

Issues for Reforming the National Statistical System in the Country: In Case of Republic of Uzbekistan

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Abstract. In this paper have been investigated processes of reforming the national statistical system of Uzbekistan. The results of the study of the statistical capacity of countries shows that in international practice, a medium-term comprehensive document defining the priorities for future development of the national statistical system - "National Strategy for Statistics Development" has been adopted and implemented. It is also important to adopt the National Strategy for the Development of Statistics, which aimed at the development of close interdependence, taking into account not only the activities of national statistical offices, but also the activities of all statistical data producers in the country.

Keywords: International Monetary Fund, management systems, Statistical Capacity Index, statistical system, surveys.

1. INTRODUCTION

The National Statistical System (SISTAN) is a network of National Statistical Authorities that provide official statistical information. Within the frame of the National Statistical Program, about one thousand direct surveys or data elaboration projects - both national and local - are carried out every year. The SISTAN assures the uniformity of direction, the homogeneity of used methods and the rationalization of the processes of official statistics through an organizational and functional coordination plan, involving the entire public administration at central, regional and local levels [1]. The task of coordinating the SISTAN is statutorily held by ISTAT and its president is also the head of SISTAN. Together with ISTAT the other bodies belonging to the National Statistical System, namely their statistical offices, are: public bodies and agencies in charge of providing statistical information; central statistical offices of government's administrations; statistical offices of public bodies and private authorities (these last designated by law); statistical offices of Government's territorial offices; Chambers of Commerce; statistical offices of Autonomous Regions and Provinces; statistical offices of Provinces; statistical offices of principal towns; statistical offices of principal municipal cities, statistical offices of municipalities; statistical offices of small municipalities associated in partnership; statistical offices associated in partnership. ISTAT is entrusted to rule SISTAN through the Committee for Policy and Coordination of Statistical Information (Comstat). Chaired by ISTAT President, Comstat is a corporate body composed by 21 members: 10 representatives of Public Administrations, one representative for the Regions, one representative of the Union of Italian Provinces (Upi), one representative of the Union of Chambers, three representatives of the National Association of Italian Municipalities (Anci), two representatives of Public Bodies, ISTAT General Director and two professors in statistics and economics. The Committee issues guidelines and policies for SISTAN offices, decides on the National Statistical Programme (PSN), upon proposal by ISTAT President. SISTAN activity is supervised by the Commission for the Protection of Statistical Information (CPSI) which is an external, autonomous and independent body. In particular, the Commission supervises: the impartiality and completeness of statistical information, the quality of methodologies, the compliance of surveys with EU and international directives. The Commission, established within the Presidency of the Council of Ministers, is composed of high-profile university professors, directors of statistical or research institutes and managers of public administrations and bodies, which do not belong to SISTAN [20].

The large-scale reforms carried out in the Republic of Uzbekistan within the framework of the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021 also have an effect in the activities of statistical offices [3].

Openness and transparency of statistical data is ensured, users are able to have free access to relevant statistics, and these results are highly appreciated not only by internal users, but also by foreign users and, most importantly, by the international statistical community [2].

In particular, a number of legal documents were made by the President and the Government of the Republic of Uzbekistan aimed at reforming the sphere of statistics, widespread implementation of international standards and best world practices and, most importantly, ensuring the accuracy, reliability and transparency of statistical data.

It should be noted that until today there was no single document aimed at the comprehensive development of the national statistical system of the Republic of Uzbekistan. The existing regulatory and legal framework does not fully ensure the comprehensive development of the entire national statistical system of the country and is mainly aimed at improving the activities of the State Committee on Statistics without taking into account other producers of statistics such as producers of financial statistics, health statistics, education, ecology, environment, crime, etc.

Also, the assessment of the statistical potential in the World Bank's Statistical Capacity Index shows unsatisfactory results, which requires an integrated and scientifically based approach to improve it. At the same time, the Law on State Statistics, adopted in 2002, required updating.[4]

This article attempts to highlight the measures taken and their results in recent years aimed at the development of the statistical system in the Republic of Uzbekistan, their impact on the World Bank's Statistical Capacity Index, as well as the importance and significance of the "National Strategy for the Development of the Statistical System" as a continuation of reforms.

2. THE REGULATORY LEGAL ACTS

The regulatory legal acts of the President of the Republic of Uzbekistan adopted for the development of statistics were studied, such as:

- I. Resolution dated July 31, 2017 № PQ-3165 "On measures to improve the activities of the State Committee of the Republic of Uzbekistan on Statistics" a 5-year comprehensive program of activities was approved, which includes specific tasks to improve the functioning of the system, adhere to the generally recognized principles of openness, accessibility and transparency of statistical data. [3]
- II. Decree dated September 12, 2017 "On measures to ensure openness and transparency of economic and financial indicators in the Republic of Uzbekistan" provided an important basis for ensuring the openness of previously unpublished indicators and connecting the internationally recognized IMF enhanced General Data Dissemination System.
- III. Decree dated February 5, 2019 No.PF-5655 on the approval of the "Concept of the census in the Republic of Uzbekistan in 2022" serves as a necessary basis for a major event in a country - the census in 2022. In this regard, on March 16, 2020, the Law of the Republic of Uzbekistan "On Population Census" was adopted. [5]
- IV. Resolution dated April 9, 2019 No.PQ-4273 "On additional measures to ensure openness and transparency of public administration and increase the statistical capacity of the country" is an integral continuation of the above measures, as well as measures to improve the functioning of the National Open Data Portal as one of the internationally recognized main criteria for transparency. [6]
- V. Resolution dated August 3, 2020 No.PQ-4796 "On measures to further improve and develop the national statistical system of the Republic of Uzbekistan" contains important norms for the comprehensive improvement of the national statistical system and an important strategic document - "National Strategy for the Development of Statistics in 2020-2025". [8]

The documentation of international organizations was also studied such as:

- i) The recommendations of UNSD, Eurostat and PARIS21: National Strategies for the Development of

Statistics (NSDS); [10]

ii) UNECE: “Generic Law on Official Statistics”, December 2016 [11].

iii) World Bank: Statistical Capacity Index [12].

3. ANALYSIS AND RESULTS

As a result of the measures taken over the past years in accordance with the above normative legal acts the statistics provided to users have been radically improved in terms of quality, transparency and volume. Statistical publications and collections improved based on international experience and best practices.

Transparency of previously unavailable basic macroeconomic and financial indicators was ensured, and the Republic of Uzbekistan joined the enhanced General Data Dissemination System of the International Monetary Fund [14].

The main information resource - the official website of the State Committee of the Republic of Uzbekistan on Statistics redesigned and launched in accordance with modern standards. Measures taken to improve the operation of the Open data portal. Gradual introduction of innovative technologies (tablets) in the process of statistical surveys has begun [7].

Particular attention was paid to the process of professional development of system personnel. The Center for Retraining and Statistical Research under the State Committee of the Republic of Uzbekistan on Statistics was transformed into the Institute of Personnel Training and Statistical Research [8].

The scientific-electronic journal "Statistical Information Bulletin of Uzbekistan" and the Scientific Council on "Econometrics and Statistics" and "Information Systems and Technologies in the Economy" were established at the Institute.

In order to continue reforms in the field of statistics, in accordance with international best practices and recommendations of international organizations, the current state of the national statistical system has been analyzed, problems and shortcomings, as well as development priorities have been identified, and the Resolution of the President of the Republic of Uzbekistan No. PP-4796 “On measures to further improve and develop the national statistical system of the Republic of Uzbekistan” was adopted [9].

It is safe to say that the adoption of this resolution marked a new stage in the development of the national statistical system. In particular, the resolution sets a number of norms aimed at further improving the functioning of the national statistical system, such as:

Firstly, in order to further strengthen the independence of state statistics bodies, the independence of territorial divisions of the State Committee of the Republic of Uzbekistan on Statistics from local authorities was established, and the procedure for further appointment of heads of these divisions by the chairman was introduced [10].

Secondly, the coordinating role of the State Committee of the Republic of Uzbekistan on Statistics in the national statistical system strengthened; in particular, the Committee was empowered to audit the statistical methodologies of all ministries and agencies that compile statistical data for compliance with international standards,

Thirdly, the establishment of separate statistical units in all ministries and organizations for statistical data compilation strictly defined,

Fourth, the activity of the Statistical Council and the Public Council resumed for active participation in the development of the statistical system,

Fifth, the task of integrating information systems of ministries and agencies in order to optimize the formation of official statistics, the widespread introduction of advanced information and communication technologies in the field of statistics.

In addition, a Generic Law on official statistics developed by the UNECE for the countries of the Eastern Europe, Caucasus and Central Asia studied, in accordance with which a new Law “On official statistics” was developed, which is which is under approval. The approval of this Law will raise the regulatory framework in the field of statistics to a qualitatively new level that meets advanced international standards.

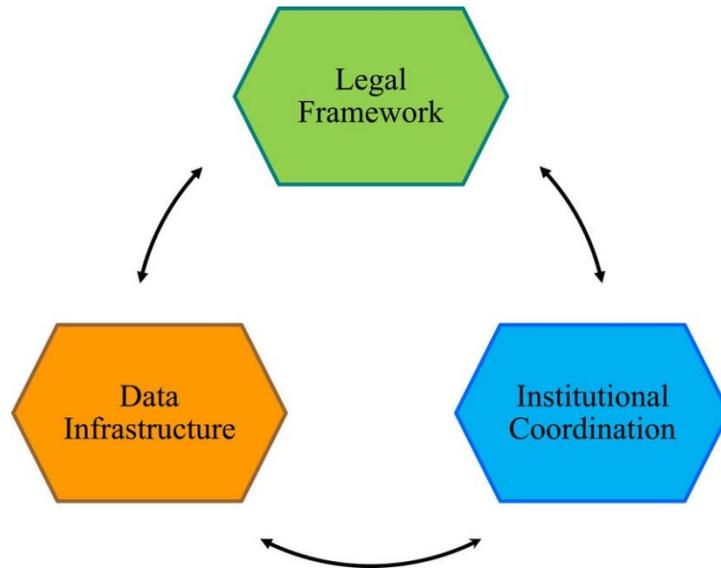


Figure 1. Fundamental pillars of a national statistical system [21]

In addition, the resolution approved the National Strategy for the Development of Statistics for 2020-2025, which for the first time in the history of country serves as a program for the improvement of the statistical system.

The strategy provides for the implementation of comprehensive measures in 6 areas, and in order to implement them in practice, a "Road Map" was adopted, which includes more than 200 activities for the implementation of 86 measures.

Legislation in the field of national statistics will be improving. A new draft Law "On Official Statistics" will be developing. In accordance with the UN recommendations, advanced quality management systems (GSIM, GSBPM, GAMSO, NQAF) will be introduced into the national statistical system (Figure 1) and in 2022 an ISO certificate will be obtained, indicating that the quality criteria have been met.

Improving Statistical Infrastructure

The statistical classifications and other instruments of the State Committee of the Republic of Uzbekistan on Statistics and other statistical data producers will be improving by studying international standards and best foreign practices.

Statistical registers will be improved in accordance with international practice. In addition to the population (in 2022) and agriculture (in 2023) censuses, business census will be carried out in 2024, and on this basis, business registers will be launched.

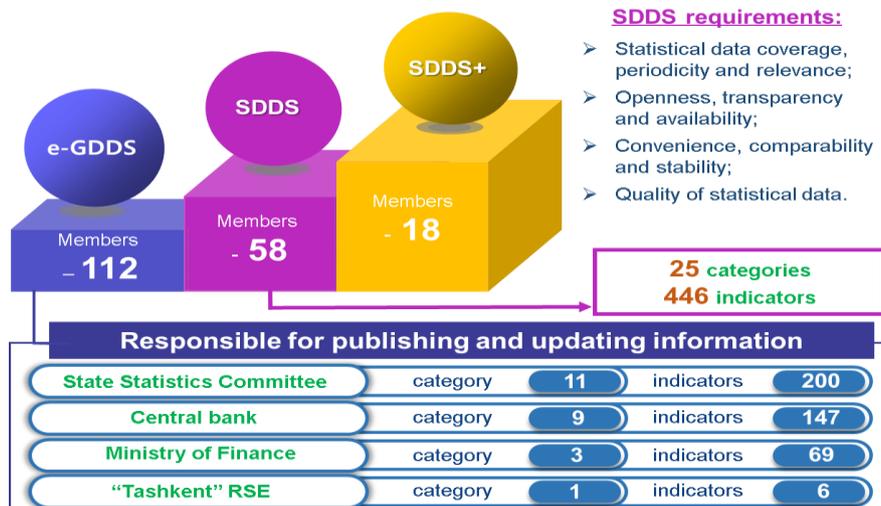


Figure 2. IMF data dissemination standards

In order to increase the representativeness of the data and to obtain the necessary data, the process of developing statistical surveys and methods of sampling will be improving.

The Republic of Uzbekistan will move from the IMF's enhanced General Data Dissemination System (e-GDDS) to the Special Data Dissemination Standard (SDDS) (Figure 2).

Interaction with users will be further strengthened. Guides on the use of statistical data will be developed, the level of user satisfaction with the data will be studied. Data release calendars will be aligned with best international practices. A modern "Media center" for the production of statistical videos will be established.

Databases of international organizations will be studied, defining indicators will be identified, methods for their formation will be developed, implemented and measures for full reflection in relevant databases will be taken (World Bank, UN Statistics Division, International Labor Organization, World Health Organization, FAO, International Transport Forum, UNESCO and etc.).

Work with data providers and data dissemination practices will be improved, surveys using call centers will be conducted, report burdens will be reduced using administrative data, and data quality will be improved.

Briefings and meetings with representatives of the media will be held on topical issues in the field of statistics. Roundtables will be held with leading universities, institutes, non-governmental non-profit organizations and local authorities.

The delivery of current statistics in the format of videos, info graphics, diagrams, topics and theses, in a way that is understandable to a wide range of users, will be further accelerated.

Close contacts will be established with reporting entities, and the quality of statistical data will be improved by ensuring the quality and regularity of preventive measures.

A modern automated information system for receiving statistical reports in electronic form (eStat-4.0) based on web technologies will be developed and launched.

The IT base of the system will be completely renewed; the necessary servers, computer equipment, printers, IP telephony equipment and devices will be purchased and installed.

Studying the best foreign practices, a new version of the Open Data Portal of the Republic of Uzbekistan will be developed and launched, new conveniences and features will be introduced, administrative information systems and resources of governmental agencies will be integrated with the portal.

Primary data collection processes will be improved, telephone surveys will be conducted, tablets will be used in the sample surveys, and reports will be received using 4th generation e-STAT software.

Information systems for storage, collecting, processing and dissemination of statistical data will be improved (Figure 3).

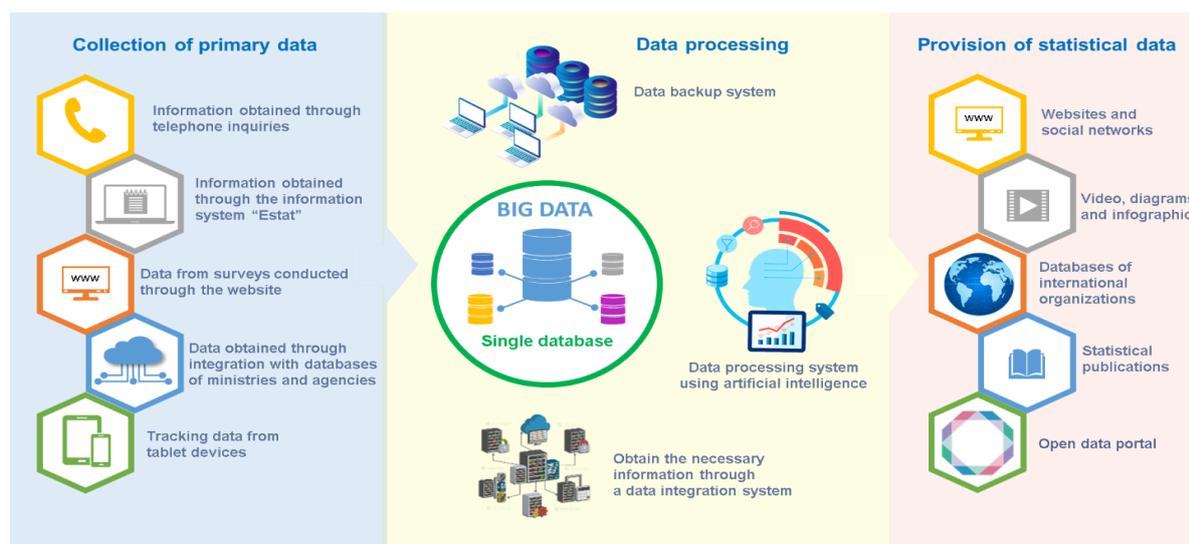


Figure 3. Improving the information and communication infrastructure for statistical data processing

Note: For information: servers, computers, printers, IP telephony equipment and devices in total about 20.0 billion soums will be purchased and installed in 2020-2021 within the framework of the funds allocated for the improvement of logistics of the system, videoconferencing and IP telephony systems will be introduced. All regional offices of the Statistics Committee will be connected to the fiber-optic network, which will allow high-speed data exchange.

Data processing processes will be automated, the processes of creating a single database and data entry into it will be fully automated, and the process of entering paper reports into the software will be eliminated, time and paper costs will be reduced, and most importantly, the human factor will be eliminated.

This work will also lead to the automation of statistical data dissemination processes. Modern systems of database management such as Oracle, MS SQL Server will be introduced for large-scale statistical data processing.

4. DISCUSSION OF RESULTS

Innovative technologies (tablets) will also be introduced for sample statistical surveys. The information and communication infrastructure will be completely modernized. Extensive use of surveillance drones and space imagery will be established (Figure 4).

This section provides for the implementation of 50 measures to improve the sectoral and regional statistics in 24 areas. In particular, for example, the harmonization of macroeconomic and social statistics, methods of statistical assessment of the shadow economy, statistics of tourism, employment, environmental accounting, transport, public finance and other sectors to international standards, as well as thorough preparation for the censuses (population, agriculture, business) and etc.

More than 15 latest recommendations, classifications and methodologies of the United Nations, the International Monetary Fund, the World Bank, the European Commission, the CIS Statistics Committee and others will be put into practice.

Statistical registers will be improved in accordance with international practice. In addition to the population and agricultural census, business census will be carried out in 2024, based on which business registers will be launched.

A high-quality energy balance will be formed on the basis of the recommendations of the United Nations and International Energy Agency.[17]

In order to increase the representativeness of the data and to obtain the necessary data, the process of developing statistical surveys and methods of sampling will be improved.[18]

Ecological and economic accounting system 2012, Oslo Instruction 2018, Frascati Instruction 2015, International Standard Classification of Education – 2011, International Standard Classification of Training - 2008, International Recommendations on Tourism Statistics-2008, Standard Classification of Goods for Transport Statistics -2007 and other internationally recognized international organizations recommendations will be fully implemented in practice.[13]

Human resources play an important role in improving the efficiency of work, so special attention is paid to improving their skills, further improving the statistical research in the field of statistics [19].

By the resolution of the Cabinet of Ministers dated August 17, 2020 No. 686, the Center for Personnel Retraining and Statistical Research under the State Committee of the Republic of Uzbekistan was transformed into the Institute of Personnel Training and Statistical Research. The Institute has organized training courses in 8 areas, on various 35 topical issues in the field of statistics, and annually improves the skills of 50% of system staff (1100-1200 people per year). [9]

The scientific journal "Statistical Bulletin of Uzbekistan" was created, which publishes current scientific articles, research and developments in the field of economics and statistics in a country.

Also, the Scientific Council for the award of the degree of Doctor of Philosophy and Doctor of Science in "Econometrics and Statistics" and "Information Systems and Technologies in Economics" was established at the institute.[15]

As an integral part of the strategy, the institute will establish a system of advanced training in the field of statistics on the basis of agreed plans and schedules of employees of public administration and local government, economic management. Regular training on the subject "Fundamentals of Statistics" will be established. There will be special training courses on the use of econometric packages such as "Statistica", "SPSS", "Eviews", "Stata" and etc.

Based on the need for staff in the field of statistics, the training of mid-level staff in vocational education institutions will be established [16]. In the field of economic education, new directions will be opened in higher education institutions ("Business analyst", "Large number analysis", "System analyst", "Data researcher", "Integration analyst", "Mathematical statistics", "Probability theory" and etc.) to train competitive specialists on the basis of a joint program with prestigious foreign higher education institutions.

The World Bank developed the Statistical Capacity Index in 2004 to study and evaluate the statistical potential of countries. The index reflects the statistical capacity of more than 140 countries, their achievements in this area and the results of ongoing reforms to develop the national statistical system.

Sources of assessment in the index are databases of international organizations and, the national information space of countries (participants of the national statistical system) and related documents (metadata, classifications, reviews etc.). [12]

Because of the work done over the past two years, today (report for 2019) Uzbekistan has a maximum score of 64.4 out of 100 in this index and occupies 84th place in the ranking.

5. CONCLUSIONS AND RECOMENDATIONS

In conclusion, it should be noted that the implementation of the above measures will achieve the following priorities:

- An advanced statistical system that fully meets modern requirements and international standards will be formed;
- A solid legislative basis will be created, the new Law "On Official Statistics" meets advanced international standards;
- The reporting burden on respondents will be significantly reduced due to alternative sources of information and administrative data, and as a result, the quality of statistical data will be at least doubled;

- Manpower resources saved through the proper distribution of work and the introduction of advanced ICT will be mobilized for a new type of statistical surveys to meet the growing demand of users for information;
- As a result, the volume of statistical data in the national information space, which is transparent, high quality and up-to-date, will be doubled, which in turn will increase the level of user satisfaction and confidence in the information;
- Serves to raise awareness of international organizations, financial institutions and foreign investors on the socio-economic situation and processes in a country;
- Results are improving in the World Bank's ranking of countries on the Statistical Capacity Index.

By ensuring the implementation of the tasks set out in the approved "Road Map" on the strategy and its implementation, rankings will be gradually improved, and by 2025 Uzbekistan will be able to enter the top 10 in the rankings, gaining 94 points.

REFERENCES

- [1] The Law of the Republic of Uzbekistan "On State Statistics", December 12, 2002, LRUz-441-II // <https://www.lex.uz/docs/53302>.
- [2] The Law of the Republic of Uzbekistan "On Population Registration", March 16, 2020, LRUz-611 // <https://www.lex.uz/docs/4766082>.
- [3] Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No 4947 "On the Strategy of Actions for the Further Development of the Republic of Uzbekistan" // <https://www.lex.uz/docs/3107042>.
- [4] On measures for the further implementation of the strategy of action on the five priority areas of development of the Republic of Uzbekistan in 2017 - 2021, August 15, 2017, No P-5024 // <https://www.lex.uz/docs/3307884>.
- [5] Resolution of the President of the Republic of Uzbekistan dated July 31, 2017 No PP-3165 "On measures to improve the activities of the State Committee of the Republic of Uzbekistan on Statistics" // <https://www.lex.uz/docs/3297204>.
- [6] Decree of the President of the Republic of Uzbekistan dated September 12, 2017 No R-5054 "On measures to ensure openness and transparency of economic and financial indicators in the Republic of Uzbekistan".
- [7] Decree of the President of the Republic of Uzbekistan dated February 5, 2019 No 5655 "On approval of the" Concept of the population census in the Republic of Uzbekistan in 2022 " // <https://www.lex.uz/docs/4190059>.
- [8] Resolution of the President of the Republic of Uzbekistan dated April 9, 2019 No PP-4273 "On additional measures to ensure openness and transparency of public administration and increase the statistical capacity of the country" // <https://www.lex.uz/docs/4277342>.
- [9] Resolution of the President of the Republic of Uzbekistan dated August 3, 2020 No PP-4796 "On measures to further improve and develop the national statistical system of the Republic of Uzbekistan" // <https://www.lex.uz/docs/4926736>.
- [10] Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated August 17, 2019 No 686 "On measures to improve the skills of personnel and the organization of the Institute of Statistical Research under the State Committee of the Republic of Uzbekistan on Statistics" // <https://www.lex.uz/docs/4477786>.
- [11] UNSD, Eurostat and PARIS21: National Strategies for the Development of Statistics (NSDS) // http://www.paris21.org/sites/default/files/1401_0.pdf.
- [12] UNECE: "Generic Law on Official Statistics", December 2016 // <https://www.unece.org/index.php?id=45114>.
- [13] World Bank: Statistical Capacity Index // <https://databank.worldbank.org/source/statistical-capacity-indicators>.
- [14] National Strategy for the Development of Statistics in the Republic of Uzbekistan for 2020-2025 // Tashkent, 2020.
- [15] International Monetary Fund information resources // <https://dsbb.imf.org/e-gdds/dqaf-base/country/UZB/category/NAG00>.
- [16] Begalov, B., & Umarov, M. (2022). Improving the Processes of Calculating the Inflation Rate in the Republic of Uzbekistan. *International Journal of Multicultural and Multireligious Understanding*, 9(3), 753-764.
- [17] Begalov, B. A., & Bobojonov, A. B. (2013). Primary trends of formation and development of innovation-based economy in the republic of Uzbekistan. *Statistics and Economics*, (5), 22-26.
- [18] Begalov, B. A., & Zhukovsky, A. D. (2021, November). High-Tech Companies are the Driver of Regional Economic Development. In *Second Conference on Sustainable Development: Industrial Future of Territories (IFT 2021)* (pp. 496-500). Atlantis Press.

- [19] Abdusalomova, N. (2017). Cost accounting and financial health: Analysis of cost reduction policy effect in selected enterprises of metallurgy industry in Uzbekistan. *International Journal of Management Science and Business Administration*, 3(3), 33-38.
- [20] Khodiev, B. Y., Mustafakulov, S. I., Tursunov, B. O., Sigidov, Y. I., & Khavrova, K. S. (2019). Methods for control efficiency evaluation of the production capacities application at the textile enterprises and the mechanism for optimal control. *Astra Salvensis*, 7(S1), 499.
- [21] <https://ec.europa.eu/eurostat/documents/64157/4372828/IT-description.pdf/ab1b0006-f87d-475e-9e38-3304d4cc76cc>.