

Role and Prospects of The System of Public Education in The Process of Accounting for The Population in The Republic of Uzbekistan

Sharifhojaev Usman Ulfatovich

Doctor of Economic Sciences (DSc), First Deputy Minister of Public Education of the Republic of Uzbekistan,
Tashkent, Uzbekistan

Ibragimov Abdimalik Gapparovich

Ph.D, associate professor, head of the department of the national research institute for professional development of pedagogues and training in new methods named after A. Avloni, Uzbekistan

Abstract: This article is the result of work aimed at the organizational and methodological foundations of the development of the public education system based on population census data, the current state of the education system, forecasting its further development, and creating scientific innovations.

Keywords: Statistics, demography, education, school, student, teacher, educator, research, economics, efficiency.

1. INTRODUCTION

Development and implementation of activities in accordance with the unified state policy in the system of public education based on official statistics, the study of a unified statistical methodology in accordance with international standards and forms of state statistical observations, the collection of statistical information on socio-economic and demographic events, processes and their results, elaboration, collection, storage, generalization, analysis and publication, the scope of the public education system in Uzbekistan, including the creation of a mechanism for analyzing and finding solutions to problems in the field of public education, the current number of schools, students, teachers and their share in the country's population analysis of the statistical situation, improving the statistics of the public education system, studying the problems associated with ensuring full coverage of data in this industry and their elimination, developing proposals aimed at developing this sector, has become one of the topical issues of today day.

2. LITERATURE REVIEW

Some aspects for education system were investigated by foreign scientists as well as Blake, R.R. and McCause, A.A. [2], Bredeson P. V. [3], Chris Balow [4], Deal T.E. [5], Derrick Meador [6], Gary Gordon [7], Getzels, J. W. [8], Jeff Kutash [9], Jeremy Sutcliffe [10], Joseph Lathan [11], Karen Seashore Louis [12], Kıvanç Bozkuş [13] and others.

3. ANALYSIS AND RESULTS

Today, statistical research covers many aspects of the world economy, affecting various areas such as trade, energy, transport, finance, publishing, media, education or health. In modern society, the level of development of statistical research is one of the main factors determining the economic development and competitiveness of the country.

The countries that make up the base of statistical research in the world mainly use the system of public education subsectors, which allows cross-country comparison and analysis of these indicators. The experience of statistically assessing the share of the public education sector in some countries is analyzed below.

When defining and calculating the indicators of the public education sector in South Korea, in contrast to the methodology of the UN Statistics Division, the statistics of the public education system are formed separately.

Based on the Malaysian experience, public education statistics are compiled by the Malaysian Department of Statistics. In Malaysia, public education aggregates are formed differently from the United Nations Statistics Division.

According to the UN, the world's population is 7.9 billion people, of which 3.97 billion men and 3.93 billion women, 91% of men, and 88% of women have primary and secondary education. men and women make up 66% of the total world population, 36% of men and 41% of women have higher education (Table 1).

Table 1: World population and its education rates

№	Population (billion people)	Gender		Literacy rate (%)					
		Men (billion people)	Woman (billion people)	Primary school education		Secondary education		High school	
				male	female	male	female	male	female
1	7,9	3,97	3,9	91	88	66	66	36	41

Today there are 7.7 million schools in the world, of which 27% are private schools. According to international statistics, the ranking of UK schools is the highest in the world. [14] Schools in the United States are in second place, followed by the school systems of Canada, Germany, and France. More than 70 percent of school graduates in these countries go on to higher education. In addition, South Korea has the best school education in Asia. At the same time, 56% of Korean school graduates enter higher education institutions. The worst school education is mainly in the African countries of Burma, and the Central African Republic of Zambia, while the education system of Pakistan and Libya is also assessed as very negative (Table 2).

Table 2: Number of schools in the world

№	Total number of schools (million)	School Category %		Countries with high school rankings
		Private schools	Public schools	
1	7,7	27	73	Great Britain USA

Globally, a total of 742 million primary school students and 601 million secondary school students were educated in schools in 2019 (figure 1). [15]

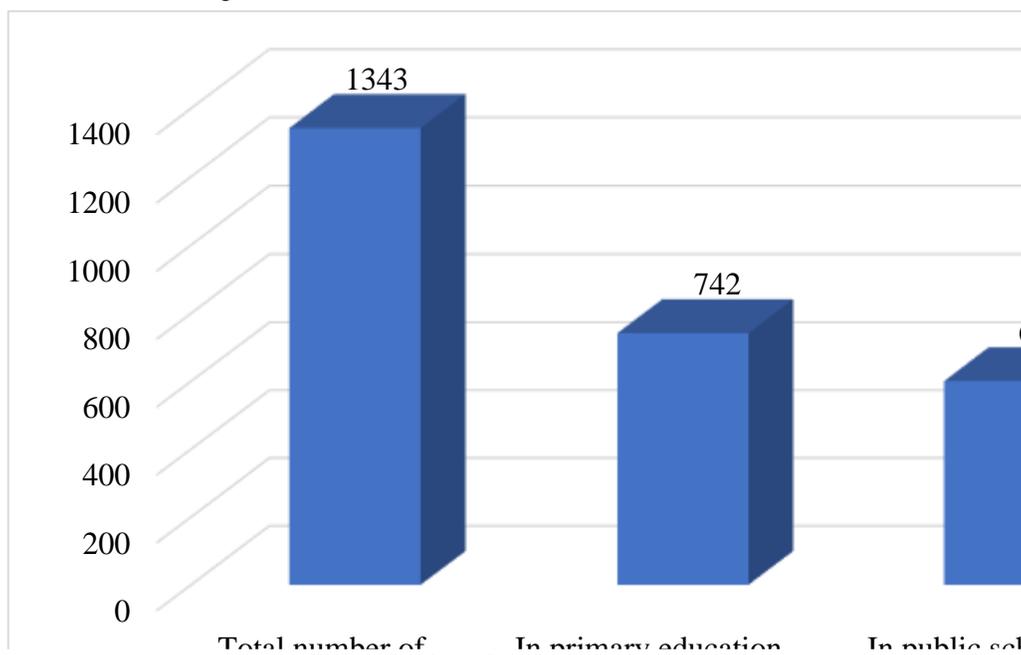


Fig.1. Number of students in the world

Today, schools around the world employ an average of 62.5 million teachers [14]. According to a UNESCO study, women make up, on average, 66.8% of primary education teachers and 54.5% of secondary education teachers worldwide (Table 3). For comparison, in our republic, this figure is 70% of female teachers and 30% of male teachers.

Table 3: The number of teachers in the world (by gender,%).

№	Total number of school students (million)	Gender of teachers			
		In primary education		In secondary education	
		male	female	male	female
1	62,5	33,2	66,8	45,5	54,5

Looking at the average cost of schools around the world, children in the UK spend an average of \$6,866 a year in public schools and \$21,458 in private schools. Although public schools in Germany are completely free, tuition fees average \$290 per year, while private schools have a much higher average cost of \$24,400.

Table 4: Fees and expenses for education in schools in developed countries.

№	Countries	Annual School Fee (USD)	
		Public schools	Private schools
1.	Great Britain	6866,7	21 458
2.	Germany	290	24 400
3.	Canada	2 977	20 800
4.	South Korea	0	15 000 – 30 000
5.	Turkey	0	5 000 – 20 000

According to the analysis, the number of female teachers in primary schools is relatively high in Germany and the UK, while the proportion of female teachers in secondary schools is high in South Korea (Table 5).

Table 5: Number of teachers in some countries with a developed education system

№	Countries	Number of teachers				
		Total	Elementary education		Secondary education	
			Total	females%	total	females %
1.	Sweden	143688	69249	81,9	74439	59,4
2.	South Korea	396105	165837	77,7	230268	60,6
3.	Canada	391095	249128	75	141967	75
4.	Germany	831786	244874	87,3	586912	63,3
5.	Great Britain	648237	279097	86,2	369140	61,2
6.	Turkey	984995	297176	61,9	687819	56,6

At the beginning of 2000, the total population of the Republic of Uzbekistan was 24,487.7 thousand people, at the beginning of 2010 - 28,001.4 thousand people, at the beginning of 2021, the total population – was 34,558.6 thousand people. In 2010, compared to 2000, the population increased by 12.55% (3513.7 thousand people, an average of 351.3 thousand people per year), in 2021 compared to 2000, that is by 29.15% over 20 years (10,070.9 thousand people, an average of 503.5 thousand people per year), in 2021 compared to 2010, the population increased by 19.00%, over ten years by 6557.2 thousand people, that is, an average of 655.72 thousand people. per year (Chart 2).

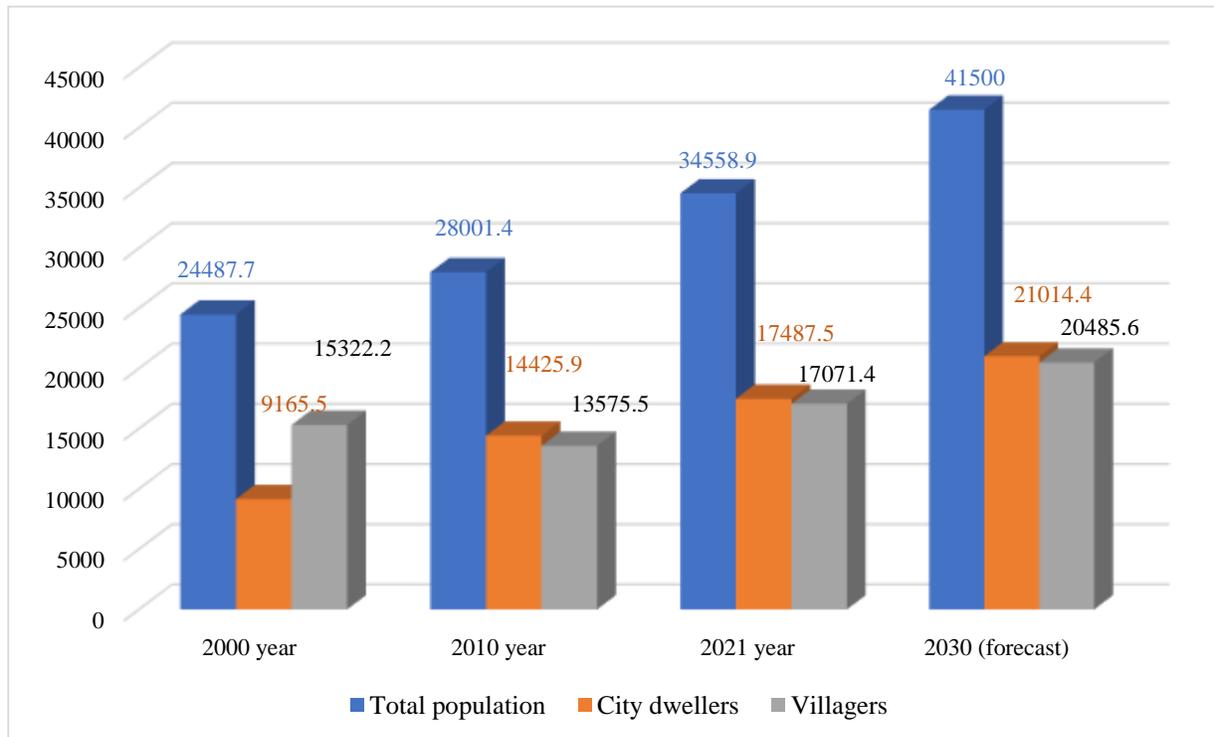


Fig.2. Indicator of the population of the Republic of Uzbekistan by cities and villages (at the beginning of the year, thousand people)

In our article “Prospects for the development of the public education system according to the population census, if we analyze the population growth of the Republic of Uzbekistan from 2000 to 2021, in 2009-2010, 4909148 students studied in 9791 schools. academic year, and in 10,008 schools in the 2019-2020 academic year, 6,168,198 students were trained, in the 2019-2020 academic year, the number of students increased by 20.42% (up to 1,259,050 students, an average of 125,905 students per year).

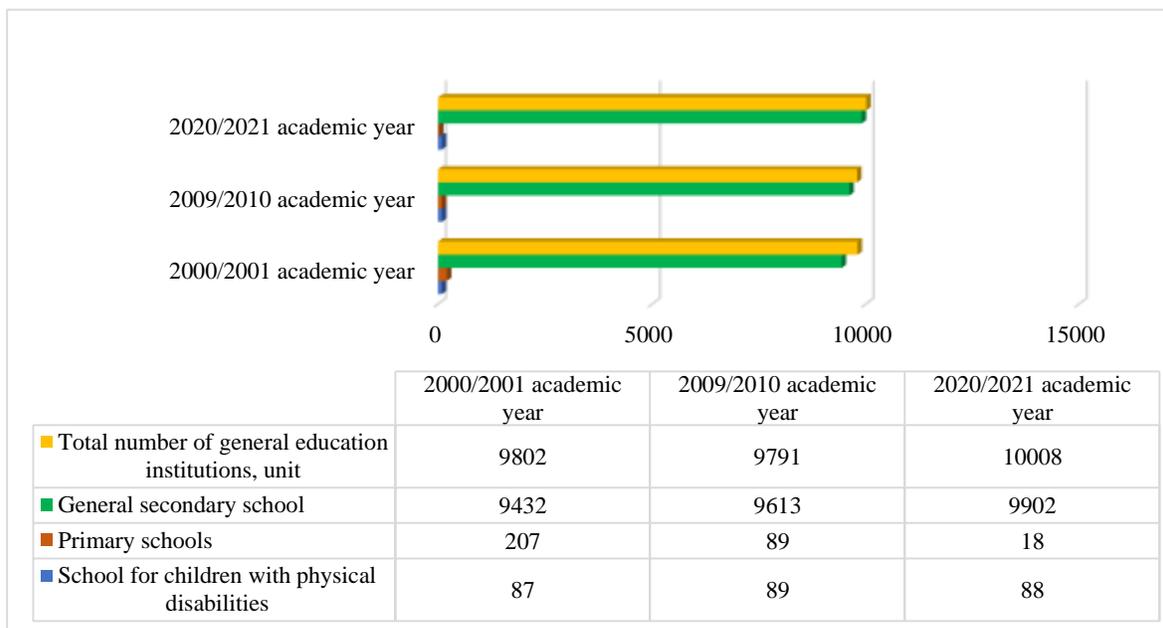


Fig.3.General education institutions (per academic year, thousand)

Compared to 2009 -2010 academic year, and the number of schools in the 2019-2020 academic year compared to the 2009-2010 academic year, i.e. an increase of 2.97 percent (299) over 10 years (Fig.3).

In the 2009-2010 school year, each school had an average of 501 students, and in the 2019-2020 school year, each school had an average of 611 students. Due to the backlog in school construction over the past decade, each school has to admit an average of 110 additional students per year. According to the results of the analysis, with an increase in the population of Uzbekistan by an average of 20% over ten years, by 2030 the population of the Republic of Uzbekistan is projected at more than 41,470.32 thousand. It is predicted that the number of students in the republic will exceed 7463520, that is, 746352 students for one year. In 2030, an average of 14,927 schools will have to have an average of 500 students per school. Based on this, in our country until 2030, 4837 new schools or additional buildings will have to be built annually (Table 6).

Table 6: Some indicators of the national system of Uzbekistan by years

№	Academic year	Number of schools	Number of pupils	The average number of students per school	New schools or additional buildings in ten years construction	Number of teachers
1.	At the beginning of the 2009-2010 academic year	9791	4909148	501	-	426581
2.	At the beginning of the 2020-2021 academic year	10008	6168198	611	299	501044
3.	in 2019 compared to 2009, %	2,97	20,42%	18%	2,9%	15%
4.	Forecast to 2030	14927	7463520	500	4837	576200
5.	in 2030 compared to 2020, %	23%	17,4%	22%	61%	13,1%

As you know, statistics is a system of numbers and numbers. We use numbers in every step of our daily lives. Numbers are our closest assistants in the market: they count money, determine the time, go on the road and make phone calls. Mankind always praises our ancestors for the invention of numbers. The numbers even show our desire, home, work, and how we study at school or university. Most problems studied in statistics are more naturally and easily expressed using numbers.

4. DISCUSSION OF RESULTS

Based on the analysis of statistical data, it can be concluded that what will be the role of the public education system in the process of registering the population in the Republic of Uzbekistan in 2023? In this regard, to what extent are the statistics of the world education system formed? Is there a methodology for calculating the statistics of the education system when taking into account the population?

First of all, it is necessary to democratize population accounting; today, in many countries of the world, traditional and registered methods of population registration are used. In some countries, for example, the Latvian education system does not have a unified statistical register. It is known from world experience that there are more and more references to indicators in population censuses.

We believe that special attention should be paid to the economic and social aspects of the education system when taking into account the population. The census should create separate indicators for the education system. What to look for when creating indicators:

It is necessary to develop new methods for determining the number of teaching staff and students, taking into account the characteristics of the public education system during the population census;

Involvement of foreign specialists who have developed specific integrators for the education system in the census and creative use of their experience;

Improving the identification of one's location by the address (address) on the GPS map and by location when registering schools;

Ensuring that the population registration process is an important source in the preparation of a school passport;

Demographics as well as geographic location should be taken into account in the census. [16]

Taking into account the location of schools, based on population density and indicators of the provision of schools with medical personnel;

The participation of teachers also affects the quality of work, that is, education, so it is important to take into account where the population (employee) lives at the same time as where they work;

It is necessary to study the number and social status of students with disabilities (disabled), students who are not citizens of Uzbekistan.

5. CONCLUSIONS

In conclusion, based on international experience and analysis, we can say that we use and apply some concepts or information on a daily basis to confirm or prove our opinions and judgments in social life. For example, inflation, population, productivity, average age or monthly salary, exchange rate, recovery time, gross domestic product, average speed, price, cost, and so on. How is this indicator or data determined? Today, when studying statistics, workers in the public education system may encounter some difficulties and conflicting opinions and trends. Therefore, users of statistics in the public education system are encouraged to use statistical methods, taking into account the above changes. That is, he must consider statistical observation, summation, grouping, tables, graphs, the study of absolute, relative, and average indicators, sample observation, time series, index methods, etc.

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