

INNOVATION SCIENCE AND TECHNOLOGY



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ISSUE 2

 Acceptance of papers **FEBRUARY, 2025**



Acceptance of articles

Published every
monthly



Directions

Social, economic, political,
technological, scientific

ISSN 3060-5229

Digital
Object
Identifier

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THE SCIENTIFIC-POPULAR ELECTRONIC
JOURNAL **"INNOVATION SCIENCE AND
TECHNOLOGY"** HAS BEEN REGISTERED
UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

CONTACTS

Phone: **97-748-70-03**

Website: <https://ist-journal.uz>

Email: munis.iriskulova@gmail.com

Electronic publication, Issue 2. 77 pages.
Approved for publication on February 13, 2025.

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PRINCIPLES OF ORGANIZATION AND CONDUCT OF STATISTICAL OBSERVATIONS OF THE LIVING STANDARDS OF THE POPULATION

Ilyosova Dilbar Ismoil qizi

Personnel training and statistics

doctoral student of the Institute of research(PhD)

Abstract: This article examines indicators that represent the standard of living of the population in Uzbekistan and forms of observation of statistics on the standard of living of the population. It is aimed at studying the principles of organization and conduct of statistical observations of the living standards of the population.

Key words: pension, income from entrepreneurship, salary, budget, indexation, consumer basket, population income, food consumption, social payments, modernization, diversification, population income, transfer income.

INTRODUCTION

Statistical observations of the living standards of the population play a crucial role in assessing social and economic development. By systematically collecting and analyzing data on income levels, consumption patterns, employment, and access to essential services, policymakers can make informed decisions to improve public welfare. The organization and conduct of such statistical observations require adherence to methodological principles that ensure accuracy, reliability, and comparability of data. This article explores the fundamental principles governing statistical observations of living standards, highlighting their significance in shaping effective socio-economic policies.

LITERATURE REVIEW

Since the second half of the 19th century, a shift from political-economic views to economic-statistical ones has been observed in the study of living standards in the scientific perspectives of Western scholars. During this period, researchers primarily analyzed the real standard of living and actual consumption of workers. Scholars such as A. Smith, J. B. Marks, P. Menger, R. Barr, P. Samuelson, J. Keynes, G. Becker, A. V. Chayanov, A. N. Oleinik, V. M. Ztsherebina, I. I. Eliseeva, and others devoted their research to different aspects of household studies.

A significant contribution to the development of the concept of “standard of living” and the system of socio-economic indicators was made by the United Nations (UN). The UN’s version of the standard of living indicators system in international statistics was developed in 1978 and includes 12 main groups of indicators.

Since 1952, family budget monitoring has been regularly conducted in all republics of the USSR, covering approximately 52,000 families. In the Republic of Uzbekistan, until the period of 1991–2000, observations were conducted within social groups. Over the years, 4,000 households were monitored, primarily focusing on workers (collective farm workers), teachers, and doctors. However, these observations did not fully cover the entire population.

RESEARCH METHODOLOGY

Household monitoring in the Republic of Uzbekistan has been carried out since 2000 with the support and recommendations of the World Bank and the European Economic Commission. This observation follows an

improved methodology for conducting sample surveys in households, which is also used in several European Union countries.

Monitoring is conducted across all regions of Uzbekistan, including the Republic of Karakalpakstan, regional areas, and the city of Tashkent. The annual sample size constitutes 0.2 percent of the total household population in the country. From 2000 to 2021, sample observations were conducted in a total of 10,000 households in Uzbekistan. This sampling proportion is comparable to other countries, with 0.2 percent in Belarus, 0.3 percent in Kazakhstan, 0.1 percent in Russia, 0.2 percent in Turkmenistan, and 0.1 percent in Korea and Japan [1]. According to Article 9 of the Law “On Official Statistics” of the Republic of Uzbekistan, the statistical agency, as an authorized state body in the field of official statistics, develops, approves, and implements statistical observation forms in accordance with international recommendations. The decision of the statistical agency, “On Approval of Statistical Reporting Forms for 2023” (Resolution No. 23, dated November 16, 2022), was registered by the Ministry of Justice with state registration No. 3401 on December 12, 2022. Additionally, the formation of statistical reports and observation forms is carried out based on the manual approved by Annex 2 of the agency’s Resolution No. 41, dated December 27, 2022.

ANALYSIS AND RESULTS

A household surveillance survey is a document approved in accordance with established procedures, consisting of a list of clearly formulated questions designed to obtain information about households during the survey. The interviewer is an employee of the Territorial Statistics Department who conducts a question-and-answer session (interview) with household members selected for participation in the observation process. The respondent is a member of the household who participates in the survey and provides responses. The respondent may be the head of the household or another member with full knowledge of household-related matters [2].

The sample tracking form consists of the following sections: title section, questions and tables consisting of columns and rows, and the final section, which includes the details of the individual completing the observation form.

Table 1. Population living standards statistics tracking forms [3]ю

№	Observation form name	Periodicity
1	Individual poll	monthly
2	Household survey	monthly
3	Survey of availability of access to ICT tools and scope of use of ICT tools of household members	monthly
4	Survey of internal tourism and physical activity of the population	monthly

The patterns of sampling statistical observations can take the form of a questionnaire or a survey form. The questionnaire includes the respondent’s name, unique identification codes (e.g., STIR and other relevant codes), while the survey form contains details of the interviewer who conducted the observation.

The household sample surveillance program defines the following data collection processes: an individual survey of household members, a household survey, a survey on domestic tourism and physical activity of the population, and a survey on the availability and usage of ICT tools (Information and Communication Technology) among household members. The individual survey program includes questions related to demographic characteristics of household members, migration information (displaced and relocated persons), education, health, employment, savings and loans, and social benefits. The household survey program covers household income, food products consumed and purchased within a seven-day period, sources of consumed products, including domestically produced, donated, self-produced, acquired through labor, from stock, through barter, debt, or other means, food security, non-food product expenses, fuel consumption and energy sources, housing, utilities, and services expenses, assessment of material and social status, possession of long-term use items, and non-productive costs and payments.

Statistical analysis of the standard of living involves comparing different years, regions, and levels of economic development across the population, social groups, and households with varying income levels. The standard of living is primarily measured using the following indicators: net national income per capita, nominal

and real income indices, cost of living index, human development index, poverty index, and subsistence minimum. The standard of living is largely influenced by household income, which determines the level of personal needs satisfaction.

Population income refers to monetary and natural forms of means received by households at certain intervals, which include: wages of all categories of the population; pensions, benefits, scholarships, and other social transfers; income of individuals engaged in private entrepreneurship; income from foreign countries (wages, benefits, scholarships, grant funding, charity, humanitarian aid); income from property (interest from rental of housing, real estate, land, and other assets, rent, dividends, etc.); receipts from the sale of agricultural products, etc. In statistical practice, indicators of the standard of living of the population are formed based on the "Methodological Regulation on the Conduct of Household Monitoring" approved by the decision of the State Statistical Committee of the Republic of Uzbekistan dated March 18, 2022, No. 10. This includes the collection of statistical data on indicators of the standard of living of the population, which is established to have the right to receive data from legal entities and individuals in the prescribed manner through statistical reporting forms or various observations. When determining the Human Development Index, the arithmetic mean of the three above-mentioned indicators is calculated. Each index is determined using the following formula:

$$I = \frac{Df - Dmin}{Dmax - Dmin} \quad (1)$$

Here:

Df -the actual amount of the indicator;

D max-maximum amount;

D min-minimum amount;

Human perfection index ($I_{\pi d}$), based on expected life expectancy (I_t), education (I_{∂}), per capita income (I_{ipt}) indices has been identified:

$$I_{ipt} = \frac{I_{\pi d} + I_t + I_{\partial}}{3} \quad (2)$$

Research into increasing living standards has produced various indicators that represent an increase in living standards of the population. For example, the fact that net national income corresponds to different categories of population is expressed through the coefficient of living standards of the population in a given group:

$$K_v^t = \frac{\sum_{v=1}^n Smd_v^t}{\sum_{v=1}^n A_v^t} \quad (3)$$

Here:

K_v^t – tin a year coefficient of living standards of the population in the group;

Smd -net national income;

A_v^t – t in a year v-the population in the group is

The relationship of increasing the standard of living of the population to the level of consumption has been studied, expressed through the regression equation. In order to determine the parameters of the regression equation, the following system of linear equations has been developed.

$$\begin{cases} n \cdot a_0 + a_1 \sum X = \sum Y; \\ a_0 \sum X + a_1 \sum X^2 = \sum XY; \end{cases}$$

Here:

Y -gross domestic product per capita;

X -consumption costs per household;

a_0 and a_1 and regression equation parameters

The housing conditions of citizens are also improving. The pace and scope of housing development in all areas have been expanding year by year. During the years of independence, the total area of the housing stock increased 1.9 times. Almost all of the housing stock is privately owned by the population. Whereas, in many developed countries, more than half of families live in rented apartments and houses. In general, the pace of socio-economic development in our country has been increasing in recent years, leading to an improved standard of living for the population. Variations in some relevant indicators are presented in Table 1.

Table 2. Indicators that represent the standard of living of the population in Uzbekistan.

Specification	Years					
	2010	2015	2020	2021	2022	2023
Permanent resident population, thousand people	29123,4	30759,2	34558,9	35271,3	36024,9	36799,8
Average annual number of people employed in the economy, thousand people	11628,4	12818,4	13236,4	13538,9	13706,2	14014,2
Number of pension and social benefits recipients, thousand people	3265,8	3193,5	4029,4	4253,1	4578,1	4827,3
The real income of the population, billion. Sound	44296,2	98654,1	367456,6	468448,4	568527,8	662749,9
Number of preschool institutions	5375	5240	7753	7868	8412	9115
unit Number of secondary schools	9806	9764	10181	10289	10522	10750
Number of secondary special,	1539	1559	818	827	812	819
vocational educational institutions	65	66	127	154	191	219
Number of higher education institutions	1158	1238	1232	1281	1328	1432
Number of hospital facilities Population housing fund, mln. KV. meter	427,4	469,2	549,0	636,4	658,4	692,5

The share of income received from entrepreneurial activity in the structure of the population's income in our country is growing. During the years of independence, this figure increased from 10.6 percent to 52 percent. In the countries of the Commonwealth of Independent States (CIS), this figure does not exceed an average of 20–25 percent.

It should also be noted that Uzbekistan does not experience sharp income stratification among the population. The difference between the highest and lowest income-earning groups decreased from 53.3 times in 2000 to 7.8 times in 2014. This indicator, which serves as a criterion for social stability, is set at 10 times according to international standards.

Currently, economic scientists in our country, along with related organizations, are working on developing a methodology for indicators and a system of generalized indicators that accurately characterize the population's standard of living. In particular, in 2022, the Statistical Agency under the President of the Republic of Uzbekistan developed a new methodology for calculating the total income of the population. This methodology establishes the foundations for calculating and evaluating indicators that define the quality of life, as well as the significance of resources in shaping the level and composition of population income.

In Uzbekistan, a policy aimed at stimulating labor, increasing wages, and raising the population's income is being implemented with a strong social orientation. Notably, in 2023, real per capita income increased by 4.2 percent.

CONCLUSION AND RECOMMENDATIONS

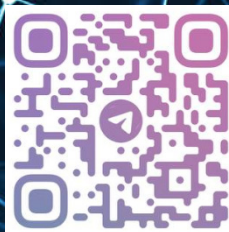
Uzbekistan has made significant progress in increasing the share of entrepreneurial income, reducing income inequality, and improving the overall standard of living. Since independence, the share of entrepreneurial income has risen from 10.6 percent to 52 percent, surpassing the CIS average of 20–25 percent. Income disparity has also narrowed, with the highest-to-lowest income ratio decreasing from 53.3 times in 2000 to

7.8 times in 2014, aligning with international stability standards. The adoption of a new methodology in 2022 has enhanced the accuracy of income and well-being assessments, supporting informed policy decisions. Additionally, in 2023, real per capita income increased by 4.2 percent, reflecting sustained economic growth.

To maintain and build on these achievements, it is essential to further support entrepreneurship, reduce income inequality, ensure wage growth, and enhance social protection. Improving statistical methodologies, promoting regional development, and monitoring inflation will also help sustain economic stability and social well-being. By continuing these efforts, Uzbekistan can further strengthen its inclusive economic growth and improve the quality of life for its population.

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