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STATISTICAL ANALYSIS OF DEVELOPMENT REAL ESTATE (example of a city of Tashkent)

Abstract: In given article questions of realization of the effective housing policy directed on social development of regions, the multifactorial statistical analysis and forecasting, qualitative housing and communal services, working out of effective mechanisms of development of housing and communal services, methods of a statistical estimation are considered. Improvement principles have been applied.

Key words: housing and communal services, the housing and communal services market, available housing, housing and communal services system, the private housing company, an engineering-communication and social infrastructure, economic and statistical aspects of housing and communal services.

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Introduction

Last years the close attention is given to maintenance of the population with habitation, maintenance with its qualitative utilities, achievement of social development, the effective organization and housing and communal services development. According to the experts the international project The Social Progress Imperative, now in a three of leaders of a rating of the Index of social development there is Norway, Iceland and Switzerland (indexes 90.26; 90.24; 89.97 accordingly), a rating (an index 59.55) [1].

By estimations of the international experts, habitation level in the world varies: in Norway - 74.0 $\,$ m² per capita, in the USA - 65.0 $\,$ m², in Denmark - 50.6 $\,$ m², in many countries - 5-10m [2].

Carrying out of the effective housing policy directed on social development, the multifactorial statistical analysis and forecasting, qualitative housing and communal services, working out of effective mechanisms of development of housing and communal services, perfection of methods of a statistical estimation.

Within the limits of scale reforms in all spheres in the Uzbekistan the special attention is given to development of social sphere, housing construction. In connection with increasing population, absence of high-grade habitation and qualitative utilities the further development of this sector in the future is necessary. In this connection in Strategy of actions in five priority directions of development of the Republic of Uzbekistan for 2017-2021 years development of a science, the literature, art and sports, perfection of the state youth policy is told about realization of target programs on building of accessible habitation, development and modernization of motor transport, an engineering-communication and social infrastructure, formation, culture [2,3].

The successful decision of such priorities demands working out of concrete measures on granting of habitation and qualitative state services to the population of the country by increase of economic efficiency of housing and communal services, perfection of system of statistics and statistical forecasting.

Thereupon one of the most actual problems today is the economic-statistical analysis of housing and communal services in the country, an estimation of the factors influencing their activity, and also working out of scientifically well-founded offers and



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the recommendations directed on increase of economic efficiency.

Housing and communal services are one of components of social statistics.

This area is one of the basic areas of studying of housing and communal services and living conditions of people who is subdivided into following subbands:

- Housing sector and the statistical; number of workers: statistics of use of habitation:
- Habitation condition statistics of conditions. The primary goal of reforms in housing and communal services sphere is change of structure registration and statistics for a statistical estimation of arising processes.
- In particular: use of various patterns of ownership on habitation on the basis of private

partnership; maintenance ресурсосбережения in housing and communal services; the state support of investments into housing and communal services modernization;

- The account of real incomes of the population for transition to absolute payment of housing-and-municipal services;
- Formation of new directions in building of habitation and social objects; to raise efficiency of decision-making in cities and to enhance the responsibility for decision-making.

In the statistical analysis of the modern market of housing-and-municipal services subjective character of occurring processes

Table1.

		2010	2011	2012	2013	2014	2015	2016	2017	2018
Republic	of									
Uzbekistan		427,7	439,5	446,4	457,9	466,2	477,1	490,8	507,5	521,2
Republic	of	25,1	25,8	25,9	27,9	28,9	29,2	30,0	35,1	35,1
Karakalpakistan		20,1	20,0	20,5	,>	-0,>	,-	20,0	00,1	00,1
Areas										
Andizhan	2	25,8	26,3	27,0	27,6	28,6	29,3	30,2	31.1	31,6
Bukhara	2	24,7	25,0	25,0	25,0	25,9	26,2	26,5	27,4	30,0
Jizakh		15,5	15,9	16,3	16,8	17,3	17,6	18,0	18,3	18,6
Kashkadaria	()	38,2	29,8	40,3	41,2	41,5	44,4	46,8	50,4	53,1
Navoi		17,4	17,6	17,7	17,9	18,0	18,3	18,9	20,7	21,3
Namangan	()	33,0	37,0	37,8	39,9	41,0	41,6	42,9	40,5	41,3
Samarkand	4	45,0	46,0	47,0	48,3	49,6	50,9	53,1	55,6	56,8
Surkhan - Daria	2	28,6	29,9	30,2	30,5	30,7	31,0	31,3	31,7	32,2
Tashkent	()	38,8	38,7	39,1	41,1	41,5	41,8	42,5	42,8	43,7
Fergana	4	43,6	43,8	44,0	44,1	44,5	46,3	47,3	48,0	48,7
Khorezm	3	38,5	39,0	39,4	40,0	40,0	40,2	42,5	43,0	43,5
Sirdaria		11,4	11,3	11,7	11,9	12,2	12,3	11,6	11,5	12,1
City Tashkent	4	42,1	43,4	45,0	45,7	46,5	48,0	49,2	51,4	53,2

Table 2.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	
	Available housing									
Total	427,7	439,5	446,4	457,9	466,2	477,1	490,8	507,5	521,2	
Including	Including									
Government	4,2	3,6	3,3	3,3	3,3	3,3	3,3	3,4	3,3	
Non-government	423,5	435,9	443,1	454,6	462,9	473,8	487,5	504,1	517,9	
On the average on each inhabitant(M ²)	15,0	15,0	15,0	15,1	15,2	15,2	15,4	15,7	15,8	
City available housing										
Total	226.1	231.9	235.8	237.2	240.0	245.0	249.1	259.4	266,0	



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Including									
Government	3,7	3,3	3,1	3,1	3,1	3,1	3,1	3,1	3,1
Non-government	222,4	228,6	232,7	234,1	237,5	241,9	246,0	256,3	262,9
On the average on each inhabitant(M²)	15,4	15,4	15,4	15,3	15,4	15,4	15,4	15,8	16,0
Agriculture available housing									
Total	201,6	207,6	210,6	220,7	225,6	232,1	241,7	248,1	255,2
Including									
Government	0,5	0,3	0,2	0,2	0,2	0,2	0,2	0,3	0,2
Non-government	201,1	207,3	210,4	220,5	225,4	231,9	241,5	247,8	255,0
On the average on each inhabitant(M ²))	14,5	14,5	14,5	14,9	14,9	15,0	15,4	15,5	15,7

For considered years the available housing gain was observed in Republic of Karakalpakstan (139.8%), Kashkadria area (139.0%), Tashkent (126.3%), Samarkand (126.2 %) and Namangan (125.1 %) areas, however in Sir-Darya area, Navoi area and Dzhizak area of considerable changes in available housing it was not observed.

According to our analysis, areas with higher level of habitation, than national level, include Khorezm area (23.9 m²), Navoi area (22.0 m²), Tashkent (21.4 m²), Republic of Karakalpakstan (18,9m²). Areas with low level of the income per capita concern Andizhan (10.4 m²), Surkhan-Darya (12.7 m²) and Fergana (13.3 m²) areas.

From table 2 also it is visible that the share of not state available housing in available housing is high. For example, in investigated years their share made 99.0 %. We see it both in city available housing, and in rural available housing.

As a result of the analysis positive rates of increase in dynamics of city and rural available housing are noted.

For example, while the average index per capita in this area in 2010 year made 15.4 m², by 2018 year this indicator made 16 m^2 whereas in countryside it has increased with 14.5 m^2 to 15.4m^2 accordingly]4-6].

The economic-statistical analysis of housing and communal services in Tashkent shows that, first of all, as it is country capital, it has rather a dense population and urbanization processes in comparison with other regions. For this reason in Tashkent many apartment houses and industrial premises are under construction.

On the end of 2019 year of the investment into Tashkent, the centralized investments (budgetary funds, the state trust funds and credits) have made 50.7 bln. sum (Uzbek currency) that on 120 % more than in 2018 year. It is equivalent 26.6 % of total amount of investments. Also the decentralized investments (corporate funds, public funds, direct foreign investments and credits, credits of commercial banks) have made 139.2 bln. sum, or rate of increase of 139.8 % in comparison with 2018 year. These are 73.4 % from total amount of investments [7-9].

As of January, 1st, 2019 year in Tashkent 4522 private associations of proprietors of habitation in comparison with 2365 in 2010 year were.

In Tashkent also are 187 private housing companies [10-15].

The quantity of many- strayed residential buildings in available housing of Tashkent has increased with 9125 in 2015 year to 9 386 in 2018 year or has increased to 261 [8].

Table 3. Multi room available housing of a city of Tashkent

Years	Quantity of	The Constructed apartment houses						
	apartment houses	Quantity of houses, pieces	Quantity of rooms	The General useful area M ²	Space for habitation M ²			
2015	9125	47	1807	179683	67473			
2016	9125	102	3652	328190	153112			
2017	9373	111	6116	426137	248131			
2018	9386	226	11617	856183	499920			

In article the economic-statistical analysis of activity of housing and communal services of Tashkent is presented.

Habitation level is defined as a floor space total area (m²) on one inhabitant, that is:



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Habitation per capita = (the General (inhabited) the available housing area on the end of the year (M²) / (Number of resident population on the beginning of next year (person) (1)

On the end of 2018 year the habitation total area in Tashkent made 53.2 million m², the resident population made 2509.9 thousand persons. The average person of a floor space makes 21.2 m², that is: $(53.2 \text{million.m}^2) / (25099 \text{million habitant} = 21.2 \text{ m}^2$

$$\frac{53,2 \text{ million.m2}}{2509,9 \text{ mln. persons}} = 21,2 \text{ m}^2$$
 (2)

The centralized water supply of the population is a daily average water supply per capita.

$$T_{c} = \frac{T_{real.}}{A} \tag{3}$$

 $T_c = \frac{T_{real.}}{A}$ (3) Where T_{c^-} a daily average water-supply per capita (in litres);

T_{real.} - an annual water-supply for needs of the population and utilities (million cubic);

And - quantity of permanent residents and quantity of annual calendar days.

Annual water supply for needs of the population and public utilities in Tashkent makes 650.5 million m³. The city resident population this year makes 2509.9 thousand Persons, the quantity of calendar days in a year makes 365 days.

Mid-annual water delivery per capita in Tashkent makes 94.6 liters.

650.5 million cubic $m^3/(2509900x365) = 94.6$ liters.

Within a year the share of a stream of sewage in the course of clearing is defined by the relation of volume of sewage treatment to all waste.

$$O_{c} = \frac{T_{oc}}{T_{yoc}} \tag{4}$$

Where O_c - percent of a stream of sewage, %;

Tc - Annual volume of the cleared sewage, m³;

 T_{voc} - Total amount of sewage, m³

The gardening factor is defined under the following formula:

$$K_{K} = \frac{y_{K}}{l_{K}} \tag{5}$$

Where, yk- the area of green saplings, hectare; lк-The area, hectare.

The quantity of many-storied residential buildings in available housing of Tashkent in 2015 year has made 9125 whereas in 2018 year this indicator made 9 386 or has increased to 261.

According to Central administrative board of housing and communal services Tashkent city government 2018 year of the enterprise and association organization will spend certain work on maintenance of uninterrupted public service of the population and other consumers, to improvement of a technical condition of available housing and a territory accomplishment has grown.

According to Central administrative board of and communal services citygovernment, in 2018 year, the municipal enterprises and the organizations within the limits of department will spend certain work on maintenance of uninterrupted public service of the population and other consumers, improvement of a technical condition of habitation and an accomplishment. The Total amount of services and the executed works as the enterprises and the organizations under control of Department has grown has made 315.3 billion uzbek

It is necessary to notice that the analysis of activityhousing and communal services in Uzbekistan has revealed a number of problems and complicated questions.

For their decision the following is necessary:

Conclusion. It is necessary to notice that the analysis of activity housing and communal services in Uzbekistan has revealed a number of problems and complicated questions. For their decision the following is necessary:

- 1. Perfection of is standard-legal base for associations of proprietors of habitation; perfection of system of mutual relations of associations of proprietors of habitation, public authorities and local governments of citizens:
- 2. Working out of measures on the state support of house owners and their companies; Increase of level of management by habitation and service.
- 3. The statistical estimation of development of regional housing construction, in particular, cities of Tashkent, begins with an estimation of a role of regional housing-and-municipal services in system of housing and communal services of republic. Indicators of position of regional housing and communal services basically are measured in republican agency "Uzbekhousing and communal services" by the contribution of economic development of housing and communal services of republic.

A number of scientific offers on housing and communal services development in Tashkent are developed. They promote the following.

- 4. To accelerate civil work and to provide a high degree of quality on the basis of housing construction standard projects Reconstruction of the water drain and treatment facilities. Perfection of system of supply by pure potable water in settlements and the regional centers;
- 5. To give particular attention to landscape design in a city and its areas;

Maintenance of building of accessible and manystrayed habitation in city center and areas.



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