

# MUHANDISLIK

## & IQTISODIYOT

4-MAXSUS SON

*Ijtimoiy-iqtisodiy, innovatsion texnik,  
fan va ta'limga oid ilmiy-amaliy jurnal*

2026  
sentyabr-oktabr

### Belarus–O'zbekiston

ilmiy-texnik hamkorligi: zamonaviy muhandislik  
ta'limi, amaliy kvalifikatsiyalar va innovatsion  
sanoat rivoji



ISSN: 3060-463X

Xalqaro ilmiy-amaliy konferensiya

РЭУ.РФ  
ИМЕНИ Г.В. ПЛЕХАНОВА  
ФИЛИАЛ В Г. ТАШКЕНТЕ



# muhandislik & iqtisodiyot

ijtimoiy-iqtisodiy, innovatsion texnik,  
fan va ta'limga oid ilmiy-amaliy jurnal

*Elektron nashr, 2026-yil, sentyabr/oktabr.*

## **Bosh muharrir:**

**Zokirova Nodira Kalandarovna**, iqtisodiyot fanlari doktori, DSc, professor

## **Bosh muharrir o'rinbosari:**

**Shakarov Zafar G'afarovich**, iqtisodiyot fanlari bo'yicha falsafa doktori, PhD, dotsent

## **Tahrir hay'ati:**

**Abduraxmanov Kalendar Xodjayevich**, O'z FA akademigi, iqtisodiyot fanlari doktori, professor

**Sharipov Kongratbay Avezimbetovich**, texnika fanlari doktori, professor

**Maxkamov Baxtiyor Shuxratovich**, iqtisodiyot fanlari doktori, professor

**Abduraxmanova Gulnora Kalandarovna**, iqtisodiyot fanlari doktori, professor

**Shaumarov Said Sanatovich**, texnika fanlari doktori, professor

**Turayev Bahodir Xatamovich**, iqtisodiyot fanlari doktori, professor

**Nasimov Dilmurod Abdulloyevich**, iqtisodiyot fanlari doktori (DSc), professor

**Allayeva Gulchexra Jalgasovna**, iqtisodiyot fanlari doktori, professor

**Arabov Nurali Uralovich**, iqtisodiyot fanlari doktori, professor

**Maxmudov Odiljon Xolmirzayevich**, iqtisodiyot fanlari doktori, professor

**Xamrayeva Sayyora Nasimovna**, iqtisodiyot fanlari doktori, professor

**Bobonazarova Jamila Xolmurodovna**, iqtisodiyot fanlari doktori, professor

**Irmatova Aziza Baxromovna**, iqtisodiyot fanlari doktori, professor

**Bo'taboyev Mahammadjon To'ychiyevich**, iqtisodiyot fanlari doktori, professor

**Shamshiyeva Nargizaxon Nosirxuja kizi**, iqtisodiyot fanlari doktori, professor,

**Xolmuxamedov Muhsinjon Murodullayevich**, iqtisodiyot fanlari nomzodi, dotsent

**Xodjayeva Nodiraxon Abdurashidovna**, iqtisodiyot fanlari nomzodi, dotsent

**Amanov Otabek Amankulovich**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

**Toxirov Jaloliddin Ochil o'g'li**, texnika fanlari bo'yicha falsafa doktori (PhD)

**Qurbonov Samandar Pulatovich**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Zikriyoyev Aziz Sadulloyevich**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Tabayev Azamat Zaripbayevich**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Sxay Lana Aleksandrovna**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

**Ismoilova Gulnora Fayzullayevna**, iqtisodiyot fanlari nomzodi, dotsent

**Djumaniyazov Umrbek Ilxamovich**, iqtisodiyot fanlari nomzodi, dotsent

**Kasimova Nargiza Sabitdjanovna**, iqtisodiyot fanlari nomzodi, dotsent

**Kalanova Moxigul Baxritdinovna**, dotsent

**Ashurzoda Luiza Muxtarovna**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Sharipov Sardor Begmaxmat o'g'li**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Tursunov Ulug'bek Sativoldiyevich**, iqtisodiyot fanlari doktori (DSc), dotsent

**Bauyetdinov Majit Janizaqovich**, Toshkent davlat iqtisodiyot universiteti dotsenti, PhD

**Botirov Bozorbek Musurmon o'g'li**, Texnika fanlari bo'yicha falsafa doktori (PhD)

**Sultonov Shavkatjon Abdullayevich**, Kimyo fanlari doktori, (DSc)

**Jo'raeva Malohat Muhammadovna**, filologiya fanlari doktori (DSc), professor.

**Yusupov Maxamadamin Abduxamidovich**, iqtisodiyot fanlari nomzodi (DSc), professor

**Kalonova Moxigul Baxritdinovna**, iqtisodiyot fanlari nomzodi (PhD), dotsent

**Mirzayev Kulmamat Djanzakovich**, iqtisodiyot fanlari nomzodi (DSc), professor.

**Karimova Nilufar Sadirdin qizi**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Norboyev Odil Abrayevich**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

**Karimova Nilufar Sadirdin qizi**, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

**Pardaev Umidjon Uralovich**, iqtisodiyot fanlari doktori (DSc), professor

**Xolmirzayev Ulug'bek Abdulazizovich**, Iqtisodiyot fanlari doktori (DSc)

# muhandislik & iqtisodiyot

ijtimoiy-iqtisodiy, innovatsion texnik,  
fan va ta'limga oid ilmiy-amaliy jurnal

- 05.01.00 – Axborot texnologiyalari, boshqaruv va kompyuter grafikasi
- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellash
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
- 05.04.01 – Telekommunikatsiya va kompyuter tizimlari, telekommunikatsiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
- 05.05.03 – Yorug'lik texnikasi. Maxsus yoritish texnologiyasi
- 05.05.05 – Issiqlik texnikasining nazariy asoslari
- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.08.06 – "G'ildirakli va gusenisali mashinalar va ularni ishlatish" (texnika fanlari)
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
- 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

Ma'lumot uchun, OAK  
Rayosatining 2024-yil 28-avgustdagi 360/5-son qarori bilan "Dissertatsiyalar asosiy ilmiy natijalarini chop etishga tavsiya etilgan milliy ilmiy nashrlar ro'yxati"ga texnika va iqtisodiyot fanlari bo'yicha "Muhandislik va iqtisodiyot" jurnali ro'yxatga kiritilgan.

**Muassis:** "Tadbirkor va ishbilarmon" MChJ

**Hamkorlarimiz:**

1. Toshkent shahridagi G.V.Plexanov nomidagi Rossiya iqtisodiyot universiteti
2. Toshkent davlat iqtisodiyot universiteti
3. Toshkent irrigatsiya va qishloq xo'jaligini mexanizatsiyalash muhandislari instituti" milliy tadqiqot universiteti
4. Islom Karimov nomidagi Toshkent davlat texnika universiteti
5. Muhammad al-Xorazmiy nomidagi Toshkent axborot texnologiyalari universiteti
6. Toshkent davlat transport universiteti
7. Toshkent arxitektura-qurilish universiteti
8. Toshkent kimyo-texnologiya universiteti
9. Jizzax politexnika instituti



# MUNDARIJA

|                                                                                                                                                                                                      |    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| AHOLI DAROMADLARI VA TURMUSH DARAJASI: O'ZARO BOG'LIQLIK NAZARIYASI .....                                                                                                                            | 9  |
| <b>Abidova Shahnoza Abduvaliyevna</b>                                                                                                                                                                |    |
| THE IMPACT OF BUY NOW, PAY LATER SERVICES ON E-COMMERCE SALES .....                                                                                                                                  | 12 |
| <b>Maxmudova Munisaxon Abbos qizi</b>                                                                                                                                                                |    |
| ROUTE-LEVEL PROFITABILITY ZONES IN RAILWAY PASSENGER TRANSPORT .....                                                                                                                                 | 16 |
| <b>Eshboyev Ulugbek Farxodovich</b>                                                                                                                                                                  |    |
| AHOLI DAROMADLARI VA TURMUSH DARAJASI: O'ZARO BOG'LIQLIK NAZARIYASI .....                                                                                                                            | 20 |
| <b>Abidova Shahnoza Abduvaliyevna</b>                                                                                                                                                                |    |
| ОПЕРАЦИОННАЯ ЭФФЕКТИВНОСТЬ КАК ДРАЙВЕР ESG-ТРАНСФОРМАЦИИ ПРЕДПРИЯТИЙ<br>ПОЛИМЕРНОЙ УПАКОВКИ В УСЛОВИЯХ РАЗВИВАЮЩИХСЯ ЭКОНОМИК: ЭМПИРИЧЕСКОЕ<br>ОБОСНОВАНИЕ НА ПРИМЕРЕ ООО «SIRDARYO MEGA LUKS» ..... | 23 |
| <b>Ташпулатов Дильмурад Рустамович</b>                                                                                                                                                               |    |
| PREPARING STATE-OWNED COMMERCIAL BANKS FOR PRIVATIZATION: INSTITUTIONAL<br>TRANSFORMATION, CORPORATE GOVERNANCE, AND CAPITAL MARKET READINESS IN UZBEKISTAN..<br>.....                               | 28 |
| <b>Salamov Islam Tashkazakovich</b>                                                                                                                                                                  |    |
| RAQAMLI TO'LOVLAR ORQALI YASHIRIN IQTISODIYOT KO'LAMINI QISQARTIRISH: XITOIY TAJRIBASI<br>VA MAKROFISKAL SABOQLAR.....                                                                               | 34 |
| <b>Shonazarov Ashurali Akabayevich</b>                                                                                                                                                               |    |
| DIGITAL FACTORS INFLUENCING THE DEVELOPMENT OF THE SERVICE SECTOR IN TASHKENT CITY37                                                                                                                 |    |
| <b>Abdikayumov Bekzod Turdiniyozovich</b>                                                                                                                                                            |    |
| METALLARGA MEXANIK ISHLOV BERISH JARAYONLARINI KOMPYUTER MODELLASHTIRISH ASOSIDA<br>OPTIMALLASHTIRISH VA SAMARADORLIGINI OSHIRISH.....                                                               | 41 |
| <b>Usmonov Abbos Valijon o'g'li</b>                                                                                                                                                                  |    |
| IMPROVING THE MECHANISM FOR EXPERT ASSESSMENT AND CERTIFICATION OF FOOD SAFETY<br>BASED ON QUESTIONNAIRE SURVEYS .....                                                                               | 45 |
| <b>Mahamatova Maftuna Shukrullo qizi</b>                                                                                                                                                             |    |



# IMPROVING THE MECHANISM FOR EXPERT ASSESSMENT AND CERTIFICATION OF FOOD SAFETY BASED ON QUESTIONNAIRE SURVEYS

**Mahamatova Maftuna Shukrullo qizi**

Independent Researcher

Tashkent State University of Economics

E-mail: [maxamatova1998@gmail.com](mailto:maxamatova1998@gmail.com)

ORCID: 0009-0001-9518-3510

**Abstract.** The article examines the importance of expert assessment conducted through consumer surveys in determining the level of consumer awareness regarding food product certification and safety assurance. The study provides a scientific basis for interpreting the significance of the survey results.

**Keywords:** food safety, certification, survey, expert assessment, consumer interests.

**Annotatsiya.** Maqolada oziq-ovqat mahsulotlarini sertifikatlash va ularning xavfsizligini ta'minlash bo'yicha iste'molchilarning xabardorlik darajasini aniqlashda iste'molchilar o'rtasida o'tkazilgan so'rovnoma asosidagi ekspert baholashning ahamiyati o'rganilgan. Tadqiqotda so'rovnoma natijalarining ahamiyatini talqin qilish uchun ilmiy asoslar yoritilgan.

**Kalit so'zlar:** oziq-ovqat xavfsizligi, sertifikatlash, so'rovnoma, ekspert baholash, iste'molchilar manfaatlari.

**Аннотация.** В статье рассматривается значение экспертной оценки, проводимой на основе опросов потребителей, для определения уровня их осведомлённости в вопросах сертификации пищевой продукции и обеспечения её безопасности. В исследовании представлено научное обоснование значимости интерпретации результатов опроса.

**Ключевые слова:** безопасность пищевой продукции, сертификация, опрос, экспертная оценка, интересы потребителей.

The year-on-year rise in global risks associated with food supply highlights the growing urgency of ensuring a stable supply of high-quality food products for the population. In this context, key priorities include the early detection of potential food-related threats, the mitigation of their adverse effects, and the consistent satisfaction of the population's need for safe food products. Accordingly, improving the mechanisms for supplying the consumer market with food products—whose quality and safety are guaranteed, which are produced in compliance with national and international standards, and which are certified according to established procedures—is a matter of significant importance and a priority area for scientific and practical research.

In accordance with Decree of the President of the Republic of Uzbekistan No. PF-36 dated February 16, 2024, "On Additional Measures to Ensure Food Security in the Republic" [1], the following were established as priority areas of the Strategy for Ensuring Food Security and Healthy Nutrition in the Republic of Uzbekistan until 2030:

- introduction of effective economic and environmental management systems for the use of natural, financial, and material resources to ensure food security, healthy nutrition, and a healthy and active lifestyle for all segments of the population;

- creation of reserves of strategically important agricultural and food products and their raw materials through mechanisms based on the principles of a free market economy;

- identification, assessment, and management of risks that may arise in the process of ensuring food security and healthy nutrition due to the negative impact of natural and man-made disasters, global political and economic crises, pandemics, military operations, and other events, as well as the creation of an information and monitoring platform;

- improvement of social protection systems to provide food products to the population in need of social protection and ensure their sustainability;

- monitoring food safety indicators and promoting healthy nutrition principles and practices with broad public involvement.

Article 19 of the Law of the Republic of Uzbekistan "On Food Safety," entitled "Consumers' Rights and

Obligations in the Field of Food Safety" [2], states that consumers have the following rights:

- to receive necessary, reliable, and open information about the purchased food products;
- to appeal to the relevant authorities regarding unjustified increases in prices for food products and raw materials and the emergence of artificial shortages;
- to freely choose quality food products that do not pose a threat to their life and health in order to satisfy their physiological nutritional needs;
- to inform the relevant state control bodies about food products that are dangerous to their life and health;
- to receive compensation for material damage caused by food products that are dangerous to life and health, as well as by illegal actions (inaction) of the producer (seller) of food products, and compensation for moral damage, etc.

In general, in order to ensure the practical implementation of the above-mentioned regulatory and legal acts, maintain food safety, produce and supply consumers with food products that meet quality, regulatory, and hygienic requirements, protect the rights and interests of consumers, constantly study and monitor food safety, and study consumers' opinions on the provision of quality food products in this regard, it is important to examine the actual situation based on questionnaires and find solutions to outstanding issues in the field. Studying the current state of food safety and certification practices based on questionnaires allows us to directly assess the level of consumer awareness in the relevant field and identify the economic and organizational problems they face. The results of such empirical research form an important information base for evaluating the effectiveness of government programs and measures implemented in the field from the point of view of consumers, defining the priorities of existing problems, and developing scientifically based proposals and practical recommendations aimed at their elimination.

At the same time, assessing the impact of certification processes on consumer interests and purchasing decisions through direct questionnaires will serve to increase the level of openness and transparency in the industry. In particular, the results obtained will allow us to determine consumers' attitudes toward the quality and safety of food products offered on the consumer market, assess the level of trust in the certification system, and substantiate the impact of information on product safety on consumer choice. As a result, the findings may provide an empirical basis for determining practical measures to increase the effectiveness of the certification system, protect the rights and interests of consumers, and strengthen confidence in food products.

An online survey was conducted in Uzbekistan to study consumer opinions regarding the certification of food products for compliance with safety requirements. The survey was conducted in Tashkent to determine the safety indicators that each consumer considers when choosing and purchasing products, as well as consumers' opinions on the certification of food products for compliance with safety requirements [5].

In a survey conducted in Tashkent, respondents were grouped by age to examine differences in perceptions of food safety and certification. Analysis of the respondents' age distribution shows that those aged 31–45 years made up the largest share—57 people (38%). Of the respondents, 45 (30%) were aged 18–30, 33 (22%) were aged 45–60, 10 (7%) were under 18, and 5 (3%) were over 60.

Analysis of the results of the consumer survey showed that several issues related to food safety and certification were identified:

- In terms of consumer awareness of food product certification, 73.3% of respondents reported having insufficient information about certification. This indicates that consumer awareness in this area remains limited.
- When asked whether they pay attention to certificates or special marks when purchasing food products, 66.6% of respondents reported that they do not routinely consider such certificates or marks when making purchasing decisions.

In conclusion, the findings of the study and questionnaire survey indicate the importance of improving the effectiveness of the certification system in ensuring the quality and safety of food products. The results also highlight the need for appropriate organizational and economic measures to strengthen certification practices and consumer awareness.

## REFERENCES

1. Decree of the President of the Republic of Uzbekistan No. PF-36 dated February 16, 2024, "On Additional Measures to Ensure Food Security in the Republic". Annex 1: "Strategy for Ensuring Food Security and Healthy Nutrition in the Republic of Uzbekistan until 2030" [Electronic resource]. – URL: <https://lex.uz/docs/6802687> (accessed: 11.09.2026).
2. Law of the Republic of Uzbekistan No. O'RQ-1023 dated February 3, 2025, "On Food Safety" [Electronic resource]. – URL: <https://lex.uz/docs/7359113> (accessed: 11.09.2026).
3. Shodiev X., Xabibullaev I. *Statistika* [Statistics]: Textbook. – Tashkent: Iqtisod-Moliya, 2019. – 454 p.



4. Yuldashev S.R. *Sotsiologik anketa tuzish nazariyasi va amaliyoti* [Theory and Practice of Designing Sociological Questionnaires]: Scientific and Methodological Manual. – Tashkent: Yoshlar Nashriyot Uyi, 2020. – 72 p.
5. Survey on Consumers' Opinions Regarding the Certification of Food Products for Compliance with Safety Requirements [Electronic resource]. – Google Forms. – URL: [https://docs.google.com/forms/d/e/1FAIpQLSe8yV7v0YJdjZu1iLoH\\_TWG-Gsd0WzuNFWXHieFC9\\_w-NT1xQ/viewform](https://docs.google.com/forms/d/e/1FAIpQLSe8yV7v0YJdjZu1iLoH_TWG-Gsd0WzuNFWXHieFC9_w-NT1xQ/viewform) (accessed: 11.09.2026).



**Ingliz tili muharriri:** Feruz Hakimov

**Musahhih:** Zokir Alibekov

**Sahifalovchi va dizayner:** Abdurahmon Qurbonov

---

**2026**

---

© Materiallar ko'chirib bosilganda "Muhandislik va iqtisodiyot" jurnali 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.

"Muhandislik va iqtisodiyot" jurnali 26.06.2023-yildan  
O'zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi  
Axborot va ommaviy kommunikatsiyalar agentligi tomonidan  
№S-5669245 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.  
**Litsenziya raqami: №095310.**

**Manzilimiz: Toshkent shahri Yunusobod  
tumani 15-mavze 19-uy**





+998 93 718 40 07



<https://muhandislik-iqtisodiyot.uz/index.php/journal>



[t.me/yait\\_2100](https://t.me/yait_2100)