Murodillo Kadirov, associate professor of Geography Department of SamSU,
honorary academician of Academy of Sciences "Turan",
Ahror Usmonov doctoral student of the department socio-economic geography,
Ulmasova Zarnigor Graduate student of the department socio-economic
geography

Narzullaeva Nurxon Bachelor student of the department socio-economic geography

## POPULATION DYNAMICS AND REGIONAL TYPES OF SETTLEMENT IN SAMARKAND REGION

**Abstract:** The article considers regional types and regionalization of the settlement of Samarkand region. The territory of the region stands out for oasis, mountain, desert and suburban types of settlement. These types of settlements are analyzed and conclusions are drawn.

**Keywords:** regional types, settlement, oasis, mountainous, desert, suburban, urbanagglomeration, hydrographic network (system), transport network, population density

Introduction. The geographical study of population has always occupied a central place in economic and social geography. The peculiarity of the demographic situation of the Samarkand region lies primarily in the high rates of population growth, significantly exceeding the indicators of other regions of the Republic of Uzbekistan. Intensive population growth occurs mainly due to its large natural increase. Moreover, the role of this source of demographic growth at all stages was great, it also determines the regional characteristics of population dynamics. High birth rates and relatively low mortality are responsible for the rapid growth of the population of the Samarkand region. [2.p.5]

In geographic science the concept of regionalization is of central essence. This is essentially an important attribute / property / and a specific feature of any geographical study. An important scientific and practical value it has in the geographical study of the population[1].

Urban agglomerations and other group forms of settlements are also peculiar areas of population distribution. But in this case the regionalization is based on the nature of the settlement and, therefore, the isolated group forms are real / specific / areas of settlement, which, however, form a discrete system, that isthey do not cover the whole territory.

Prinicipally there are other approaches to regionalization of settlement. This is determined by the basic principles of regionalization. So, if the decisive role of production location is based on natural and economic specialization of different parts of the territory, it is possible to single out regional types of settlement. Such types or areas are "continuous and will include the entire territory, regardless of whether there are settlements there, or not. As for urban agglomerations and other frame-node elements or systems of settlement, they form the material basis-the backbone of regional types[2].

**Main part.** As Table 1 shows, in general for 1926-2022. The region's population has more than tripled.

It took more than 50 years for the region's population to double for the first time. In 1979, 2 times more people lived here than in 1926. The urban population as a whole for 1926-1995. increased by 3.9 times, while the total number of rural residents over the years increased by 2.8 times. The study shows that the rates of population, including urban and rural areas, were not the same in certain years. For example, the highest growth rates of the total population are observed in 1995–2022, and the lowest in 1939–1959.

Table 1.

Average annual population growth rate of Samarkand region (in %)

Years	Total	Urban	Rural
	population	population	population
1926-1939	1,45	1,65	1,45
1939-1959	0,70	2,80	0,04
1959-1970	1,55	0,03	2,85
1970-1979	2,60	8,65	0,45
1979-1994	3,05	2,00	3,50
1995-2022	5,00	5,00	5,00

The table was compiled by the author.

The maximum growth rates of the urban population are found in 1970-1979, which in turn is caused by the high rates of town formation and industrialization of the region. In rural areas, the population increased most dynamically in 1979-1994.

In identifying the real dynamics of the population, the analysis of the average annual growth rates and population growth for a certain period is of great importance. increased almost 1.5 times.

At the same time, Urgut, Dzhambay, Bulungur and Aktash stand out with higher rates of demographic development. At the same time, in Payaryk and Juma, the population increased relatively slowly.

Analysis of trends and factors of regional development shows that the share of the urban population in the Samarkand region for 1979-1999. did not increase. For example, in 1989 it was 31% against 37% in 1979, and in 1998 - 29%, in 2022 - 37%. Such a paradoxical phenomenon was associated with changes in the administrative boundaries of the regional center of Samarkand, as well as the transfer of many rural settlements to the category of urban settlements in 2009.

In recent years, the population of the city of Samarkand has increased due to the connection of rural areas, which are located close to the city. For example, in 1991 the population of the city was over 391 thousand people. or about 18% of the total population of the region, and in 2022 - 564.5 thousand people. or more than 13.9%. As can be seen, the population increased by 173.5 thousand people, and the share in the total population of the region decreased by 3%.

Taking into account the above in the territory of Samarkand region the following main regional types of settlement can be distinguished:

Settlement in oases of irrigated agriculture. In the oasis areas on the basis of irrigated agriculture and manufacturing industries, relatively developed forms of settlement have developed. Accommodation of settlements in an oasis type of settlement in the main one is connected not only with the presence of irrigated lands, but also with the construction of an irrigation-meliorative network. That is why the largest settlements of this type are localized and tied to relatively large channels. Here the natural and geographical conditions are favorable for population and production. The oasis system of settlement is typical for many areas of the region, however, it is particularly widespread in the Akdarya, Samarkand, Taylak, Jambay, Ishtikhon, Kattakurgan and Pastdargom districts.

In arid conditions, rivers and irrigation channels play an important role in the formation and development of an oasis system of settlement and production. Oases are considered to be the main areas of the territorial organization of production and the population of Samarkand region, where labor-intensive branches of the economy are developed on the basis of land and water resources, high population density and population density of populated areas.

In Samarkand region in the beginning of the year of 2021 there were 240,3 thousand hectares of irrigated land. Among the districts, this indicator is the highest in Jambay, Kattakurgan, Ishtikhan districts[8].

Oasis, as a rule, is characterized by a high density of populated areas. For example, in selected areas, on average, 100 km. sq. m. account for 31,2 SOR, the average population of which is 1000 people. As it can be seen there are prerequisites for the formation of local settlement systems.

An important component of oases are not only irrigated lands, but also sources of irrigation. A network of irrigation facilities is built in the areas under consideration: the reservoirs - Kattakurgan, Khishrav, canals - Dargom, Yangiarik, Bulungur, Siyab, etc. The largest of these are the Kattakurgan reservoir and the Dargomcanal. It is along them or in the zone of their direct influence that such important points as the Kattakurgan reservoir, the urban village of Khishrav, the village of Dashtsukhta on the Dargom canal, etc. In recent years, on the basis of development and settlement of new territories, the oasis settlement is expanding, which is especially noticeable in Samarkand region, in the zone of influence of the Dargom and Yangiarik canals.

Table 1
Regional types of settlement in Samarkand region (2022)

№	Settlement types	Area, sq.km.	Population , thousandp eople	Population densityfor 1 sq.km.,people.
1	Oasis	5867,5	2085,6	350,0
2	Mountain	4730,8	538,6	110,3
3	Desert	6381,2	429,2	67,0
4	Suburban	2662,4	988,1	370,2

As Table 1 shows the oasis type of settlement occupies 36% of the territory of the region, where 63% of the total population live and the population density is more than 350,0 people. for 1 sq. km. In the formation of the settlement system the influence is primarily effected by the natural and territorial community, the unified hydrographic and transport network, the interconnected economy and the high density of settlements. In the same settlement area due to favorable socio-

economic conditions, Samarkand agglomeration and the Kattakurgan local group of settlements have developed and are developing.

The oasis system of settlement of Samarkand region, although it has much in common with similar areas (or areas) of settlement of the population of Central Asia, is somewhat different in its scale and configuration from the latter. For example, in the classical region of the Fergana Valley or in Turkmenistan, oases are narrow-caled irrigation systems and population distribution, mainly on the cone of small rivers, which are often completely taken for irrigation. In our country, the tributaries of Zarafshan reach the main river and, oases have developed both in the basin of these tributaries and along the banks of the Zarafshan River itself. We recall that the population density in the Fergana Valley, directly near the Sirdarya, is very low[6].

Thus, oasis plots in Samarkand region were formed not only in the foothill part, at the outlet of rivers, from mountain ranges, but also in flat areas. For example, Kattakurgan, Ishtikhan, Narpay, Pakhtachi districts are mainly located in the lowland, while Samarkand, Taylak, Pastdargom, Jambay and Bulungur districts are located in the foothills. Common for them is the cultivation of labor-intensive and water-intensive crops. Thus, the Akdarya, Payarik, Ishtikhan and some other regions specialize in cotton growing, Samarkand, Taylak - on the foothill farm / vegetable growing and potato growing, Bulungur district - horticulture and viticulture.

The type of settlement in the mountainous areas includeUrgut andKoshrabad districts. Settlement in Koshrabad - area due to the lack of conditions for large tracts of farming and population settlement, as well as the difficult terrain and poorly developed transport network is characterized by a low density of population and settlements. It is true that Urgut district, though geographically part of the mountainous territories (it occupies part of the Zarafshan range), but it differs somewhat in the degree of economic characteristics. That is why the level of

population of the territory is high: the average population density is 443,3 people per 1 sq. km.

The Koshrabad district, which occupies a part of the territory of the Nurata and Betaktau ranges, is characterized by typical rarely focal types of production and population distribution. In the region, livestock / meat-and-wool direction develops mainly, and the size of irrigated lands is not very large - 890 hectares or 2,7% of all agricultural land. All this causes a relatively low level of economic development of the territory and density of population.

As a whole, in these two regions that are part of the mountainous territories, 538,6 thousand people live. The level of urbanization is very low - 12.5%. The urban form of settlement is represented only in Urgut, the district center of Koshrabad does not yet have this status. However, Koshrabad district is incomparably larger than Urgut, although the economic and demographic potential of this region is small. In this respect, the Urgut district is more developed, and its close proximity to the regional center exerts some influence. It is also important here that there is a relatively large number of irrigation canals and tributaries of the river. Zarafshan, natural conditions for recreational development of territories[7].

Rarely populated is the desert territory. In this type of settlement we include the territory of Nurabad, as well as the adjacent lands of Narpay and Pakhtachi districts. The geographically named territory is partly part of the Carnabchul steppe, where sheep breeding traditionally develops.

In general, this region occupies 39.2% of the territory; here live more than 429,2 thousand people, which is about 4.8% of the total population of Samarkand region. The level of urbanization is also low - 18.9 thousand people, the population lives in the city of Nurobad (formerly Sovetabad) and in the resource village of Ingichka. The city of Nurabad is developing on the basis of the Djam quarry, Ingichka-mining industry without a dense agricultural environment.

The average population density is 67,0 people. Here there are more than 100 SNPs, the density of their deployment is 2 per 100 km square. In this case, in

contrast to the densely populated oases and mountain-valley regions (for example, Urgut district), rural settlements are small. However, in this respect, the adjacent territories of Narpay and Pakhtachi districts are noticeably distinguished, where the population and settlement indicators are relatively higher.

It can be said that this part of the territory is, as it were, transitional between the desert and oasis types of regional settlement.

A peculiar type of resettlement has developed in the zone of direct influence of relatively large cities - Samarkand and Kattakurgan. Suburban resettlement is formed within oasis systems and, therefore, they should not be considered in the hierarchy or at the level of the above-mentioned regional types of settlement: the basis for this type of settlement is the structure and specialization of agricultural production, in particular the cultivation of food crops for everyday and mass consumption of citizens. And the trend is that the boundaries of this zone are constantly expanding due to direct crops and, first of all, cotton area. In other words, as the demand of the townspeople grows, cotton fields will increasingly "leave" the zone of influence of large cities.

On the territory of the studied area, we distinguish two suburban areas of settlement. This is primarily Samarkand, as well as Kattakurgan system. At the same time, these areas of settlement do not cover the entire territory of Samarkand agglomeration and Katgakurgan local population system; they form the core of these systems, but comparatively already, than in the system of settlement.

Samarkand suburban settlement area includes the territories of Samarkand and Taylak districts, as well as part of the Jambay, Bulungur and Pastdargom districts. Within this system, except for urban settlements / Jambay, Bulungur, Superphosphate, etc.), there are large rural settlements that carry out agricultural, recreational, dacha and other functions. They include, for example, the Bagizagan village, Bagibaland, Bagimaydan, etc. At the same time, as far as the distance from the regional center, the size and function of rural settlements change, they become smaller and specialize mainly in agricultural production. In the suburban zone

there are also specialized farms such as: Marokand, Navruz, Samarkand, and others[9].

Kattakurgan suburban area is relatively small, it includes urban and rural settlements that lie directly near the "second" city of the region. The largest of these are settlements - Kattakurgan reservoir and Payshanba, as well as the villages of Kadan, Maybulak, etc. There are such large farms as Karadarya, which specialize in growing vegetables, potatoes and dairy cattle.

The population of suburban areas is actively involved in pendulum migration and in the development of the city's industry. As Table 1 shows, the area of the suburban type of settlement is approximately 2.7 thousand sq. km., where there are 988,1 thousand people. of the population / or 26% of the total population of the region.

**Findings**. Thus, the most developed and densely populated type of settlement is the oasis system of settlement, which includes the suburban settlement of Samarkand and Kattakurgan. The remaining regional types of settlement and, above all, the desert and typical mountainous regions of Nurabad and Koshrabad, are characterized by low rates of population resettlement.

Scientific and practical conclusions and proposals arising from the content of this work can be summarized as follows.

- 1. Improvement of the territorial organization of the population of the region involves, first of all, the further strengthening of the city of Samarkand as the organizing center of the regional settlement system.
- 2. The study showed that the second largest city of the region- Kattakurgan is somewhat behind in its development. With the advent of the rapidly growing industrial and regional center of Navoi, the more ancient Kattakurgan lost its intermediary value between Samarkand and Bukhara, in the field of the settlement system of the Zarafshan valley. Now the sphere of its influence is limited only to the western districts of the Samarkand region and the adjacent part of the Navoi region.

- 3. Improvement of the territorial organization of the population of the region is inextricably linked with the tasks of comprehensive development of other significant cities, such as Urgut, Bulungur, Ishtykhan, Juma and Aktash. The development of these cities should be considered in two qualitatively heterogeneous systems within the framework of integral group forms of settlement. Samarkand and Kattakurgan and as part of the grassroots district systems, where they themselves act as the main backbone center.
- 4. In solving social problems, in improving the lives of the rural population, the importance of district centers is great. Currently, the Government of the Republic of Uzbekistan provides for a significant expansion of the rights of district authorities of khokimiyats to organize social and economic life in the field. Therefore, the rural district centers of the 16 of them here should assume the functions of comprehensive service of the population's farms and its social needs. To do this, it is necessary to strengthen the organizing and servicing functions of district centers, and above all, such as Koshrabad, Nurabad, Guzalkent, etc.
- 5. This study on the problems of interrelated development of urban and rural settlements within the framework of the regional system of resettlement allows us to conclude that it is desirable to carry out similar work in other regions of the republic. And this is the scientific and methodological basis for the development of the regional policy of the Republic of Uzbekistan on the regulation and management of the territorial socio-economic development of its constituent parts.

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