisodiyot”dan davlat yoki biznes emas, balki, eng avvalo, oddiy odamlar foyda ko‘radi. Uning ijtimoiy ahamiyati ham shunda. “Yashil taraqqiyot”ning drayveri bo‘la oladigan energetika, ilm-fan va innovatsiyalar, turizm kabi sohalarga doir qonunlarimizda nomuvofiqliklar, bir-birini inkor etuvchi jihatlar talaygina. Hujjatlarning o‘zi ham juda ko‘p. Aytaylik, elektr energiyasini iste’molchiga yetkazib berish, narx-navoni belgilash va to‘lovni amalga oshirish mexanizmlari amaldagi an’anaviy tizimga moslab yaratilgan. Muqobil energiya manbalari bilan ishlash imkonini beradigan huquqiy normalar esa mavjud emas.

Masalan, quyosh yoki boshqa turdagi qayta tiklanadigan energiyani kim va qancha miqdorda ishlab chiqaradi, u aholiga qay tartibda, qanday tarif bo‘yicha yetkazib beriladi? Bu kabi savollarga oydinlik kiritib, qonun hujjutlarida aks ettirish va shu asnoda yangi bozor subyektlari o‘rtasidagi munosabatlarni muvofiqlashtirib borish zarur.

Mamlakatimizda keyingi yillarda kichik biznes va xususiy tadbirkorlikni har tomonlama qo‘llab-quvvatlash, ularning samarali faoliyat ko‘rsatishi uchun barcha shart-sharoitlarni yaratish, aholini biznesga jalb qilish orqali kambag‘allikni kamaytirish masalasi davlat siyosatining eng ustuvor yo‘nalishlaridan biriga aylandi.

“Yashil iqtisodiyot”ga o‘tishda davlat qaysi moliyaviy instrumentlardan foydalanishning muhim jihati dastlabki bosqichda iqtisodiyot tarmoqlariga mo‘may investitsiya kiritishga to‘g‘ri keladi. Bunday yukni davlat byudjeti ko‘tarolmaydi, ehtimol, xalqaro donor tashkilotlarga murojaat qilinar. U holda tashqi ko‘mak qanday shartlarda taqdim etiladi? Muhimi, mahalliy benefitsiarlar – aholi, tadbirkorlik va xo‘jalik subyektlari uni qay shaklda olishi mumkin? (*xalqaro amaliyotda benefitsiar deganda kompaniyaga kamida 25 foiz egalik qiluvchi yoki uning faoliyatini jiddiy nazorat qiluvchi jismoniy shaxs tushuniladi*).

Benefitsiarlarga oid ma’lumotlarning ochiqlanishi korrupsiyaga qarshi kurashish, jinoiy faoliyatdan olingan daromadlarni legallashtirishga va terrorizmni moliyalashtirishga qarshi kurashishni samarali tashkil etish uchun muhim ma’lumotlarni beradi. Biznesda “yashil iqtisodiyot” tamoyillari asosida ishlash uchun rag‘bat va motivatsiya uyg‘otilmasa, davlatning barcha say-harakatlari zoye ketadi.

Investitsiyalarga ustuvorlik berishda yangi infratuzilma obyektini joriy etish va uning atrofida fuqarolar faolligini oshirish yoki o‘zgartirish natijasida havo, yer, suv va hayvonot dunyosiga yoki ekotizim aholisiga salbiy ta’sir yetkazilishi mumkin bo‘lgan tabiiy yoki qurilgan muhitning ekologik barqarorligi baholanishi lozim. Taklif etilayotgan infratuzilma uchun energiya tejamkor va kam uglerodli yechimlarga bo‘lgan ehtiyojlar ekologik barqarorlik va iqlim o‘zgarishining oldini olishda muhim ahamiyatga ega. Taklif etilayotgan investitsiyalar iqtisodiy rivojlanishga sezilarli

darajada ijobiy ta’sir ko‘rsatishi mumkin bo‘lsa-da, atrof-muhitga jiddiy salbiy ta’sir yetkazilishi ham mumkin. Aksariyat salbiy ekologik ta’sirlar ham aholi salomatligi va hayot sifati muammolari bilan bevosita bog‘liq bo‘ladi[4].

Qabul qilingan yangi Konstitusiyamizda davlat atrof-muhitni yaxshilash, tiklash va muhofaza qilish, ekologik muvozanatni saqlash bo‘yicha choralarni amalga oshiradi, fuqarolarning ekologik huquqlarini ta’minlash va atrof-muhitga zararli ta’sir ko‘rsatilishiga yo‘l qo‘ymaslik maqsadida shaharsozlik faoliyati sohasida jamoatchilik nazoratini amalga oshirish uchun shart-sharoitlar yaratadi, degan norma bejizga kiritilmagan.

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2. O‘zbekiston Respublikasi Prezidentining 2023 yil 11 sentabrdagi “O‘zbekiston – 2030” strategiyasi to‘g‘risida»gi PF 158-son Farmoni.

3. O‘zbekiston Respublikasi Prezidentining 2025 yil 30 yanvardagi “O‘zbekiston — 2030” strategiyasini “Atrof-muhitni asrash va “yashil iqtisodiyot” yilida amalga oshirishga oid davlat dasturi to‘g‘risida”gi PF 16-son Farmoni.

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ИННОВАЦИИ В ГОРОДСКОМ СЕЛЬСКОМ ХОЗЯЙСТВЕ: РОЛЬ ГИДРОПОННОГО ФЕРМЕРСТВА В УСТОЙЧИВОМ ОБРАЗОВАНИИ И ЗЕЛЕНЫХ ТЕХНОЛОГИЯХ

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Аннотация. Предпосылки: в условиях глобальных экологических вызовов и перехода к устойчивой экономике вопросы устойчивого сельского хозяйства и «зелёных» технологий приобретают особое значение. Городское сельское хозяйство, в том числе гидропонное фермерство, становится важным элементом «зелёной» экономики, направленной на снижение воздействия на окружающую среду и устойчивое производство продуктов питания. Гидропонные системы позволяют эффективно использовать природные ресурсы, такие как земля и вода, что снижает нагрузку на экосистемы. Важно, что этот подход не только обеспечивает экологическую устойчивость, но и создает новые возможности для профессиональной подготовки, особенно среди молодежи, школьников и детей с ограниченными возможностями (ОВЗ). Введение образовательных программ, связанных с гидропонным фермерством, способствует развитию востребованных высокотехнологичных профессий в агросекторе и формированию у подрастающего поколения экологической осведомленности.

Одной из актуальных проблем является нехватка квалифицированных кадров в агропрофессиях. В Узбекистане и других странах многие родители не считают сельское хозяйство высокотехнологичной профессией и не стимулируют детей выбирать её в качестве будущего. Однако гидропонное фермерство — это пример аграрной профессии, которая требует знаний не только в области агрономии, но и в информационных технологиях, биотехнологиях и инженерии, что делает её высокотехнологичной и востребованной в будущем. Поэтому важность образовательных программ, которые готовят специалистов в области устойчивого сельского хозяйства, становится очевидной.

В условиях глобальных экологических вызовов, стремительной урбанизации и роста населения вопросы устойчивого развития становятся приоритетными для большинства стран мира. Особое значение приобретает поиск инновационных решений в сфере сельского хозяйства, особенно в городских условиях, где ресурсы, такие как земля и вода, ограничены. Одним из таких решений является гидропонное фермерство — современная технология выращивания растений без использования почвы.

Гидропоника представляет собой важное направление не только в аграрной науке, но и в экологическом образовании, так как способствует формированию у молодёжи понимания принципов устойчивого развития и зелёных технологий. Благодаря своим преимуществам — экономии воды, возможности круглогодичного производства и снижению негативного воздействия на окружающую среду — гидропонные системы всё чаще рассматриваются как ключевой элемент «зелёного» городского хозяйства будущего.

Целью данной статьи является анализ роли гидропонного фермерства в развитии устойчивого образования и внедрении зелёных технологий в контексте городского сельского хозяйства. Также рассматриваются перспективы применения этих инноваций в условиях Узбекистана, с учётом международного опыта и современных тенденций.

Цели: Цель данного исследования — анализ роли гидропонного фермерства в контексте «зелёной» экономики и его интеграции в образовательные программы для формирования устойчивых и экологичных привычек у студентов, школьников, дошкольников и детей с ограниченными возможностями. Программа направлена на подготовку кадров для городского сельского хозяйства, повышение осведомленности о высокотехнологичных агро-профессиях, а также на работу с детьми с ОВЗ, обеспечивая равный доступ к знаниям и навыкам. Одной из задач является показать родителям, что агрономия и другие агропрофессии могут быть не только важными для устойчивого развития, но и высокотехнологичными, требующими знаний в современных науках и информационных технологиях.

Методология: в рамках исследования используется метод кейс-анализа, включающий изучение существующих образовательных инициатив по внедрению гидропонных технологий и других «зелёных» технологий в сельское хозяйство. Основные методы включают экспертные интервью с учеными, практиками и специалистами в области устойчивого сельского хозяйства, а также анализ успешных образовательных моделей, использующих современные технологии для подготовки специалистов. Также проводится сравнительный анализ подходов интеграции «зелёных» технологий в аграрное образование в разных странах и адаптации этих программ для дошкольников, школьников, студентов и для детей с ОВЗ.

Анализ. Развитие инновационных технологий в городском сельском хозяйстве приобретает всё большее значение в условиях урбанизации, изменения климата и роста потребности в устойчивом продовольственном обеспечении. Одним из наиболее перспективных направлений в этой сфере является гидропонное фермерство — метод выращивания растений без почвы, с

использованием питательных растворов.

Гидропонные технологии предоставляют возможность эффективно использовать ограниченные городские ресурсы, такие как вода, земля и энергия. В отличие от традиционного земледелия, гидропоника требует на 70–90% меньше воды и позволяет выращивать культуры круглый год в контролируемых условиях. Это делает её важным элементом устойчивого городского развития и зелёной экономики.

С экологической точки зрения, гидропонные установки способствуют снижению использования пестицидов и гербицидов, что положительно влияет на качество продукции и здоровье потребителей. Кроме того, интеграция таких систем в образовательные учреждения способствует формированию у молодёжи экологической культуры и повышает интерес к наукоёмким профессиям в аграрной сфере.

Анализ международного опыта показывает, что во многих странах, включая Нидерланды, Сингапур и США, гидропонные фермы становятся частью городской инфраструктуры, объединяя научные исследования, производство и образование. Внедрение подобных инноваций в Узбекистане может способствовать решению продовольственных проблем, созданию новых рабочих мест и повышению уровня экологической устойчивости городов.

Таким образом, гидропонное фермерство представляет собой не только технологическую, но и социально-образовательную инновацию, способствующую формированию зелёной экономики будущего.

Результаты: Исследование показывает, что организация «зеленых» классов в школах, детских садах, АГРО пространства на базе ВУЗов, гидропонное фермерство и городское сельское хозяйство обладают значительным потенциалом для развития «зелёной» экономики и подготовки квалифицированных кадров, необходимых для устойчивого сельского хозяйства. Внедрение гидропонных технологий в образовательные программы способствует формированию экологической осведомленности, предпринимательских навыков, а также социальной интеграции, особенно среди детей с ограниченными возможностями. Программы, направленные на развитие таких технологий, способствуют созданию инклюзивной образовательной среды, где каждый ребенок, независимо от своих возможностей, может освоить навыки, важные для будущего. Кроме того, такие программы позволяют детям понять, что профессии в агросекторе могут быть высокотехнологичными, требующими знаний в IT, инженерии и биотехнологии, что значительно повышает их привлекательность как для молодежи, так и для родителей.

Важно отметить, что в условиях современных вызовов и растущего спроса на экологически чистое производство продуктов питания существует

необходимость создания специализированных образовательных структур, которые будут не только готовить квалифицированных специалистов, но и развивать предпринимательские навыки у студентов, готовых внести вклад в развитие «зелёной» экономики.

Гидропонное фермерство представляет собой перспективное направление развития инновационного городского сельского хозяйства, способное внести значительный вклад в устойчивое развитие, продовольственную безопасность и экологическое образование. Эта технология демонстрирует высокую эффективность в использовании ресурсов, минимизирует воздействие на окружающую среду и может быть интегрирована в городскую инфраструктуру, включая образовательные учреждения, жилые районы и научные центры.

Предложения и рекомендации:

разработать и внедрить государственные программы поддержки гидропонного фермерства в городах Узбекистана, включая субсидии, налоговые льготы и гранты для стартапов;

интегрировать гидропонные технологии в образовательные программы школ, колледжей и университетов, создавая учебно-демонстрационные лаборатории и стимулируя проектную деятельность студентов;

создать условия для публично-частного партнёрства в сфере внедрения городских аграрных инноваций, особенно в новых жилых массивах и на крышах зданий;

проводить просветительскую работу среди населения, направленную на формирование экологической культуры, знание принципов устойчивого потребления и выращивания продуктов;

развивать научные исследования и инновационные стартапы в сфере агротехнологий, в том числе при участии международных организаций и фондов.

Анализ международного опыта показывает, что успешное внедрение гидропонных систем требует междисциплинарного подхода, государственной поддержки, участия частного сектора и активного вовлечения граждан, особенно молодёжи. Применение таких решений в Узбекистане может стать важным шагом на пути к формированию зелёной экономики и устойчивых городов.

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RISK OR REVOLUTION? A CRITICAL REVIEW OF STRATEGIC RISKS ASSOCIATED WITH AI ADOPTION IN BUSINESS

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Abstract. Artificial Intelligence (AI) promises to revolutionize business operations, yet its adoption introduces strategic risks that threaten organizational success. This article critically examines these risks—strategic misalignment, resource constraints, ethical dilemmas, organizational resistance, financial instability, and reputational damage—through global case studies and an exploration of Uzbekistan's emerging AI landscape. Findings suggest that while AI offers transformative potential, its risks are significant and multifaceted, requiring proactive management. In Uzbekistan, early adoption stages amplify resource and cultural challenges, yet offer opportunities to learn from global precedents. Recommendations include aligning AI with business goals, investing in capabilities, and prioritizing ethical frameworks to balance risk and reward.

Keywords: AI adoption, strategic risks, business transformation, Uzbekistan, ethical AI, organizational change

Introduction. Artificial Intelligence (AI) is reshaping the business landscape, driving innovation in areas such as automation, customer engagement, and strategic decision-making. As of April 10, 2025, AI's global market value is projected to exceed $500 billion, reflecting its pervasive adoption (Statista, 2025). However, this revolution is not without peril. Strategic risks—those that jeopardize long-term business objectives—loom large, from misaligned implementations to ethical controversies and financial losses. This article critically reviews these risks, drawing on global case studies and contextualizing them within Uzbekistan's nascent AI ecosystem, where government initiatives aim for a $1.5 billion market by 2030 (Uzbekistan Daily, 2023).

The central question is whether AI represents a revolution worth pursuing or a risk-laden gamble. By analyzing real-world examples and Uzbekistan's unique challenges, this study aims to provide a balanced perspective for businesses navigating this dual-edged phenomenon. The objectives are threefold: to identify key strategic risks, evaluate their implications through case studies, and propose mitigation strategies applicable globally and locally.

Literature Review. The adoption of AI in business has been extensively studied, with literature highlighting both its transformative potential and inherent risks. Porter's (1985) competitive advantage framework suggests AI can enhance efficiency and

differentiation, yet Mintzberg (1994) warns of strategic misalignment when technologies outpace organizational goals. Recent studies categorize AI risks into several domains:

Strategic Alignment: Davenport and Ronanki (2018) argue that AI projects often fail when not tied to clear business outcomes, a view echoed by IBM's Watson Health debacle (Slate, 2022).

Resource Constraints: Chui et al. (2018) note that AI demands robust data, skilled personnel, and infrastructure, resources often scarce in developing markets like Uzbekistan (Daryo, 2023).

Ethical and Legal Issues: Mittelstadt et al. (2016) highlight biases in AI algorithms, as seen in Amazon's hiring tool (Reuters, 2018), alongside privacy concerns under regulations like GDPR.

Organizational Resistance: Bughin et al. (2018) document employee pushback due to job displacement fears, necessitating change management (Kotter, 1996).

Financial Risks: Marr (2019) points to high failure rates in AI ventures, with significant losses reported by firms like OpenAI (Where's the Money, 2024).

Reputational Damage: Fountaine et al. (2019) discuss AI missteps, such as Microsoft's Tay chatbot, that erode brand trust (The Guardian, 2016).

In Uzbekistan, literature is sparse, but government strategies signal ambition tempered by challenges like skill shortages and regulatory gaps (Central Asian Light, 2023). This review synthesizes global insights with Uzbekistan's context, identifying a research gap in localized risk analysis.

Methodology. This study employs a qualitative, case-study approach to critically review strategic risks in AI adoption. Five global cases—IBM Watson Health, Amazon's hiring tool, employee resistance trends, AI startup failures, and Microsoft's Tay chatbot—were selected for their diversity and documented impact, sourced from credible outlets (e.g., Reuters, BBC). For Uzbekistan, data was drawn from government reports (Uzbekistan Daily, 2023) and industry analyses (TechBehemoths, 2025), supplemented by inference due to limited case-specific evidence.

Analysis involved thematic coding of risks (alignment, resources, ethics, culture, finance, reputation) and comparative evaluation across global and Uzbekistani contexts. Limitations include the scarcity of Uzbekistani AI failure cases, necessitating reliance on strategic plans and trends. This methodology ensures a robust, critical exploration grounded in real-world evidence.

Findings from Global Case Studies:

IBM Watson Health (Strategic Alignment):

IBM invested heavily in Watson Health to transform healthcare, but by 2022, it sold the unit at a loss due to poor alignment with clinical needs and data issues (Slate,

2022). This reflects a strategic disconnect, costing billions and undermining IBM's AI credibility.

Amazon's AI Hiring Tool (Ethical Risks):

Amazon's tool, trained on male-dominated data, exhibited gender bias, leading to its 2017 cancellation (Reuters, 2018). This ethical lapse risked legal violations and highlighted the perils of untested AI deployment.

1. Employee Resistance (Organizational Risks):

Across industries, workers resist AI due to automation fears, reducing adoption rates (Cognizant, 2023). This cultural risk demands proactive engagement, absent in many firms.

2. Financial Losses in AI Ventures:

OpenAI's $9 billion loss in 2024, despite $4 billion in revenue, exemplifies financial risks (Where's the Money, 2024). Smaller firms like Aria Insights also collapsed, signaling high stakes (Failory, 2023).

3. **Microsoft's Tay Chatbot (Reputational Risks)**:

Tay's offensive tweets in 2016 forced a swift shutdown, damaging Microsoft's reputation (The Guardian, 2016). This case underscores the need for oversight in AI interactions.

Uzbekistan's AI Landscape. Uzbekistan's AI adoption is embryonic, with only 8 AI firms in Tashkent as of 2025 (TechBehemoths, 2025). The government's 2030 strategy targets a $1.5 billion market, focusing on research labs and e-governance (Uzbekistan Daily, 2023). Risks include:

- **Resource Gaps**: Limited AI expertise and infrastructure hinder progress (Daryo, 2023).
- **Ethical Uncertainty**: Emerging data privacy laws lag behind adoption pace (Central Asian Light, 2023).
- **Cultural Barriers**: Traditional business practices may resist AI-driven change.

While specific failures are undocumented, these risks mirror global patterns, amplified by Uzbekistan's developmental stage.

Comparative Insights. Globally, risks stem from execution failures (IBM, Amazon), while Uzbekistan's challenges are structural (skills, infrastructure). Both contexts share ethical and cultural hurdles, suggesting universal lessons.

Discussion. The findings reveal AI as a paradox: a revolutionary tool with transformative potential, yet a source of strategic risks that can destabilize businesses. Globally, IBM's misalignment and Amazon's bias illustrate how poor planning and ethical oversights derail AI initiatives. Financial losses, as with OpenAI, highlight the

gamble of high-cost investments, while Microsoft's Tay shows reputational fragility. Employee resistance further complicates adoption, reflecting a human dimension often ignored.

In Uzbekistan, the lack of documented failures suggests an opportunity to preempt risks, but resource constraints and cultural inertia pose unique challenges. The government's ambitious strategy risks overreach without addressing these gaps. Critically, both contexts underscore a core tension: AI's promise hinges on execution, yet execution is fraught with uncertainty.

This analysis challenges the hype surrounding AI, suggesting that its revolutionary status is conditional. Businesses must weigh whether the risks—strategic, ethical, or financial—outstrip the rewards, particularly in resource-scarce settings like Uzbekistan. Mitigation requires aligning AI with goals, building capabilities, and fostering ethical transparency, but success is not guaranteed.

Conclusion. AI adoption in business is neither a guaranteed revolution nor an unmitigated risk-it is a strategic choice demanding careful navigation. Global cases reveal tangible consequences of misalignment, bias, and oversight, while Uzbekistan's early-stage adoption amplifies resource and cultural risks. This critical review advocates a balanced approach: businesses must harness AI's potential while proactively managing its pitfalls. For Uzbekistan, learning from global precedents offers a path to sustainable AI integration. Future research should explore specific Uzbekistani case studies to refine these insights.

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