



FROM THE HISTORY OF CONSTRUCTION OF WATER SUPPLY AND IRRIGATION FACILITIES IN UZBEKISTAN

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Abstract

This article is devoted to the history of the construction of water supply and irrigation facilities in Uzbekistan, and the water supply of the Zarafshan valley, in particular, the Bukhara oasis located in its lower part, from the time of Shaybani Khan to the occupation of these territories by the Russian Empire. It covers and covers the history of the empire's statutes issued for its own interests. It is also an archive and manuscript that the economic and social economy, which formed the basis of the Tupkinton population economy, was not developed on the legal and socio-economic front during the Poccia empire's totalitarianism. analyzed on the basis of sources, historical materials.

Keywords: Irrigation facilities, irrigation networks, archaeological monuments, land massifs, Amudarya, Syrdarya, Zarafshan rivers, social and economic problems, agricultural oases, Bukhara.

Introduction

1. Cost

Uzbekistan is resolutely pursuing the path of strengthening its independence, building a legal democratic state and a free civil society. Among the historical topics studied today, the study of the history of irrigation and irrigation in Uzbekistan is of urgent importance. In particular, in the five priority directions of the development of the Republic of Uzbekistan in 2017-2021, the priority directions set for the modernization and rapid development of agriculture in the Strategy of Actions include "improving the reclamation condition of irrigated lands, reclamation " It can be seen from this that it is one of the strategic issues to implement irrigation works, build irrigation facilities, improve them, optimize the composition of cultivated areas and crops in the republic, and introduce advanced agro-technologies in the network. Therefore, today, the history of irrigation, especially the analysis of research aimed at studying the use





of water and the state of irrigation and its problems in the territory of Uzbekistan, is of great importance.

2. Methods and level of study

The article is covered on the basis of generally accepted historical methods - the principles of historicity, systematicity, impartiality, as well as the civilizational approach to the problem, as well as the methods of comparative analysis.

A number of scientific researches have been conducted in Uzbekistan on the emergence and development of agricultural culture, the history of irrigation and its development in different periods, the history and technology of the construction of irrigation facilities. As a result of archeological research carried out by archaeologists in the foothills of the Amudarya, Syrdarya and Zarafshan rivers of Central Asia, large land massifs of ancient irrigated lands were discovered. Studying the history of irrigation of these ancient irrigated lands, where water was once extracted and cultivated, has not lost its importance even now.

Remains of water structures and irrigation networks of the distant past, which are the main source for studying the history of irrigation in the ancient period of Central Asia, are almost not preserved in the present agricultural oases. Although such archeological monuments have been preserved to a certain extent only in the bosom of ancient irrigated lands, their discovery and study in the ancient agricultural oases of Central Asia is a large-scale archaeological, geomorphological and cartographic study. related to transfer. Such research conducted in the ancient irrigated lands of Central Asia began only in the late 1930s. That is why the first works on the history of irrigation in Central Asia are written almost on the basis of historical sources, and they talk more about medieval irrigation.

The development of the science of archeology in Uzbekistan created ample opportunities to pay attention not only to the social and economic problems of the peoples living in this area, but also to the issues of the history of the development of irrigation in the country.

In 1930-1934, B. A. Datinin, in 1930-1934, and in 1934 and 1939, A. YU. Yakubovsky chief Zarafshon, Termiz under the leadership of M. E. Masson in 1936-1938, Varakhsha under the leadership of V. A. Shishkin in 1937-1939 and 1947-1954, Khorazm under the leadership of S. P. Tolstov, who has been working regularly since 1937, y. in 1950-1970. G. Ghulomov chieftain Mokhondaryo and other archaeological expeditions made a great contribution. At the same time, the irrigation constructions carried out in order to improve the water supply of the existing cultivated areas in our republic and develop new lands: Katta Fergana, North Tashkent canals, Kattakurgan,



Chimkurgan, Southern Surkhan, Tuyabo As a result of the archeological observation and excavations carried out in the areas of Giz reservoirs, Charvak hydroelectric power plant and the routes of the Amu-Bukhara, Amu-Karshi and Central Fergana canals, very rich archaeological materials related to the ancient farming culture of Central Asia were obtained. . In addition to the issues of social and economic history of the peoples of Central Asia, the large-scale and regular study of archeological monuments is the emergence of farming culture in the large and small river basins of Central Asia and the emergence of irrigation, which is its basis. Many issues related to the history and development of irrigation were clarified.

D. D. Bukanich, S. P. Tolstov, Ya. G. The service of Ghulomov, B. A. Latinin, V. A. Shishkin, B. V. Andrianov and others was especially great. Summarizing rich and diverse archaeological and historical data, they created valuable works on the history of irrigation of certain river valleys of Central Asia. These works undoubtedly constitute the main part of the historiography of ancient and medieval irrigation of Central Asia.

Soviet historians made a significant contribution to the extensive and deep research of the history of irrigation in Central Asia. Even so, the irrigation history of the Zarafshan valley, especially the Bukhara oasis, among several agricultural oases of Uzbekistan, is one of the least covered issues in historiography. It is undoubtedly both scientific and practical appeared. In this regard, V. A. Shishkin's work entitled "Varakhsha" is especially valuable. Although this work by V. A. Shishkin is not directly related to the history of irrigation in Bukhara, the historical dynamics of the development of the oasis is revealed from the archaeological monuments of different periods presented in it.

Important information about the state building of the Bukhara Emirate, its management, agricultural life and agrarian issues, the state of irrigation stations in the Emirate, irrigation technologies, agricultural crops and weapons, types of land ownership and their interpretation It is given in the work of M. A. Abduraimov, and this work is far from the politics of that time and is completely different from the works created in that period due to its impartiality and the fact that it is written in an objective state.

It is dedicated to the water management of the Bukhara Khanate in the 16th-19th centuries. Referring to the main part of M. A. Abduraimov's work on agrarian relations to our historians dealing with agrarian relations, it can be said about the part of his history of irrigation that the author did not deeply research the issues of the history of irrigation. considerable information from the works is not correctly and reasonably interpreted in terms of scientific setting of the issue and its chronological coverage. As



a result, this part of the work on the history of irrigation is incomplete. If we pay attention to the scientific research of Y. Kasimov, one of the historians of the Soviet era, it is devoted to the coverage of the heroic struggle of the people of Uzbekistan for the development and irrigation of new lands during the Great Patriotic War (1941-1945). It contains rich archival and ethnographic materials. The work describes the history of the construction of irrigation facilities in our republic.

Sources have a special role in revealing the history of irrigation. The Central State Archives of the Republic of Uzbekistan (UzR MDA), Turkestan MIQ (17 funds), KDK (People's Commissariat of Agriculture 29-fund) funds irrigation is rich in historical sources.

At that time, the collections contained in the funds were considered to be a document containing only information on the history and reforms of TASSR irrigation, but the demarcation reforms of 1924 and the integration of Uzbekistan, Turkmenistan, and Kazakhstan by now part, it is a valuable source that provides detailed information about the history of water management of the republics of Tajikistan and Kyrgyzstan, the contributions and works of the peoples who lived in this area to the field of irrigation.

3. Research results

The period that we want to dwell on covers the period from Shaybani Khan's reign to the second half of the 19th century, when the Poccia empire was established. The political unification of the state and the establishment of a single authority led to the improvement of the country's economy, albeit for a short period of time, during the reign of Shaybani Khan (1500-1510), and then during the reign of Abdullah Khan (1557-1598). According to the book "Hospitality of Bukhara", Shaybani Khan held a special council of legal scholars in Qanigil, near Samarkand, in order to regulate land, water and tax issues. The council discussed the issue of using the lands of the owners who abandoned their lands due to the burden of taxes and the tyranny of officials. a decision was made to pay the fee.

According to the information given in Kamoliddin Binoi's work entitled "Shayboniynoma", in 1502, a water-separating bridge was built by Shaybaniyhan in the part of Zarafshan divided into Aqdarya and Karadarya.

The development of irrigated agriculture was related to the development of irrigation technology. There are many sources of information about the irrigation facilities built along the Zarafshan river. The remains of this structure are located on the left bank of the river, 7-8 km north-east of the center of Samarkand. "Abdullah Khan Bridge" is mentioned.



Until our time, only one of its walls has been preserved. The construction of this wall was personally supervised by Shaybani Khan himself, who is Rabbi ul-Awwal. It was completed on the last day of the month (November 1, 1502). This structure is a water separation dam that directs the water of the Zarafshan river into parts, i.e. Akhdarya and Karadarya, and also serves as a bridge. But it is worth noting that the dam at the bifurcation of the Zarafshan river has existed since ancient times and has been repaired over time.

The construction of such a large water facility in the Zarafshan Valley was undoubtedly of great importance in the economic life of the country.

In the second half of the 16th century, a number of large irrigation facilities were built in the Bukhara Khanate, especially in the Zarafshan Valley, which is considered its central part, and the area of arable land was expanded.

During the reign of Abdullah Khan (1557-1598), Badriddin Kashmiri describes the construction and irrigation works in the country in his work entitled "Ravzatur Rizvan wa Hadiqatul Gilman": the odd arches were decorated with seven-colored tiles, gold and jewels. Rivers and cisterns were built in every place, and stone bridges were built over the rivers. Canals were dug, and water was released to the plains. - Peace, cheapness... and happiness appeared among the people," he writes.

In one of the historical documents, it is said that 400 cisterns were built and repaired during the reign of Abdullah Khan, and in another document, this number is 1000. Abdullah Khan built his cisterns in the places where he would stay, and the rabots in the places where he could spend the night.

Through the information about this cistern, we get an idea of how these structures were built and the total volume of drinking water stored in them. cistern - a dome-shaped room with a diameter of about 13 meters and a depth of 11 meters, and a door with a small flap installed on its northern side. The characteristic feature of the cistern is that it is made of bricks 24-27 cm long and 4-5 cm thick. Wood was not used in the construction of the cistern. According to experts who conducted research on the Rabati Malik caravanserai, bricks of the same size were used in the construction of the caravanserai. Based on such evidence, experts came to the conclusion that the caravanserai and the cistern were built at the same time. According to architects and historians, the dome of the cistern belongs to the late Middle Ages (XVI-XIX centuries). Because the cisterns built separately or in the complex of caravanserais were used for a very long time on the trade route.

The foundation of the cisterns is very reinforced. Special mixtures containing alabaster and ash were used in the construction of the base of the inner part, and bricks and stones were collected. In this, great attention is paid to prevent the



accumulated water from seeping into the ground, and also to prevent water from seeping. Water was brought to the cisterns with the help of special pipes, and excess water was also removed in the same way. In order to keep the temperature the same when the sun shines, holes are placed on the sunrise (east) and sunset (west) sides. The wind blows from the east side. Holes are opened on the sides for water to enter the cistern. In drought years, a special ditch is dug. water was brought in. The trough near the building's door was used for watering livestock.

Archaeologists report that there are many ruins of cisterns in the Mirzachol and Karshi deserts.

There are many remains of cisterns on the ancient trade routes of the Mirzachol and Karshi deserts. In Ortachol desert, there was a cistern along with the remains of Qorovulbazar. A.A. Semenov gives information about this cistern in the article "Materialnye pamyatniki ariyskoy kultury". zan is also called "palace". The entrance to the cistern is decorated with arched pediments, through which a large and wide pool is entered on the corridor.

There are also rooms with windows in the corridor, which is intended for the employees who service the cistern. The diameter of the cistern rooms is 15.8 m, the depth is 8.1 m. The height of the dome is 6.35 m and it is divided by 9 windows. Water was brought to the cistern in Karovulbazar from the flow of the Kashkadarya river. Along the desert road, a number of caravanserais and cisterns belonging to the era of Abdullah Khan were noted in the Kerki pass of the Amudarya. These are cisterns such as Sangisuluq, Nishon, Tolgida, Barimarjon, Yusuf, Oroz. Also, there is a cistern and cistern associated with the name of Abdullah Khan near Chorshanba station and the ruins of the caravanserai of the same name. The remains of this structure point to the routes of ancient trade routes. During these periods, the positions of the Khojabori families in the political and economic life of the Bukhara Khanate were high. In the Bukhara Khanate, expanding irrigation works and acquiring new lands, the Khojabori Khojas, one of the most influential feudal priests of that time, played a major role in the country's political and economic life. From the middle of the 16th century, the chiefs of Muslim priests, who exerted political influence on the administration of the khanate, used their positions in the economic and political life of the country to control large amounts of money in their possessions. - those who sought to expand their properties consisting of large land and water. That's why they were interested in building water structures and bringing water to the steppes and developing new lands with the power of the working people.

It is mentioned in the work "Ravzatur Rizvan and Hadiqatul Gilman": according to information, in the second half of the 16th century, in addition to irrigation



constructions, Joybori Khojas carried out huge construction works in Bukhara and its surroundings, as well as in many other cities of Movarunnahr. they do. For example, in Bukhara's Dzhoybor neighborhood, Chashmai Ayub, Qafshfurushon market, Durunishahr CHorsusi, Sahar (Kalon minor), the remains of the old canal bottom that passed near Suvkhojaporsan, Miton, Gijduvon, Karakol, Ohugir district, Totkand (Mionkol) and built eleven baths in Chorjoi, ten cisterns in deserts crossed by caravan routes, and two caravanserais in Sarrofon guzar and Durunishahr chorus of Bukhara. One of the main signs of the development of agriculture in the conditions of Central Asia in the XVI-XVIII centuries was that during this period, the irrigation system expanded and many new canals were built. During the reign of Amir Shahmurad, the irrigation networks in the Zarafshan Valley were also restored. Shahmurad ascended the throne of the Bukhara Emirate. After his rise, he paid special attention to the development and improvement of cities, irrigation and agricultural development. He was called Amir Masum, that is, Amir without sin, due to the actions and events he performed during his reign, as well as his position in relation to the people. During his reign, Shohmurod paid great attention to the reconstruction of the complex of large-scale irrigation facilities on the border of the Zarafshan oasis.

43 main and 940 secondary ditches were built along the Zarafshan River during the Bukhara Khanate (in the first half of the XVI-XIX centuries), and these ditches provided water to 400,000 square meters of land.

The Emirate of Bukhara tried to change the flow of the Zarafshan River due to the lack of water in the area at different times. During the reign of Amir Muzaffar Khan (1834-1885), the son of the Emir of Bukhara Nasrullah Khan (1834-1885), he directed the water of the Zarafshan River to Qal'ai Buss. , beautifies Karmana and its surroundings. However, due to Muzaffar Khan's failure to use the river water wisely in the process of improving Karmana, he did not take into account the distribution of water needed for other regions of the emirate, there is a water shortage in the Karakol oasis, which is fed by the waters of the Zarafshan River, and many farms and villages agricultural areas suffer a lot from lack of water.

After fierce battles between Chor Russia and the Bukhara Emirate between 1866 and 1868, Bukhara was defeated and lost a large part of its territory. The territories from Jizzakh to Kattakurgan have come under the control of the Russian government. The Samarkand region of the Turkestan general governorate was established at the expense of the territories conquered in the battles between Russia and Bukhara.

Thus, by 1868, the Bukhara Emirate was completely deprived of its large population centers such as Khojand, Oratapa, Jizzakh, Samarkand, Kattakorgan, and the upper and middle reaches of the Zarafshan oasis.



As we know, after the battles on Kattakorgan and Zirabulok Hill, the upper part of the Zarafshan River, which is the main water source of the Bukhara Emirate, and its catchment basin, came under the control of Russia according to the bilateral peace treaty concluded in 1868 and 1873. had passed. It is this situation that started to cause huge economic problems in the economic life of the Bukhara Emirate, especially in the development of agriculture, from the 70s of the 19th century.

Since the upper part of the Zarafshan River is part of the territory of Turkestan, the authorities of the tsarist government in Samarkand began to use it in order to make Bukhara economically dependent on them. With various reasons and excuses, they almost did not provide water to the residents of the emirate. The people of Bukhara were sometimes deprived of Zarafshan water for months, and their cultivated fields dried up due to lack of water. This, in turn, caused crop failure and made it difficult for the population to live.

By the 90s of the XIX century, on this issue, the two parties held several talks.

After long negotiations between Russia and the authorities of Bukhara on the distribution of the Zarafshan river water and its reasonable, agreed use, the following settlement was agreed on on May 27, 1894. From November 15 to March 10, all water will be supplied to the territory of the emirate, except for drinking water for the residents of Samarkand region and some vital issues, and from June 10 to August 15, 60 percent of the water of the Zarafshan River will be supplied to the Russian-controlled areas of the Zarafshan oasis, the rest It was agreed that 40 percent will be given to the regions of Bukhara.

Although an agreement on such an agreement was signed between the two parties, the Russian authorities in Samarkand did not follow it and openly tied Bukhara to themselves economically with this very issue of water supply. in other words, they continued to subjugate them.

By 1877, 12 years after the occupation of Tashkent, a serious law on irrigation, which defines the powers and obligations of the administration of the irrigation system in the country, the right of the owner to use water and the relationship of water, was important for the lower stratum of the population. After the adoption of the 1877 "Temporary Regulation of the Tupkinton Country Fishing Club" as a result, the "custom" and "tradition" of the Tupkinton country during the aclap of the "custom" and "tradition" of the use of water became the crown of the system.

On July 12, 1886, Article 256 of the "Regulations for the Maintenance of the Territory of Tupkinton", approved by Alexander III, stated that "Apiqlap, coylap, dapro and cuqlap in kollap shall be assigned to the inhabitants according to "custom". This is the only clause in the "Regulation" related to the right to water in the country, and it is



determined that the use of water is a "custom" for the population. As it is known, in the old law, in the Tupkinton area, a variety of unique traditions have been formed. However, the law did not explain the concept of "custom" and it was natural that it caused a lot of misunderstanding in the use of tobacco among the population. By the end of the century, the administration of the youth became a mechanism of the general government, and its implementation was in the hands of the local government. The saddest thing is that he lost his independence and respect during the reign of the khanate. As a result, the government developed the necessary uniforms and service standards for young adults and young adults in order to strengthen the control of youth administration and strengthen the system. The burden of repairing and cleaning the Sugopish puzzle was entirely the responsibility of the population. In the new "Regulation", the government claimed that this work was carried out by the people against the "habit", and imposed a heavy tax and coercion in the system of communication. In Ulap's sisterhood, in particular, he kept the tradition of working for irrigation water for free. It is worth noting that 36.4 million state funds have been allocated to the development of smoking in 20 years, and the cost of water users to protect and support the smoking industry is almost 2 times more than the state funds allocated for this purpose.

Conclusion

One of the main signs of the development of agriculture in the conditions of Central Asia in the 16th-18th centuries was that during this period the irrigation system expanded and many new canals were built. The irrigation networks in the Zarafshan valley were also restored during the reign of Amir Shahmurad. Over time, after the Emirate of Bukhara lost its rights, the upper part of the Zarafshan River, which is considered the main water source of the Emirate of Bukhara, and its watershed, came under the control of Russia according to the bilateral peace treaty concluded in 1868 and 1873. had passed. It was this situation that began to cause huge economic problems in the economic life of the Bukhara Emirate, especially in the development of agriculture, from the 70s of the 19th century.

Agriculture, which formed the basis of the economy of the Turkic population, was not developed on the legal and social-economic front during the period of the imperialist globalization of Pakistan. On the other hand, a cotton monopoly was established in the existing cotton plantation, and the possibility of growing food sufficient for the needs of the population was limited. As a result, the mobile phone belonging to the residents was found in an illegal sale. As a result of the constant drought, the country's agriculture declined, and the population was in a poor economic situation.



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