

## THE INFLUENCE OF THE ZARAFSHAN RIVER ON THE DEVELOPMENT OF CITIES

**Abstract:** This article discusses about the Zarafshan River, one of the major rivers which flows through Tajikistan and the Republic of Uzbekistan and its influence on the development of cities.

**Key words:** river, the Zarafshan River, development of cities,

**Introduction.** The influence of water, especially river, on the location of Central Asian cities is significant. If we look at the map of the region, we can see that most of them were formed on or near major rivers. In particular, along the major rivers such as the Amudarya and the Syrdarya, a series of cities were formed in a chain. In this regard, the Zarafshan River, which flows almost from the center of the region, has formed a unique geourbanistic system. The Zarafshan River is 781 km long and flows through Tajikistan and the Republic of Uzbekistan. The Zarafshan valley is one of the oldest centers of civilization not only in Central Asia but also in the world. Therefore, the history of the riverside cities such as Samarkand, Bukhara, Karmana, Panjikent dates back to the millennia BC and occupies a worthy place in human civilization.

The Zarafshan basin is divided into 3 parts - upper, middle and lower Zarafshan. The part from the Zarafshan glacier where the river begins to the Ravotkhoja dam is called the upper Zarafshan, from the Ravotkhoja dam to the Khazara corridor - the middle Zarafshan, and the lower part of it (the Khazara corridor) is called the lower Zarafshan. Along the valley from east to west, along with large and medium-sized cities such as Panjikent, Samarkand, Kattakurgan, Navoi, Bukhara, there are a number of small towns. Let's take a brief look at these cities.

**Materials and Methods.** *Panjikent* is the only city in the Zarafshan Valley in Tajikistan. It is the district center of the same name in the Sughd region. The city is located on the left bank of the Zarafshan River, at an altitude of 900 m above sea level. Panjikent was founded in the beginning of our era and developed along the

Great Silk Road. Panjikent is located 48 km east of Samarkand, 240 km northwest of Dushanbe and 270 km southwest of Khojand. Panjikent has a very rich history. 15 km west of the city, near the state border of Uzbekistan and Tajikistan, is the ancient city of Sarazm, formed in the Neolithic and Bronze Ages (second half of the third millennium BC). Sarazm is one of the ancient centers of agricultural culture in Central Asia, north of the Amu Darya. In 2010, by the Decree of the President of Tajikistan, the 5500th anniversary of Sarazm was celebrated and this archeological monument was included in the list of intangible heritage of UNESCO. To the southeast of present-day Panjikent, on the 2nd terrace of the left bank of the Zarafshan, is the ancient town of Panjikent (V-VIII centuries). According to some reports, due to changes in natural conditions, drought, the population will settle near the Zarafshan River, resulting in the degradation of Sarazm and the emergence of the ancient town of Panjikent. The population of the city has increased 10-12 times over the last hundred years. If in 1897 there were 3658 people living in Panjikent, in 2019 it increased to 42800 people. The majority of the city's population are Tajiks and Uzbeks. The agro-industrial sector is mainly developed in the city economy. Panjikent is still famous for its beautiful settlements, archeological monuments and other attractions along the Zarafshan coast.

*Samarkand* is one of the oldest cities in the world, not in the Zarafshan valley or Uzbekistan. The city is located on the left bank of the river at an altitude of 600-700 meters. Celebrating its 2750th anniversary, Samarkand is the largest city in the Zarafshan Valley. Samarkand's highest development dates back to the time of Sahibkiran Amir Temur and the Timurids. The city was one of the largest cities not only in Movarounnahr and Khorasan but in the whole world from the last quarter of the fourteenth century to the second half of the fifteenth century. The monuments of this period still add splendor to Samarkand. The favorable geographical location within the region has had a positive impact on the development of Samarkand. In particular, in 1924-1930 the city of Samarkand was chosen as the first capital of the Republic of Uzbekistan. At present, Samarkand plays an important role in the socio-economic life of Uzbekistan. The city is the official "second" city of the republic

(after Tashkent), with a population of more than 600,000 people. Today, Samarkand is not only the regional center, but also the unofficial center of Central Uzbekistan. At the same time, it can be considered the "capital" of the Zarafshan valley.

*Kattakurgan* is located on the left bank of the middle reaches of the Zarafshan River, at an altitude of 485 m above sea level [1]. In the last quarter of the XVII century (1683-1684) was founded the present-day Kattakurgan (its old part - the "old city"). Formed 76 km northwest of Samarkand (the regional center), this settlement was included in the list of cities in 1868. Later, at the end of the XIX century, with the construction of the Turkmenbashi (Krasnovodsk) - Tashkent railway, it gained a favorable geographical location. In the 1940s, the Kattakurgan Reservoir (Sea of Uzbekistan) was built to rationally use the water of the Zarafshan River. This served to increase not only the socio-economic, but also recreational importance of the city.

Due to its convenient geographical location and proximity to the raw material areas, the city's industries developed rapidly and became one of the middle cities (population 50-100 thousand people). In particular, the city has an oil extraction plant, cotton ginning, brick and milk processing. factories, meat and flour mills. Currently, Kattakurgan, the "second city" of Samarkand region, has a population of more than 70,000. It is known that the Zarafshan river, after passing through the city of Samarkand, divides into two branches - Karadarya and Akdarya. It is between these rivers that the island of Miyankol was formed. In the territory of Miyankol Island, district centers such as Loyish, Ishtikhon, Payshanbe, Qoradarya and Aqdarya merged again, and near the place that formed Zarafshan, Yangirabod city (the center of Khatirchi district) was formed. These administrative centers, which belong to the category of small towns (population less than 20 thousand people), are mainly agroindustrial [3].

*Navoi* is located on the left bank of the Zarafshan River, at an altitude of 350 m above sea level. The river flows through the northernmost part of the city. Navoi was founded in 1958 in connection with the discovery and processing of deposits of non-ferrous metals, chemicals and construction raw materials in the central Kyzylkum. refinery and other food industry enterprises. Navoi is not only an industrial center,

but also an economic, social and cultural center of the region. The city of Navoi in our country is an example of such cities. Navoi was awarded the P. Abercrombe International Prize in the 1970s for his outstanding urban development achievements.

The city of Navoi, one of the largest industrial centers of Uzbekistan, will not lose this position in the future. On the contrary, the free economic zone can also become one of the largest economic centers of Central Asia, stimulating its development in the near future. After crossing the Khazora corridor, the Zarafshan River enters the territory of the Bukhara oasis. Although the Bukhara oasis is currently irrigated mainly by the Amudarya, the location of its settlements is associated with the Zarafshan hydrographic network. In particular, district centers such as Vobkent, Romitan, Jondor and Karakul are located directly on the river, and cities such as Bukhara, Gijduvan, Galaasiya are located up to 10 km from the river.

**Results and Discussions.** If we look at the map of Bukhara region, we can see that the Bukhara oasis stretches from northeast to southwest. The natural or geographical basis of the oasis's location is the Zarafshan River. In the late 60s of the XX century a special archeological expedition was organized under the leadership of academician Y.Gulyamov. Large-scale excavations were carried out first in 1970-1974, then in 1977-1980 in the old part of Bukhara. In almost all excavations, it was possible to excavate to the surface formed by the swamps of Bukhara. Over the centuries, a 14-meter-thick and 20-meter-thick cultural layer has been found in some parts of Bukhara. The Bukhara oasis can be called a gift of Zarafshan as the Nile of the gift of the Egyptians. As it was located at the head of the river, composed of deposits were brought by Zarafshan for thousands of years. The canals and ditches that flowed from the river served as a key factor in the formation and development of the nature of the oasis, as well as the formation of settlements [4].

*Bukhara* is the largest city of Lower Zarafshan district. The Samanids were one of the largest cities in Central Asia during the Bukhara Khanate and the Emirate (from the 16th century to the early 20th century). Today, Bukhara is one of the largest economic, cultural and tourism centers of Uzbekistan. Bukhara, the main center of Lower Zarafshan, has a population of more than 270,000. These achievements of

Bukhara are connected with the river factor. Indeed, the convenient geographical location of Bukhara, located in the center of the delta below the Zarafshan River, has had a positive impact on the development of the city. The branching of the river in the delta and the removal of many canals and ditches from them led to the formation of a number of settlements. As a result, there was an increase in the level of territorial concentration of the population and process of agglomeration around the city of Bukhara [2]. The decline and ruin these cities is associated with the Zarafshan River.

**Conclusion.** We conclude in the followings:

1) Unlike most rivers, there are 3 tributaries of the Zarafshan river - cities are formed in the upper, middle and lower parts;

2) In the river basin there are cities with a history of II-III millennia, such as Samarkand, Bukhara Karmana and Panjikent;

3) At the same time, "new" cities such as Navoi and Kagan emerged;

4) No river basin city in Central Asia has served as a long-term political center - the capital, like the cities of the Zarafshan Valley;

5) There are also ruins of ancient cities along the river and its old tributaries. Such ancient cities as Sarazm, Afrosiab, Dobusiya, Varakhsha and Poykent can be included. Thus, the Zarafshan River plays an important role in the development of Central Asian cities. Dozens of cities sprang up along the river. For comparison, many cities, such as the Zarafshan Valley, have not formed a network along rivers such as the Panj or the Naryn, which are much wetter, due to the geographical location of the river and its flow through areas with favorable natural conditions.

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