

# Yashil

## IQTISODIYOT va TARAQQIYOT

Ijtimoiy, iqtisodiy, siyosiy, ilmiy, ommabop jurnal

9  
2023

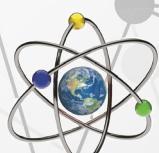


- 08.00.01 Iqtisodiyot nazariyasi
- 08.00.02 Makroiqtisodiyot
- 08.00.03 Sanoat iqtisodiyoti
- 08.00.04 Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 Ekonometrika va statistika
- 08.00.07 Moliya, pul muomalasi va kredit
- 08.00.08 Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 Jahon iqtisodiyoti

- 08.00.10 Demografiya. Mehnat iqtisodiyoti
- 08.00.11 Marketing
- 08.00.12 Mintaqaviy iqtisodiyot
- 08.00.13 Menejment
- 08.00.14 Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 Turizm va mehmonxona faoliyati



74-91 xalqaro daraja  
ISSN: 2992-8982



# **Yashil** IQTISODIYOT va TARAQQIYOT

Ijtimoiy, iqtisodiy, siyosiy, ilmiy, ommabop jurnal

## **Bosh muharrir:**

Sharipov Qo'ng'irotboy Avezimbetovich

## **Bosh muharrir o'rinnbosari:**

Karimov Norboy G'aniyevich

*Elektron nashr. 464 sahifa, 30-sentyabr, 2023-yil.*

## **Muharrir:**

Qurbanov Sherzod Ismatillayevich

## **Tahrir hay'ati:**

Rae Kvon Chung, Janubiy Korea, TDIU faxriy professori, "Nobel" mukofoti laureati

Salimov Oqil Umrzoqovich, O'zbekiston fanlar akademiyasi akademigi

Abduraxmanov Kalandar Xodjayevich, O'zbekiston fanlar akademiyasi akademigi

Osman Mesten, Turkiya parlamenti a'zosi, Turkiya – O'zbekiston do'stlik jamiyatni rahbari

Toshkulov Abduqodir Hamidovich, i.f.d., prof., O'zbekiston Respublikasi Prezidentining yoshlar, fan, ta'lif, sog'liqni saqlash, madaniyat va sport masalalari bo'yicha maslahatchisi o'rinnbosari

Buzrukxonov Sarvarxon Munavvarxonovich, i.f.d., O'zR Oliy ta'lif, fan va innovatsiyalar vaziri o'rinnbosari

Sharipov Qo'ng'irotboy Avazimbetovich, t.f.d., prof., TDIU rektori

Oblamuradov Narzulla Naimovich, i.f.n., dots., O'zR Tabiat resurslari vaziri o'rinnbosari

Djumaniyazov Maqsud Allanazarovich, Qoraqalpog'iston Respublikasi Tabiat resurslari qo'mitasi raisi

Axmedov Durbek Kudratillayevich, i.f.d., prof., O'zR Oliy Majlis qonunchilik palatasi deputati

Utayev Uktam Choriyevich, O'zR Bosh prokuraturasi boshqarma boshlig'i o'rinnbosari

Ochilov Farxod, O'zR Bosh prokuraturasi iqtisodiy jinoyatlarga qarshi kurashish departamenti bo'limi boshlig'i

Eshov Mansur Po'latovich, i.f.d., prof., TDIU Akademik faoliyat bo'yicha prorektori

Xudoqulov Sadirdin Karimovich, i.f.d., prof., TDIU YoMMMB birinchi prorektori

Abduraxmanova Gulnora Kalandarovna, i.f.d., prof., TDIU Ilmiy ishlari va innovatsiyalar bo'yicha prorektori

Kalonov Muxiddin Baxritdinovich, i.f.d., prof., "O'IRIAM" ilmiy tadqiqot markazi direktori – prorektor

Yuldashev Maqsud Abdullayevich, p.f.d., prof., TDIU Moliya-iqtisod ishlari bo'yicha prorektori

Karimov Norboy G'aniyevich, i.f.d., prof., TDIU huzuridagi PKQTMO tarmoq markazi direktori

Hakimov Nazar Hakimovich, f.f.d. TDIU profesor

Yuldashev Mutallib Ibragimovich, i.f.d., TMI professori

Samadov Asqarjon Nishonovich, i.f.n., TDIU Marketing kafedrasи professori

Slizovskiy Dimitriy Yegorovich, t.f.d., Rossiya xalqlar do'stligi universiteti professori

Mustafakulov Sherzod Igamberdiyevich, i.f.d., prof., Xalqaro "Nordik" universiteti rektori

Aliyev Bekdavlat Aliyevich, f.f.d., TDIU professori

Po'latov Baxtiyor Alimovich, t.f.d., prof., Atrof-muhit va tabiatni muhofaza qilish texnologiyalari ilmiy-tadqiqot instituti

Axmedov Javohir Jamolovich, i.f.f.d., "El-yurt umidi" jamg'armasi ijrochi direktori o'rinnbosari

Isakov Janabay Yakubbayevich, i.f.d., TDIU professori

Toxirov Jaloliddin Ochil o'g'li, t.f.f.d., Toshkent arxitektura-qurilish universiteti katta o'qituvchisi

Kamilova Iroda Xusniddinovna, i.f.f.d., TDIU dotsenti

Nosirova Nargiza Jamoliddin qizi, i.f.f.d., TDIU dotsenti

Sevil Piriyeva Karaman, PhD, Turkiya Anqara universiteti doktaranti

Yaxshiboyeva Laylo Abdisattorovna, TDIU katta o'qituvchisi

Rustamov Ilhomiddin, f.f.n., Farg'onan davlat universiteti dotsenti

Mirzaliyev Sanjar Maxamatjon o'g'li, TDIU Ilmiy tadqiqotlar va

innovatsiyalar departamenti rahbari

Babayeva Zuhra Yuldashevna, TDIU huzuridagi Pedagog kadrlarni qayta tayyorlash va ularning malakasini oshirish tarmoq Markazi xorijiy hamkorlik bo'yicha mutaxassis

## **Ekspertlar kengashi:**

Hakimov Ziyodulla Ahmadovich, i.f.d., TDIU dotsenti

Tuxtabayev Jamshid Sharafetdinovich, i.f.f.d., TDIU dotsenti

Imomqulov To'iqin Burxonovich, i.f.f.d., TDIU dotsenti

**Muassis:** "Ma'rifat-print-media" MChJ

**Hamkorlarimiz:** Toshkent davlat iqtisodiyot universiteti,  
O'zR Tabiat resurslari vazirligi,  
O'zR Bosh prokuraturasi huzuridagi IJQK departamenti.

## **Jurnalning ilmiyligi:**

"Yashil iqtisodiyot va taraqqiyot" jurnali

O'zbekiston Respublikasi Oliy ta'lif, fan va innovatsiyalar vazirligi huzuridagi Oliy attestatsiya komissiyasi rayosatining 2023-yil 1-apreldagi 336/3-sonli qarori bilan ro'yxatdan o'tkazilgan.



# MUNDARIJA

Ichki turizmni rivojlanlantirishda davlatning o'rni.....	7
<b>Dehqonov Burxon Rustamovich</b> , tayanch doktorant	
Qishloq xo'jaligida sug'orish tizimlari boshqaruvini rivojlanlantirish yo'llari .....	11
<b>Mirjamilova Hulkar Nurali qizi</b> , assistent	
Yangi O'zbekiston sharoitida o'simliklar karantini tizimi faoliyatini takomillashtirish va iqtisodiy samaradorligini oshirish .....	15
<b>Alimov Murodkosim Achilovich</b> , mustaqil izlanuvchi	
"Yashil iqtisodiyot"da energetika sohasini investitsion holatining statistik tahlili .....	20
<b>Umarov Faxriddin Umar o'g'li</b> , katta o'qituvchi	
Yoqilg'i-energetika korxonalari moliyaviy barqarorligini ta'minlashda investitsion faoliyatning ahamiyati .....	26
<b>Ergashev Muhibbek Aslam o'g'li</b> , mustaqil izlanuvchi	
Tog'li hududlarda turizm biznesining rivojlanishi .....	31
<b>Abduvakil Alimov Komil o'g'li</b> , tayanch doktorant	
Ta'lif turizmining nazariy asoslari va O'zbekistondagi tendensiyalari.....	38
<b>Maxmudova Nodira O'ktamovna</b> , tayanch doktorant	
Turizmga innovatsion texnologiyalarni joriy qilish shart sharoitlari .....	43
<b>Po'latov Ma'murjon Murodjon o'g'li</b> , tayanch doktorant	
Mintaqaviy investitsion loyihalarining jozibadorligi tahlillari masalalari .....	46
<b>Davlyatshayev Akmal Ashurmamatovich</b> , dotsent, i. f. n.	
Yashil iqtisodiyotning tijorat banklaridagi ahamiyati va ularning raqamlashuvi.....	51
<b>Maxmudova Muxlisa Qodirjon qizi</b> , dotsent, PhD	
Turizmni rivojlanlantirishda "Tourism 4.0" konsepsiyasini joriy etish masalalari .....	57
<b>Yuldasheva Dilnoza Ulug'bekovna</b> , mustaqil tadqiqotchi	
Davlat tomonidan qishloq xo'jaligini moliyaviy qo'llab-quvvatlash tizimini takomillashtirish .....	62
<b>Olikulova Feruza Mansurovna</b> , PhD; <b>Jabborov Jahongir Abduvohid o'g'li</b> , magistrant	
Перспективные направления "Зелёной химии" для Республики Узбекистан.....	66
<b>Султанходжаев Баҳтиёр Забиҳуллаевиҷ</b>	
O'zbekistonda transport va logistika sohasini rivojlanlantirish strategiyasi .....	73
<b>Usmonov Botir</b> , magistr	
Hududlarda investitsion faollikni oshirishga qaratilgan mexanizmni takomillashtirish .....	78
<b>Sunatullayeva Shaxnoza Xurshid qizi</b> , tayanch doktorant	
Qurilish tarmoqlarida boshqaruv faoliyatining iqtisodiy ko'rsatkichlari tahlili.....	82
<b>Mirsodiqov Abdulla Tursunaliyevich</b> , PhD	
Connection between interest rate on loans, cash flow and turnover of funds .....	87
<b>Sharbat Abdullaeva, Professor; Sardor Abdullaev</b> , the applicant	
Econometric Analysis of the Impact of IPO on the Market Capitalization of Companies .....	92
<b>Shakhzod Saydullaev</b> , PhD.	
Davlat xaridlarini takomillashtirishda byudjet mablag'laridan samarali foydalanishning mohiyati va zarurligi .....	101
<b>Raximjonov Kamronbek Ilxomjon o'g'li</b> , mustaqil tadqiqotchi	
O'zbekistonda to'lov tizimining raqamli transformatsiyasining o'ziga xos xususiyatlari.....	105
<b>Otamurodov Shavkat Nusratillayevich</b> , i. f. d. (DSc); <b>Eshqulova Nasiba Normo'minovna</b> , o'qituvchi	
Tijorat banki xizmatlarida ta'lif kreditining o'rni va uni takomillashtirish masalalari.....	110
<b>Eldor Uskanov</b> , mustaqil tadqiqotchi	
Korxonaning strategik boshqaruvini takomillashtirish .....	114
<b>Maxmudov Nosir Maxmudovich</b> , professor; <b>Elmurodov Faxriddin Farxodovich</b> , magistratura tinglovchisi	



Respublikada kichik biznesni moliya-kredit mexanizmlari orqali qo'llab-quvvatlash masalalari .....	120
<b>Ergashev Otamurod Toshtemirovich</b> , PhD	
Mulk iqtisodiy xavfsizligini ta'minlashda muammo va yechimlar .....	125
<b>Ermatov Musojalil Komilovich</b> , kafedrasi dotsenti v. b.; <b>Abdunazarov Oybek Abdumatalibovich</b> , katta o'qituvchi	
Using intelligent and decision support systems for developing University Curriculum: semi-automated need analysis approach .....	132
<b>Abduraxmanov Zafar Batirovich; Ikromov Sayidolim Ismoilovich</b>	
Challenges of Developing a Competitive Environment in the Context of Economic Liberalization.....	138
<b>Akobirova Nodira Najmuddin qizi</b> , asisstant	
Topical Issues of the Development of Recreational-Tourist and Military-Recreational Activities.....	141
<b>Alimova Guzal Alisherovna</b> , PhD in economics, docent	
Kreditlash jarayonlarida xulq-atvor iqtisodiyoti omilini joriy etish istiqbollari .....	146
<b>Jo'rayeva Sevara Zakirovna</b> , mustaqil izlanuvchi (PhD)	
Portfelli xorijiy investitsiyalarining milliy iqtisodiyotni rivojlantirishdagi roli .....	152
<b>Kamilova Iroda Xusniddinovna</b> , PhD	
Exploring the Ethical Dimensions of Artificial Intelligence in Advancing Human Rights and Sustainability .....	156
<b>Matkarimova Gulchekhra Abdusamatovna</b> , Professor	
Tijorat banklarida muammoli kreditlar bilan ishslashning nazariy asoslari.....	163
<b>Maxmudov Rahimjon Xamid o'g'li</b> , mustaqil izlanuvchi	
Barqaror iqtisodiy o'sishga yalpi talab va yalpi taklif omillarining ta'siri.....	170
<b>Nabiiev Ulug'bek Mirodiljon o'g'li</b> , tayanch doktorant	
The potential advantages of implementing the Total Quality Education Management (TQEM) concept .....	175
<b>Otakulov Makhamadjon</b> , PhD	
Kichik yashil biznesni yanada rivojlanitirish imkoniyatlari .....	181
<b>Raximova Kizlarxon Ne'matjon qizi</b>	
Jamg'armalar investitsiyalar manbasi sifatida .....	185
<b>Sadikova Ra'no Abdullayevna</b> , i. f. n., dots.	
Davlat moliyasining moddiy assosini oshirish orqali iqtisodiy o'sishga erishish .....	188
<b>Shamsiyev Shuxrat Sayfutdin o'g'li</b> , mustaqil izlanuvchi	
Aholi turmush darajasini oshirishda ijtimoiy himoyaning o'rni .....	191
<b>Sherjonov Sherjon Alijan o'g'li</b> , mustaqil izlanuvchi	
Xo'jalik yurituvchi subyektlar to'lov qobiliyatini aniqlashning nazariy-uslubiy masalalari.....	196
<b>Adashaliyev Baxtiyorjon Valisher o'g'li</b> , dekan o'rinosari	
Kichik sanoat zonalari faoliyatini samarali boshqarish tamoyillari .....	203
<b>Shodmonqulov Kamoliddin Murodillayevich</b> , dotsent; <b>Adilbekov Allayar Anvarbekovich</b> , magistrant	
Aholini ijtimoiy himoya qilishda pensiya va ijtimoiy nafaqalarning o'rni .....	206
<b>Aliyev Ma'ruf Komiljon o'g'li</b> , mustaqil izlanuvchisi	
Использование методов управления для повышения эффективности производства на предприятиях.....	212
<b>Алиева Надирахон Абдумаликовна</b> , PhD. доц.; <b>Тлеумуратова Мадинабону Дилмурат кизи</b> , ст. 3-курса	
Korxonalar moliyaviy barqarorligini ta'minlash mexanizmini takomillashtirish.....	217
<b>Z. G. Allaberganov</b> , kafedra dotsenti	
Davlat fiskal (byudjet-soliq) siyosatining aholi bandligiga ta'siri va uni takomillashtirish.....	222
<b>Asatullayev Xurshid Sunatullayevich</b> , i. f. n., professor	
O'zbekistonda iqtisodiyot tarmoqlariga raqamli iqtisodiyotni shakllantirish omillari.....	228
<b>Axmedova Yulduz Sunatullayevna</b> , kafedra o'qituvchisi	
Moliyaviy risklarni baholash usullari, boshqaruvdagi yondashuvlari .....	232
<b>Baymuratova Gulirayxon Tursunbayevna</b> , kafedra dotsenti	



Sug'urta kompaniyalarining moliyaviy barqarorligini ta'minlashda biznes jarayonlarini boshqarish .236 <b>Baxriyev Dilshod Rizvonkulovich</b> , mustaqil izlanuvchi	
Tijorat banklarida investitsiya loyihalarini moliyalashtirishning ekonometrik modellashtirish ko'satkichlari.....242 <b>Berdiev Akram O'ktamovich</b> , mustaqil izlanuvchi	
Innovatsion muhitni shakllanishi va rivojlanishida investitsiyaning zarurligi .....253 <b>Bobobekov Ergash Abdumalikovich</b>	
Meva-sabzavotchilik klasterlarida yashil moliyalashtirishning nazariy asoslari va xususiyatlari .....258 <b>Botirov Erkinjon Xayitovich</b> , kafedra dotsenti	
O'zbekiston Respublikasida xorijiy investitsiyalarni jalg etish orqali investitsion salohiyatni oshirish .....263 <b>G'aybullayev Odil Baxtiyarovich</b> , kafedra dotsenti v. b.	
Tadbirkorlik subyektlarining innovatsion loyihalarini moliyalashtirishni qo'llab-quvvatlash mexanizmini takomillashtirish .....269 <b>Jubanova Bayramgul Aymuratovna</b> , PhD	
Soliq ma'muriyatichiligi va uni raqamlashtirishni ekspert baholash yo'llari.....272 <b>Ibragimov Boburshoh Bohodir o'g'li</b> , i. f. d. (PhD), doktorant (DSc)	
Xalqaro standartlarga muvofiq buxgalteriya autsorserlari tomonidan moliyaviy hisobotlarni transformatsiya qilishni takomillashtirish.....278 <b>Islomov Alisher Baxtiyor o'g'li</b> , mustaqil izlanuvchi	
O'zbekistonda moliyaviy hisob va hisobotni MHXSlariga transformatsiya qilishda asosiy vositalar hisobini tashkil etish masalalari .....284 <b>Qurbanova Shaxrinoz</b> , tayanch doktorant	
Yerlarning degradatsiyaga uchrashi va oldini olish bo'yicha chora-tadbirlar .....288 <b>Mamanazarova Nasiba Jo'rayevna</b> , kafedra doktoranti	
Davlat sektorida ichki auditni tashkil etish xususiyatlari .....292 <b>Mamirjon Jalollidinov</b> , mustaqil izlanuvchi	
Финансирование акционерных общества через рынок капитала .....297 <b>Муминов Шохжакон Суюнович</b> , ассистент кафедра	
Необходимость развития предпринимательской и страховой деятельности риски на рынке Узбекистана .....302 <b>Муятдинов Махмуд Жалелович</b> , независимый исследователь	
Инвестиционная привлекательность как фактор экономического развития страны.....307 <b>Назарова Гузал Баходировна</b>	
Tijorat banklarida kreditlash jarayonlarini takomillashtirish masalalari.....312 <b>Nozima Abdullayeva</b> , mustaqil tadqiqotchi	
Tijorat banklarining xizmatlar sohasini kreditlash amaliyotiga ta'sir etuvchi omillarning ekonometrik tahlili.....316 <b>Nurmuxammedov Abdijabbar Yunusovich</b> , kafedra dotsenti v. b.	
Современное решение, которое положительно влияет на логистические услуги и резко снижает смертность на перекрестках.....326 <b>Тажимуратов Умид Рузматович</b> , <b>Бахриев Иброхим Исометдинович</b> , кандидат медицинских наук, доцент; <b>Жуманиёзов Эркин Худойберганович</b> , кандидат медицинских наук, доцент; <b>Тажимуратов Рузмат Отажанович</b> , кандидат медицинских наук, <b>Тажимуратов Абдусами Умид угли</b> , ученик 10 класса	
O'zbekiston Respublikasi tijorat banklarida dividend siyosati va tendensiyalari tahlili .....333 <b>Temirov Abdulaziz Alimjanovich</b> , kafedra dotsenti, i. f. n.	
Современное состояние инвестиционного потенциала Республики Узбекистан.....339 <b>Топилдиев Соҳибжон Раҳимжонович</b> , DSc; <b>Одилова Дилноза Барнаевна</b> , PhD	
Portfelli xorijiy investitsiyalarni milliy iqtisodiyotni rivojlantirishdagi roli.....345 <b>Tosheva Ziroat Aliqul qizi</b>	



Kichik biznes subyektlarida raqamli texnologiyalardan foydalanishning ilmiy-nazariy jihatlari .....	349
<b>To'rayeva Nafisa Odilovna</b> , mustaqil izlanuvchi	
O dostizheniyaх Uзbekistana v realizatsii naionalnyx celей i zadach ustoychivogo razvitiya.....	355
<b>Tursun Muxitovich Ahmedov</b> , i. ф. д., prof.; <b>Gavhar Rustamovna Xidirova</b> , doktorant, i. ф. ф. д., doz.	
Vliyanie korporativnogo upravleniya v zelenoy ekonomike .....	359
<b>Urinov Bobur Nasilloevich</b> , zavedeyuchiy kafedroy	
Ko'chmas mulkni soliqqa tortishning o'ziga xos xususiyatlari.....	366
<b>Fayziyev Farrux Abdullaxojayevich</b> , kafedra dotsenti	
Transport tizimi iqtisodiy rivojlantirish yo'naliishlari.....	374
<b>Fayzullayev Javlonbek Sultonovich</b> , DSc.	
Oliy ta'lim muassasalarida byudjet mablag'laridan samarali foydalanishning ayrim fundamental masalalari.....	382
<b>Xayriddinov Sh. B.</b> , mustaqil izlanuvchi	
Xalqaro raqamli valyuta bozorini rivojlantirish istiqbollari .....	385
<b>Xolov Nabijon Qaxramonovich</b> , PhD.	
Nodavlat notijorat tashkilotlarning rivojlanishi va hozirgi shart-sharoitlari .....	391
<b>Xusanov Otabek Nishonovich</b> , PhD, mustaqil izlanuvchi	
Banklarining aktivlarini daromadlilagini oshirish yo'llari.....	396
<b>Elbusinova Umida Xamidullayevna</b> , kafedra dotsenti	
Osobennosti metodiki provedenia audita затрат на производство.....	401
<b>Хилола Икрамова Ровшан кизи</b> , bazovyj doktorant	
Ta'lim islohotlarining ma'naviyatdagi o'rni .....	407
<b>Bekdavlat Aliyev</b>	
O'zbekistonda tijorat banklari emission operatsiyalarining dolzarb masalalari .....	412
<b>O'ktamova Nozima Narzulla qizi</b> , kafedra dotsenti	
Moliyaviy barqarorligi tushunchasining konseptual mohiyati, turlari va asosiy tavsiflari .....	416
<b>Eshquvatov Aziz Baxtiyorovich</b> , mustaqil izlanuvchi	
XX asr jadid ma'rifatparvarlari Abdurahmon Toshkandiy va Abdulla Avloniy axloqiy konsepsiylaridagi umumiylilik va xususiylik.....	420
<b>Abrorxon Asatulloyev Asatulloyevich</b> , falsafa fanlari doktori (PhD)	
Yer resurslaridan foydalanishning iqtisodiy va huquqiy asoslari.....	424
<b>Abdurahmanova Muqaddas Toxtasinovna</b>	
Стратегии привлечения иностранных инвестиций для содействия устойчивому экономическому росту в Республике Узбекистан с акцентом на инициативы зеленого развития .....	431
<b>Нилуфар Зикируллаева Дилмуродовна</b> , аспирант	
Bank tizimi barqarorligini oshirishda kredit risklarining ahamiyati va ularni kamaytirish yo'llari .....	440
<b>Xolmamatov Farhodjon Kubayevich</b> , iqtisodiyat fanlari bo'yicha falsafa doktori, professor	
Baholash faoliyatini rivojlantirish yo'naliishlari va uning huquqiy asoslari .....	446
<b>Bobirjon Aktamov</b> , mustaqil tadqiqotchi	
Suv resurslaridan foydalanishni iqtisodiy boshqarish samaradorligini kompleks baholash uslubiyoti.....	454
<b>Axmedov Sayfullu Normatovich</b> , t. f. n., mustaqil tadqiqotchi	
Oliy ta'lim muassasalarida ilmiy-tadqiqot faoliyatini boshqarishni takomillashtirish metodologiyasini ishlab chiqish.....	459
<b>Mirzaliyev Sanjar Maxamatjon o'g'li</b>	



# EXPLORING THE ETHICAL DIMENSIONS OF ARTIFICIAL INTELLIGENCE IN ADVANCING HUMAN RIGHTS AND SUSTAINABILITY

**Matkarimova Gulchekhra Abdusamatovna**

Professor, the Department of State Legal Sciences and Human Rights of the IIV Academy of the Republic of Uzbekistan

**Abstract:** This research paper delves into the intricate interplay between artificial intelligence (AI), human rights, and sustainability, shedding light on the ethical dimensions that permeate this dynamic relationship. In an era marked by rapid technological advancements, the deployment of AI technologies holds immense promise for addressing global challenges, including the protection and promotion of human rights and the pursuit of sustainability goals. This study goes beyond the conventional evaluation and impact assessment paradigms to explore the underlying ethical underpinnings. Drawing from a multi-disciplinary approach that encompasses ethics, law, and technology, this paper examines how AI can both empower and potentially infringe upon human rights, highlighting the complex ethical dilemmas posed by AI-driven decision-making systems. It also scrutinizes the potential contributions of AI in bolstering environmental sustainability, emphasizing the need for responsible AI development and deployment to mitigate unintended consequences. Furthermore, this research underscores the importance of fostering a comprehensive ethical framework for AI, one that aligns with established human rights principles and sustainability objectives. By addressing ethical concerns such as bias, transparency, and accountability, we aim to guide policymakers, technologists, and stakeholders towards a more equitable and sustainable AI future. In sum, this paper advances the discourse on AI, human rights, and sustainability by presenting a holistic examination of the ethical considerations that underpin this intersection. By doing so, it contributes to a deeper understanding of the complexities involved in harnessing AI's potential while safeguarding fundamental human rights and advancing sustainability in an increasingly AI-driven world.

**Key words:** Ethical AI, Human Rights, Sustainability, Transparency, Algorithmic Bias, Interdisciplinary Collaboration, Sustainability by Design.

**Annotatsiya:** Ushbu tadqiqot maqolasi sun'iy intellekt (AI), inson huquqlari va barqarorlik o'rtaqidagi murakkab o'zaro ta'sirni o'rGANIB chiqadi va bu dinamik munosabatlarga kirib boradigan axloqiy o'chovlarga oydinlik kiritadi. Tez texnologik taraqqiyot davrida AI texnologiyalarini joriy etish global muammolarni hal qilish, jumladan, inson huquqlarini himoya qilish va rag'batlantirish hamda barqaror rivojlanish maqsadlariga erishish uchun katta va'da beradi. Ushbu tadqiqot asosiy axloqiy asoslarni o'rGANISH uchun an'anaviy baholash va ta'sirni baholash paradigmalaridan tashqariga chiqadi. Etika, qonun va texnologiyani o'z ichiga olgan ko'p tarmoqli yondashuvdan kelib chiqqan holda, ushbu maqola AI qanday qilib inson huquqlarini kuchaytirishi va potentsial ravishda buzishi mumkinligini ko'rib chiqadi va Alga asoslangan qaror qabul qilish tizimlari tomonidan yuzaga keladigan murakkab axloqiy dilemmalarni ta'kidlaydi. Shuningdek, u Alning ekologik barqarorlikni mustahkamlashdagi potentsial hissasini sinchkovlik bilan ko'rib chiqadi va kutilmagan oqibatlarni yumshatish uchun mas'uliyatlari Alni ishlab chiqish va joylashtirish zarurligini ta'kidlaydi. Bundan tashqari, ushbu tadqiqot o'matilgan inson huquqlari tamoyillari va barqarorlik maqsadlariga mos keladigan AI uchun keng qamrovli axloqiy asosni shakllantirish muhimligini ta'kidlaydi. Noto'g'rilik, shaffoflik va javobgarlik kabi axloqiy muammolarni hal qilish orqali biz siyosatchilar, texnologlar va manfaatdor tomonlarni yanadaadolatli va barqaror AI kelajagiga yo'naltirishni maqsad qilganmiz. Xulosa qilib aytganda, ushbu maqola ushbu kesishuvni asoslaydigan axloqiy mulohazalarning yaxlit tahlilini taqdim etish orqali AI, inson huquqlari va barqarorlik haqidagi nutqni ilgari suradi. Shunday qilib, u sun'iy intellekt salohiyatidan foydalanish bilan bog'liq murakkabliklarni chuqurroq tushunishga yordam beradi, shu bilan birga asosiy inson huquqlarini himoya qiladi va tobora ortib borayotgan sun'iy intellektga asoslangan dunyoda barqarorlikni ta'minlaydi.

**Kalit so'zlar:** Axloqiy AI, inson huquqlari, barqarorlik, shaffoflik, algoritmik tarafkashlik, fanlararo hamkorlik, dizayn bo'yicha barqarorlik.



**Аннотация:** Эта исследовательская статья углубляется в сложное взаимодействие между искусственным интеллектом (ИИ), правами человека и устойчивым развитием, проливая свет на этические аспекты, которые пронизывают эти динамичные отношения. В эпоху быстрого технологического прогресса внедрение технологий искусственного интеллекта открывает огромные перспективы для решения глобальных проблем, включая защиту и продвижение прав человека, а также достижение целей устойчивого развития. Это исследование выходит за рамки традиционных парадигм оценки и оценки воздействия и направлено на изучение основных этических основ. Опираясь на междисциплинарный подход, охватывающий этику, право и технологии, в этой статье рассматривается, как ИИ может одновременно расширять возможности и потенциально нарушать права человека, подчеркивая сложные этические дилеммы, возникающие в системах принятия решений, управляемых ИИ. В нем также тщательно изучается потенциальный вклад ИИ в повышение экологической устойчивости, подчеркивая необходимость ответственной разработки и внедрения ИИ для смягчения непредвиденных последствий. Кроме того, это исследование подчеркивает важность создания всеобъемлющей этической основы для ИИ, которая соответствовала бы установленным принципам прав человека и целям устойчивого развития. Решая этические проблемы, такие как предвзятость, прозрачность и подотчетность, мы стремимся направить политиков, технологов и заинтересованных лиц к более справедливому и устойчивому будущему ИИ. В целом, эта статья развивает дискуссию об искусственном интеллекте, правах человека и устойчивом развитии, представляя целостное исследование этических соображений, лежащих в основе этого пересечения. Тем самым это способствует более глубокому пониманию сложностей, связанных с использованием потенциала ИИ, одновременно защищая фундаментальные права человека и продвигая устойчивость в мире, который все больше управляет ИИ.

**Ключевые слова:** этический ИИ, права человека, устойчивость, прозрачность, алгоритмическая предвзятость, междисциплинарное сотрудничество, устойчивое развитие задумано.

## INTRODUCTION

Artificial Intelligence (AI) has emerged as a transformative force in the contemporary world, reshaping industries, economies, and societies at an unprecedented pace [1]. While its potential for positive impact on human rights and sustainability is substantial, it simultaneously introduces a host of ethical complexities and challenges that demand urgent scholarly scrutiny [2]. This paper embarks on a comprehensive exploration of the intricate relationship between AI, human rights, and sustainability, with a primary focus on the ethical dimensions that underlie this dynamic intersection.

As AI systems become increasingly integrated into various aspects of our lives, from healthcare and finance to criminal justice and environmental management, their influence on human rights is palpable [3]. AI-driven decision-making, often touted for its efficiency and impartiality, has the potential to either empower or infringe upon fundamental human rights, such as privacy, non-discrimination, and freedom of expression [4]. The opaque algorithms that govern these systems can inadvertently perpetuate biases, amplifying existing societal disparities [5]. Therefore, understanding how AI technologies intersect with human rights is a pressing concern, necessitating a nuanced exploration of their impact and the development of ethical safeguards.

Simultaneously, as the global community grapples with the imperatives of sustainability, AI has emerged as a pivotal tool in the pursuit of environmental and social goals [6]. From optimizing energy consumption and managing resources more efficiently to enabling climate change mitigation strategies, AI offers innovative solutions to some of humanity's most pressing challenges [7]. However, the sustainable deployment of AI necessitates careful consideration of its ecological footprint and ethical ramifications, as well as equitable access to its benefits [8].

This paper contends that a comprehensive examination of AI in the context of human rights and sustainability must extend beyond traditional assessments of its efficacy and impact. It underscores the imperative of establishing a robust ethical framework that guides the development, deployment, and governance of AI systems in a manner that is consistent with established human rights principles and sustainability objectives. This research thus seeks to navigate the intricate ethical terrain of AI, presenting a multidisciplinary perspective that engages with ethics, law, and technology studies, and ultimately contributes to a deeper understanding of the multifaceted role of AI in shaping our future [9].

The subsequent sections of this paper are structured to provide a comprehensive analysis of the ethical dimensions of AI within the contexts of human rights and sustainability. Following this introduction, the paper proceeds with a thorough review of the pertinent literature, which critically examines the existing body of knowledge on AI's impact on human rights and sustainability ethics. Subsequently, the paper employs a multidisciplinary approach to explore the ethical challenges and opportunities presented by AI, drawing on insights from ethics, law, and technology studies. Following this analysis, the paper outlines a conceptual framework for the ethical development and deployment of AI in alignment with human rights principles and sustainability goals. Finally, the paper concludes by summarizing key findings and offering practical recommendations for policymakers, technologists, and stakeholders in navigating the complex ethical landscape of AI in contemporary society.



## LITERATURE REVIEW

The intersection of artificial intelligence (AI), human rights, and sustainability ethics has emerged as a focal point of scholarly inquiry, reflecting the growing recognition of AI's transformative potential and ethical implications. This literature review critically assesses the existing body of knowledge in this domain, highlighting key themes, debates, and gaps.

- AI and Human Rights:** The impact of AI on human rights has garnered substantial attention in recent years. AI applications in surveillance, law enforcement, and decision-making systems have raised concerns about privacy, discrimination, and due process [10]. Scholars emphasize the need for transparent, accountable, and unbiased AI systems to safeguard individual rights [11]. Furthermore, the potential for AI to enable or hinder the exercise of freedom of expression and access to information is an area of ongoing investigation [12].
- AI for Sustainability:** AI's role in advancing sustainability objectives is another key focus of research. AI-driven solutions have been applied to climate change modeling, resource management, and renewable energy optimization [13]. These applications hold promise for mitigating environmental challenges, but their ethical implications, such as data privacy and energy consumption, must be carefully considered [14]. Additionally, AI can facilitate sustainable urban planning and transportation systems, aligning with the United Nations Sustainable Development Goals [15].
- Ethical Dilemmas:** Ethical dilemmas at the nexus of AI, human rights, and sustainability are a central theme. Algorithmic bias and discrimination are persistent concerns, with AI systems often replicating and exacerbating societal biases [16]. Balancing the potential for AI to improve decision-making processes while addressing these biases is a complex challenge [17]. The ethical trade-offs between AI-driven efficiency and human rights protections are also a subject of ongoing debate [18].
- Regulatory Frameworks:** The development of regulatory frameworks to govern AI's ethical use within the contexts of human rights and sustainability is a pressing issue. Researchers have called for comprehensive legal and ethical guidelines to guide AI development, deployment, and oversight [19]. The European Union's General Data Protection Regulation (GDPR) and the growing field of AI ethics principles represent significant steps toward addressing these concerns [20].
- Interdisciplinary Approaches:** Multidisciplinary approaches have gained prominence in addressing the complex ethical dimensions of AI. Research at the intersection of ethics, law, technology, and social sciences seeks to provide a holistic understanding of the ethical challenges posed by AI in the realms of human rights and sustainability [21].

In conclusion, the existing literature underscores the need for a nuanced understanding of AI's impact on human rights and sustainability ethics. It highlights the importance of addressing ethical concerns while harnessing AI's potential for positive change. However, there is an ongoing need for further research to develop practical guidelines, ethical frameworks, and policy recommendations that strike a balance between AI-driven innovation and the protection of fundamental human rights and sustainable development goals [22].

## EXPLORING ETHICAL CHALLENGES AND OPPORTUNITIES WITH A MULTIDISCIPLINARY APPROACH

The examination of ethical challenges and opportunities presented by AI at the intersection of human rights and sustainability necessitates a detailed multidisciplinary approach that draws from insights in ethics, law, and technology studies. This comprehensive perspective offers a nuanced understanding of the complex ethical landscape surrounding AI deployment in these contexts.

**Ethics:** Ethics serves as the foundational pillar of this multidisciplinary approach. It provides the philosophical framework for assessing the moral dimensions of AI technologies [23]. Ethical analysis offers a lens through which to evaluate AI's impact on human rights, emphasizing core principles such as fairness, transparency, accountability, and non-discrimination [24]. By delving deeply into ethical considerations, this approach enables the exploration of complex ethical dilemmas, such as the trade-offs between privacy and security in AI-driven surveillance systems [31]. Moreover, it guides the examination of ethical challenges in sustainability contexts, such as the ethical use of AI in wildlife conservation or agricultural practices [32].

**Law:** Legal studies play a pivotal role in evaluating the regulatory environment surrounding AI applications. Examining existing legal frameworks and emerging legislation, such as Uzbekistan's data protection and privacy laws, provides crucial insights into the legal protections and limitations governing AI's impact on human rights and sustainability [26]. Legal scholars contribute to the development of robust regulatory mechanisms that balance technological innovation with ethical standards [27]. In the context of human rights, this approach entails an examination of international conventions, such as the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights, to assess AI's compliance with fundamental rights [33].



**Technology Studies:** Technology studies encompass a diverse range of disciplines, including computer science, engineering, and information systems. This facet of the multidisciplinary approach delves into the technical intricacies of AI, allowing for a critical evaluation of algorithmic bias, data privacy mechanisms, and system design considerations [28]. It empowers researchers to assess the feasibility of ethical principles in practice, such as designing AI systems that can explain their decisions transparently [34]. Furthermore, technology studies facilitate the development of technical solutions to ethical challenges, including the creation of bias mitigation algorithms or the implementation of privacy-enhancing technologies [29]. Researchers in this domain explore the intricacies of sustainable AI development, addressing issues like energy efficiency and resource optimization in AI systems [35].

By integrating these multidisciplinary perspectives, this paper seeks to provide a comprehensive and detailed analysis of the ethical challenges and opportunities inherent in AI's impact on human rights and sustainability. This holistic approach aims to deepen our understanding of the intricate ethical landscape surrounding AI, thereby informing the development of ethical frameworks, guidelines, and policies that promote responsible AI deployment while upholding human rights and sustainability principles [30].

## OUTLINING A CONCEPTUAL FRAMEWORK FOR ETHICAL AI DEVELOPMENT AND DEPLOYMENT

This section presents a comprehensive and advanced elaboration of the conceptual framework for the ethical development and deployment of AI systems, aligning them with human rights principles and sustainability goals. Building on the multidisciplinary analysis of AI's ethical complexities, this framework offers nuanced guidance to policymakers, technologists, and stakeholders, addressing the intricate terrain of AI ethics within the contexts of human rights and sustainability.

**Foundations in Human Rights:** At the heart of this framework lies a profound commitment to human rights principles. It unequivocally establishes the paramount importance of universally recognized human rights, rooted in international declarations and conventions such as the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights. This foundation underscores that AI systems must be meticulously designed and operated to be fully consistent with these fundamental rights. It encompasses a holistic approach, encompassing the right to privacy, non-discrimination, due process, and freedom of expression. This principled foundation is essential for ensuring that AI technologies align with the broader ethical landscape and respect individual liberties.

**Transparency and Accountability:** Transparency and accountability are twin pillars that uphold the edifice of ethical AI development and deployment within this framework. It demands a high degree of transparency from AI developers and organizations, requiring them to provide not just mere glimpses but comprehensive documentation and lucid explanations regarding the inner workings of AI algorithms and decision-making processes. This radical transparency enables scrutiny and comprehension by relevant stakeholders. In tandem, the framework mandates the establishment of robust accountability mechanisms. These mechanisms include assigning clear responsibilities to individuals or entities and creating accessible avenues for grievance redressal. These facets ensure that ethical considerations remain at the forefront throughout the AI lifecycle.

**Bias Mitigation:** Addressing the pervasive issue of algorithmic bias is central to the framework. It advances a meticulous approach to bias mitigation, stressing the necessity for continuous vigilance. The framework compels AI developers and organizations to implement ongoing monitoring and rigorous audits of AI systems. These measures serve to unearth and rectify biases that may inadvertently surface during the training and deployment phases. Moreover, the framework underscores the criticality of utilizing diverse and representative datasets, a key strategy to minimize bias. Additionally, it underscores the imperative for the development and adoption of fairness-aware algorithms, a crucial step in ensuring that AI decision-making is both equitable and ethical.

**Sustainability by Design:** Sustainability considerations are seamlessly integrated into the very DNA of AI systems within this framework. It meticulously outlines that AI algorithms and applications must be meticulously optimized for energy efficiency. Furthermore, the framework places a strong emphasis on reducing the environmental footprint of AI technologies. Beyond mitigating their own environmental impact, AI technologies are expected to actively contribute to sustainability objectives. This includes supporting climate change mitigation efforts and contributing to responsible resource conservation.

**Ethical Impact Assessment:** At its core, the framework champions the systematic integration of ethical impact assessments throughout the entire AI development lifecycle. It advocates for the use of standardized tools and methodologies for conducting these assessments. These assessments are designed to holistically evaluate the potential ethical ramifications of AI systems, affording developers and users the ability to proactively identify and mitigate risks. This comprehensive approach ensures that AI technologies do not inadvertently compromise human rights or undermine sustainability endeavors.



**Interdisciplinary Collaboration:** Recognizing the multidimensional and evolving nature of AI ethics, this framework champions interdisciplinary collaboration. It specifies that diverse teams of ethicists, legal experts, technologists, and sustainability specialists must be actively engaged in the development and deployment of AI systems. This collaborative ethos fosters a holistic approach to ethical AI development, where a wealth of perspectives converge, resulting in AI systems that not only respect human rights but also actively contribute to sustainability goals.

In summary, the meticulously detailed conceptual framework presented here serves as a beacon for ethical AI development and deployment. By adhering to this framework, stakeholders can harness the full potential of AI as a transformative force for positive change. Simultaneously, it enables the mitigation of ethical challenges, ensuring that AI plays a pivotal role in shaping a more equitable, just, and sustainable future.

**Table 1: Elements of the Conceptual Framework**

Framework Element	Description
Foundations in Human Rights	Universally recognized human rights principles as a foundational cornerstone for AI development and deployment.
Transparency and Accountability	Radical transparency and robust accountability mechanisms throughout the AI lifecycle.
Bias Mitigation	Ongoing monitoring, audits, diverse datasets, and fairness-aware algorithms to mitigate algorithmic bias.
Sustainability by Design	Integration of sustainability principles into AI design, optimizing for energy efficiency and eco-responsibility.
Ethical Impact Assessment	Systematic ethical impact assessments using standardized tools and methodologies.
Interdisciplinary Collaboration	Inclusion of diverse expertise from ethicists, legal experts, technologists, and sustainability specialists.

In conclusion, the outlined conceptual framework provides a structured and advanced approach to guide the ethical development and deployment of AI. By adhering to this meticulously detailed framework, stakeholders can harness the full potential of AI as a transformative force for positive change. Simultaneously, it enables the mitigation of ethical challenges, ensuring that AI plays a pivotal role in shaping a more equitable, just, and sustainable future.

## CONCLUSION: NAVIGATING THE COMPLEX ETHICAL LANDSCAPE OF AI

After an in-depth exploration of AI's ethical dimensions at the intersection of human rights and sustainability, several critical findings emerge. We have uncovered the central role AI plays in shaping modern society, presenting both significant opportunities and profound ethical challenges. Our multidisciplinary approach has shed light on the intricate interplay between ethics, law, technology, and sustainability, underscoring the need for a holistic perspective in addressing these complex issues.

**The Primacy of Human Rights:** Human rights must remain at the forefront of AI development and deployment. Universally recognized human rights principles, enshrined in international declarations and conventions, provide a solid ethical foundation that AI systems must adhere to. Policymakers and technologists must prioritize the protection of privacy, non-discrimination, due process, and freedom of expression, ensuring that AI technologies respect and safeguard these fundamental rights.

**Transparency and Accountability:** Transparency and accountability are non-negotiable components of responsible AI governance. The opacity of AI algorithms and decision-making processes poses ethical risks, necessitating clear documentation and explanations. Establishing mechanisms for accountability, with designated responsible parties and accessible grievance redressal avenues, is imperative to ensure ethical compliance throughout the AI lifecycle.

**Bias Mitigation:** Addressing algorithmic bias remains a pressing concern. The framework for bias mitigation calls for vigilant monitoring and auditing of AI systems, coupled with the use of diverse and representative datasets to minimize bias. The development of fairness-aware algorithms is crucial in mitigating disparities and promoting ethical decision-making.

**Sustainability Integration:** Sustainability considerations must be integrated into AI design and operation. AI algorithms and applications should be optimized for energy efficiency and environmentally responsible practices, aligning with sustainability objectives such as climate change mitigation and resource conservation.



**Ethical Impact Assessment:** Ethical impact assessments serve as essential tools for anticipating and mitigating ethical risks associated with AI. Standardized methodologies and assessments throughout the AI development lifecycle are critical to ensure that AI technologies do not inadvertently compromise human rights or hinder sustainability efforts.

In light of these findings, we offer practical recommendations for policymakers, technologists, and stakeholders:

#### For Policymakers:

- Develop and enact comprehensive AI ethics legislation that incorporates human rights and sustainability principles.
- Foster international collaboration to create standardized ethical guidelines for AI development and deployment.
- Establish regulatory bodies with the authority to enforce ethical AI standards and conduct regular audits.

#### For Technologists:

- Prioritize transparency in AI design, ensuring that algorithms are explainable and understandable.
- Continuously monitor and evaluate AI systems for bias and discrimination.
- Collaborate with ethicists, legal experts, and sustainability specialists to embed ethical considerations into AI development processes.

#### For Stakeholders:

- Advocate for ethical AI practices within organizations and industries.
- Support and invest in research and development of AI technologies that align with human rights and sustainability goals.
- Engage in interdisciplinary collaborations to ensure ethical AI deployment.

In conclusion, the ethical landscape of AI is multifaceted and dynamic, demanding a proactive and concerted effort from all stakeholders. By embracing the findings and recommendations presented here, we can navigate this complexity and harness the potential of AI as a force for positive change while upholding human rights and advancing sustainability in our contemporary society.

#### References:

1. Yang, S. J. H., Ogata, H., Matsui, T., & Chen, N. S. (2021). Human-centered artificial intelligence in education: Seeing the invisible through the visible. *Artificial Intelligence in Education*.
2. Pedro, F., Subosa, M., Rivas, A., & Valverde, P. (2019). Artificial intelligence in education: Challenges and opportunities for sustainable development.
3. Stahl, B. C. (2021). Ethical issues of AI. *Artificial Intelligence for a Better Future: An Ecosystem*.
4. Wang, Y., Xiong, M., & Olya, H. (2020). Toward an understanding of responsible artificial intelligence practices. *Proceedings of the 53rd Hawaii*.
5. Khakurel, J., Penzenstadler, B., Porras, J., & Knutas, A. (2018). The rise of artificial intelligence under the lens of sustainability. *Technologies*.
6. Yigitcanlar, T., & Cugurullo, F. (2020). The sustainability of artificial intelligence: An urbanistic viewpoint from the lens of smart and sustainable cities. *Sustainability*.
7. Galaz, V., Centeno, M. A., Callahan, P. W., & Causevic, A. (2021). Artificial intelligence, systemic risks, and sustainability. *Technology in Society*.
8. Nishant, R., Kennedy, M., & Corbett, J. (2020). Artificial intelligence for sustainability: Challenges, opportunities, and a research agenda. *International Journal of Information*.
9. Manning, L., Brewer, S., Craigon, P. J., Frey, J., & others. (2022). Artificial intelligence and ethics within the food sector: Developing a common language for technology adoption across the supply chain. *Trends in Food Science*.
10. Chiu, T. K. F., & Chai, C. (2020). Sustainable curriculum planning for artificial intelligence education: A self-determination theory perspective. *Sustainability*.
11. Walsh, T., Levy, N., Bell, G., Elliott, A., & Maclaurin, J. (2019). The effective and ethical development of artificial intelligence: an opportunity to improve our wellbeing.
12. Stahl, B. C. (2021). Artificial intelligence for a better future: An ecosystem perspective on the ethics of AI and emerging digital technologies.
13. Vidgen, R., Hindle, G., & Randolph, I. (2020). Exploring the ethical implications of business analytics with a business ethics canvas. *European Journal of Operational*.



14. Stahl, B. C., & Wright, D. (2018). Ethics and privacy in AI and big data: Implementing responsible research and innovation. *IEEE Security & Privacy*.
15. Boada, J. P., Maestre, B. R., & Genís, C. T. (2021). The ethical issues of social assistive robotics: A critical literature review. *Technology in Society*.
16. Dauvergne, P. (2020). AI in the Wild: Sustainability in the Age of Artificial Intelligence.
17. Aizenberg, E., & Van Den Hoven, J. (2020). Designing for human rights in AI. *Big Data & Society*.
18. Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., & others. (2020). The role of artificial intelligence in achieving the Sustainable Development Goals. *Nature*.
19. Siala, H., & Wang, Y. (2022). SHIFTing artificial intelligence to be responsible in healthcare: A systematic review. *Social Science & Medicine*.
20. Kazim, E., & Koshyama, A. S. (2021). A high-level overview of AI ethics. *Patterns*.
21. Cunneen, M., Mullins, M., & Murphy, F. (2019). Artificial driving intelligence and moral agency: Examining the decision ontology of unavoidable road traffic accidents through the prism of the trolley dilemma.
22. Gupta, S., Langhans, S. D., Domisch, S., & others. (2021). Assessing whether artificial intelligence is an enabler or an inhibitor of sustainability at indicator level. *Transportation*.
23. Amann, J., & Blasimme, A. (2020). Explainability for artificial intelligence in healthcare: a multidisciplinary perspective. *BMC medical*.
24. Robinson, S. C. (2020). Trust, transparency, and openness: How inclusion of cultural values shapes Nordic national public policy strategies for artificial intelligence (AI). *Technology in Society*.
25. Lim, H. S. M., & Taeihagh, A. (2019). Algorithmic decision-making in AVs: Understanding ethical and technical concerns for smart cities. *Sustainability*.
26. Medvedeva, M., Vols, M., & Wieling, M. (2020). Using machine learning to predict decisions of the European Court of Human Rights. *Artificial Intelligence and Law*. [DOI if available].
27. Alston, P. (2018). Statement on visit to the United Kingdom, by Professor Philip Alston, United Nations Special Rapporteur on extreme poverty and human rights.
28. Cath, C. (2018). Governing artificial intelligence: ethical, legal and technical opportunities and challenges. *Philosophical Transactions of the Royal Society*.
29. Nemitz, P. (2018). Constitutional democracy and technology in the age of artificial intelligence. *Philosophical Transactions of the Royal Society A*.
30. Geis, J. R., Brady, A. P., Wu, C. C., Spencer, J., & Ranschaert, E. (2019). Ethics of artificial intelligence in radiology: summary of the joint European and North American multisociety statement. *Radiology*.
31. Ishay, M. R. (2022). The human rights reader: Major political essays, speeches, and documents from ancient times to the present.
32. Fjeld, J., Achten, N., Hilligoss, H., & Nagy, A. (2020). Principled artificial intelligence: Mapping consensus in ethical and rights-based approaches to principles for AI. Berkman Klein Center.
33. McGregor, L., Murray, D., & Ng, V. (2019). International human rights law as a framework for algorithmic accountability. *International & Comparative Law*.
34. Gabriel, I. (2020). Artificial intelligence, values, and alignment. *Minds and Machines*.
35. Ntoutsi, E., Fafalios, P., Gadiraju, U., & others. (2020). Bias in data-driven artificial intelligence systems—An introductory survey. *Data Mining and Knowledge Discovery*.

# Yashil

IQTISODIYOT  
va  
TARAQQIYOT

Ijtimoiy, iqtisodiy, siyosiy, ilmiy, ommabop jurnal

**Ingliz tili muharriri:** Feruz Hakimov

**Musahhih:** Xondamir Ismoilov

**Sahifalovchi va dizayner:** Iskandar Islomov

**2023. № 9**

© Materiallar ko'chirib bosilganda "Yashil iqtisodiyot va taraqqiyot" jurnalni manba sifatida ko'rsatilishi shart. Jurnalda bosilgan material va reklamalardagi dalillarning aniqligiga mualliflar ma'sul. Tahririyat fikri har vaqt ham mualliflar fikriga mos kelamasligi mumkin. Tahririyatga yuborilgan materiallar qaytarilmaydi.

Mazkur jurnalda maqolalar chop etish uchun quyidagi havolalarga maqola, reklama, hikoya va boshqa ijodiy materiallar yuborishingiz mumkin.

Materiallar va reklamalar pullik asosda chop etiladi.

E-mail: sq143235@gmail.com

Bot: @iqtisodiyot\_77

Telefon: 93 718 40 07

Jurnalga istalgan payt quyidagi rekvizitlar orqali obuna bo'lisingiz mumkin. Obuna bo'lgach, @iqtisodiyot\_77 telegram sahifamizga to'lov haqidagi ma'lumotni skrinshot yoki foto shaklida jo'natishingizni so'raymiz. Shu asosda har oygi jurnal yangi sonini manzilingizga jo'natamiz.

"Yashil iqtisodiyot va taraqqiyot" jurnalni 03.11.2022-yildan O'zbekiston Respublikasi Prezidenti Administratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan №566955 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.

Litsenziya raqami: №046523. PNFL: 30407832680027



**Manzilimiz:** Toshkent shahar, Mirzo Ulug'bek tumani  
Kumushkon ko'chasi, 26-uy.