GALAXY INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (GIIRJ)
ISSN (E): 2347-6915
Vol. 10, Issue 12, Dec. (2022)

TRADITIONS AND INNOVATIONS OF WATER CIVILIZATION ARE AN IMPORTANT FACTOR IN THE DEVELOPMENT OF UZBEKISTAN

Khatamova Rano
PhD. State Museum of the History of Uzbekistan
xatamovar16@gmail.com

RESUME

The article describes the water civilization in Uzbekistan and its role in the development of the country. An innovative approach to water resources was mentioned, which is now a global issue. One of the most important aspects of the life of our rapidly developing country today is the training of mature irrigators with modern thinking based on the capabilities of the water civilization, the high culture of our people in the use and protection of water, the combination of traditional management methods with universal values. it is not in vain that special attention is paid. In this regard, the achievement of deep knowledge and high talent, especially for young irrigators, a clear definition of current tasks related to the issues of their spirituality and enlightenment, becomes one of the most important life needs.

Keywords: irrigation, civilization, Avesto, innovation, education for sustainable development.

INTRODUCTION

It is known that every person, every family and nation, nation and people live, form and develop in areas with certain natural water civilization conditions, adapt to it. For this reason, each person is a child of the universe and is the highest stage of the development of living organisms on the planet Earth.

To be a civilized person who meets the requirements of the water civilization is to understand the scientific and theoretical views, ideas, knowledge, actions and efforts of the whole world, nature and mankind, living organisms and their communities, their relationships with the environment, and a person who deeply understands their importance. should be At the same time, knowledge of nature, skills and abilities, understanding of the laws of coordinated, non-harmful and protected functioning and manifestation of relations between man and the surrounding environment are also components of the development of people who have mastered the principles of water civilization.

For this reason, this process makes it possible to prevent certain threats in this direction, to protect human life and the space in which he lives, to understand the needs of man and nature, his water civilization. Avoiding imbalances in the interaction between these factors on the earth, maintaining the cleanliness of the environment, forming an active attitude of people towards land and water, and creating historical, political, legal and social factors for the realization of the principles and requirements in this regard.

In the most developed countries of the world, the construction of all spheres of education and economy on the basis of such principles began in the 70s of the last century. In these countries, continuous environmental education based on the requirements of land and water conservation and effective use of their potential has been implemented. At the same time, many of them began

to transition to sustainable development education (BRT) in the late 20th and early 20th centuries.

In order to overcome the problems in this direction and to achieve the effectiveness of BRT in practical terms, all the necessary issues are being solved with a high level of organization. Due to this, in some regions, some crisis situations related to land and water are being effectively eliminated, experiences are being collected for use in the countries of the whole world.

For example, there were specific rules of procedure for celebrating Navruz, which has a history of more than thirty centuries. Customs such as cleaning yards, planting greenery and flowers, visiting parents and friends, and visiting the graves of the deceased are part of the historical part of Navroz holiday. Therefore, there is no doubt that such values are formed under the basis of spiritual factors.

The history of the emergence of ideas related to natural values and water civilization in our country goes back thousands of years. It is not in vain that our ancestors said, "The fate of the world depends on loving nature." Because education dedicated to instilling love for nature is one of the most urgent issues of today, in fact, the worship of the elements of nature was initially formed as a primitive religious imagination, and later it was reflected in Zoroastrianism and other religious teachings.

In the Avesta, special attention is paid to the veneration and appreciation of water, the source of life. In the image of Ardvisura (Amu Darya), a special dedication was written to him. Amudarya waters are considered the greatest and holiest of all waters, and are described as "waters above waters". This is how the tradition of protecting the river and connecting the beauty of nature with water was born. "Avesta" describes that time and human life are directly related to "wide pastures, deep lakes, muddy rivers, mountain meadows". That's why the earth feeds man, gives him generosity.

The glorification of earth, water, air, and fire in "Avesta" indicates that our ancestors did not look at water indifferently in the pre-Islamic period, and had a rational attitude towards nature. "Avesta" condemns evil, darkness, destruction, war, bloodshed. Anyone who breaks the oath of cultivation will be "punished with a thousand lashes". In the play, whoever plants a seed on the ground is believed to believe in humanity. On the contrary, Chapters 13-14 of "Vendidat" stipulate the punishment of forced labor if water is not saved or polluted. Killing plants and killing animals for no reason is condemned in Zoroastrian traditions. "Avesta" also touched on issues such as the elimination of disease-spreading animals and insects, the need for a person to walk cleanly. Recommendations are also given on ways to clean dishes, clothes, water and dishes touched by dead dog [1].

Not only in religious-philosophical worldviews, but also in the teachings of ancient and medieval thinkers, it served as the beginning of the understanding of reality. For example, the famous scholar Thales, who lived in antiquity and was the founder of the Miletus school of philosophy in Greece, and many of his contemporaries in Ancient Greece considered earth and water to be the basis of the universe.

Especially in the East, especially in our region, the contributions of our scholars who grew up in natural science, including water civilization, are great. For example, Allama Muhammad al-Khorazmi (782-847) writes: "Know that when the eyes of the river are filled with tears, sorrow and trouble will be upon it. People, don't take your love away from the river." This opinion of

Alloma indicates that he considered the need to prevent excessive wastage of river water, first of all it is necessary for the river and people to understand each other, find a common ground, and show love to each other.

In this regard, another world-famous scholar Abu Nasr al-Farobi (870-910) gave a description of various branches of science, and paid great attention to natural science, including the issues of the role and importance of water in the life of man and society. He distinguished between natural and man-made objects, especially artificial bodies of water other than rivers and lakes. He thoroughly assessed and analyzed the influence of the human factor in nature, natural and artificial selection and other effects on nature. At the same time, he expressed his views on the importance of water and its use.

According to the famous scholar of the East, Abu Rayhan Beruni (973-1048), the resources necessary for the existence of plants and animals on Earth, including water and other food, are limited. But plants, animals, and the human race also strive for unlimited reproduction and fight for this purpose [2]. The thinker founded the science of mineralogy by observing the state of stones, and the science of geodesy by observing the height and depression of the Earth's surface. In his works such as "Osor al-Baqiya", "India", "Minerology", he did not ignore the topics related to water, along with many other issues. According to Beruni's hypothesis, all bodies tend to the center of the Earth, that is, its center of gravity. He said, "It is established from the basics of astronomy that the Earth is spherical and is in the center of the spherical universe, and it is natural for weights to move from all sides towards the center. From this it can be seen that the water level is also circular, and it deviates from this only by the amount of waves, which is due to the absence of attraction between its particles" [3]. Accordingly, the scientist assumes that it is necessary to balance the weights on its edges in the inner layers of the earth.

Beruni describes the theory of continental drift for the first time in the history of science. According to him, "The prosperous part of the Earth moves to different places of the Earth in turn according to those events. When its parts moved from one place to another, its weight moved with it, and it changes at the edges of the Earth" [4]. The thinker puts forward such a hypothesis based on his observations. "In ancient times, the sea replaced the land and the land replaced the sea. If it was in the world before the creation of man, it is not known when, if it was after, it was not kept in people's memory, because after a long time the messages are forgotten, only special people can perceive them" [5].

In Beruni's work "Monuments left by ancient ancestors", great attention is paid to the relations of representatives of the human world, plants and animals with the external environment. According to Beruni, plants and animals do not appear and disappear suddenly. Perhaps, even if one of them disappears, he will leave his presence (a trace of life - A.H.). If the Earth is the same tree or if the same animal completely covers it, in this case there is no room for the reproduction of the animal or the growth of the tree [6].

For centuries, Abu Ali Ibn Sina's words, "If there were no dust and dust in the air, a person would live for a thousand years", have not lost their importance. At the same time, this scholar also recognized the incomparable role of water in human health and well-being. As a great encyclopedic scientist who made a great contribution to the development of world culture and science, Ibn Sina dealt with almost all fields of science of his time, including the importance of water for the human body. In his famous masterpiece "The Laws of Medicine", which is

considered to be an encyclopedia of medical science, the scholar emphasized the importance of the influence of the external environment, including water, on the human body.

METHODS

In the analysis of the emergence of water civilization and its stages in Central Asia and today's Uzbekistan, there are many works devoted to the history of water use and irrigation traditions in our region and our country, as well as the history of irrigation systems in our country. Relying on them, there is certainly an opportunity to scientifically deeply analyze the natural-historical foundations of the water civilization, which has been formed in our country for centuries and has been polished in the past millennia, and has its own regional and national traditions, as well as issues of periodization of its development [7].

Among the sources devoted to issues of the formation of water civilization and the stages of its improvement and the periodization of its gradual improvement in our country, the works based on the civilizational view of issues related to historical processes and based on the approach from the perspective of the development of agricultural culture are of great importance. Among them are A. Askarov, B. Abdullaev, D. Bukinich, Yu. Buryakov, I. Ziyodullaev, Yu. Zadneprovsky, A. Isakov, A. Latynin, L. Lordkipanidze, V. Masson, A. Mukhammadjanov, Ya. Gulomov and N. We should note that the works of many scientists and specialists such as Kholmatov, which reflect the results of their research, are of particular importance [8].

RESULT

Today, large-scale measures are being implemented to restore the traditions of water civilization and to increase the efficiency of work in this regard, in order to implement the tasks planned in the Action Strategy for the five priority areas of socio-economic development of the Republic of Uzbekistan in 2017-2021. In particular, the implementation of plans and programs of strategic level measures in this direction on the introduction of economical technologies in the use of water shows that such a process has turned in a positive direction in our republic.

In general, it should be noted that in the years of independence, in contrast to the former union, the implementation of cost-effective technologies to ensure the harmony of water civilization traditions and innovations in our country is of great importance in the practice of this field. In particular, in the following years, necessary measures are being gradually implemented in our country with the help of several types of water conservation. Crops that require a lot of water, such as cotton and rice, have been reduced, and instead of them, the area of grain crops, vegetables and pulses, and orchards and vineyards has been expanded. In particular, compared to the 80s, cotton areas were reduced by almost 50%, and rice areas were reduced by 75%. 5 thousand km every year. irrigation, 12,000 km of collector-drainage, 50,000 km of canal networks are being cleaned, 200 km. more than 30 km of canals, 500 km of collector networks, more than 400 hydrotechnical structures and many other objects are being reconstructed and built. Diversification of agricultural production also has a positive effect on water conservation [9].

Taking into account the importance of the use of advanced water-saving irrigation technologies in increasing the efficiency of water resources use, the development of this direction was supported by the leadership of our country. In particular, according to the Decision of the President of the Republic of Uzbekistan dated April 21, 2013 "On measures to improve the

reclamation condition of irrigated lands and rational use of water resources in the period 2013-2017" during the years 2013-2017 drip irrigation system on a total area of 25 thousand hectares, 45 It is decided to introduce the method of irrigation by laying a film on the ground on the area of 6,000 hectares, and on the area of 34,000 hectares, irrigation methods using portable flexible pipes will be introduced.

Measures to ensure the implementation of this Decision and encourage agricultural producers who have introduced modern water-saving irrigation methods are defined in the Cabinet of Ministers' decision of June 21, 2013 "On measures to effectively organize the financing and introduction of the drip irrigation system and other water-saving irrigation technologies" it can be said that the provision of benefits gave a great impetus to the practice [10]. As noted in the decree signed by the President of Uzbekistan with responsibility, care and concern, it is clear that it is necessary to accelerate the use of advanced water-saving technologies, including drip and sprinkler irrigation systems, and start organizing work on the operation and reconstruction of hydrotechnical facilities without delay [11].

At the moment, as stated in the decision of the President of the Republic of Uzbekistan "On the approval of the concept of development of water management of the Republic of Uzbekistan in 2020-2030", according to the UN classification, Uzbekistan is among the countries experiencing water shortage, the future balance of the republic's water resources will be the rapid melting of the glaciers that form the main rivers of the region. , other aspects of climate change, as well as the increasing water needs of the population and industrial development are affected.

It is estimated that a 10-20 percent reduction in water supply could have serious consequences for the size of irrigated land and population employment, resulting in a reduction in gross national income. Effective management of water management to meet the needs of irrigated agriculture, utility and industrial sectors, environment and other sectors is crucial to guarantee sustainable economic development of the country [12].

CONCLUSION

All of the above, in turn, indicate that a unique water civilization that has passed through the centuries safely in the territory of our country and the traditions of training efficient watermen, intellectuals, and mature irrigators in accordance with its history and development. The large number of historical sources in this direction, the results of archaeological research, scientific and practical research on this topic clearly prove this.

In this respect, the antiquity of the formation of water civilization and its unique personnel training traditions in the territory of our country is certainly related to the early periods of the emergence of water use and farming culture in the whole world and in the Central Asian region. We must emphasize that the presence of natural water sources, especially the Amu and Sir rivers, is extremely important in the formation and development of this civilization in the territory of our country.

REFERENCES

1. Bertels E. E.. Excerpts from the Avesta // Collection "East". - Moscow: Gosizdat, 1924. Kn. 4;
2. Abu Rayhan Beruni. Book al-jamahir fi-marifat al-javahir (Mineralogy). Tashkent. 2017.

3. Abu Rayhan Beruni. Selected Works, III, Geodesy. The author of the introduction, translation and comments is A. Ahmedov. Tashkent "Fan", 1982. - 42 pages.
4. Abu Rayhan Beruni. Selected Works, III, Geodesy. The author of the introduction, translation and comments is A. Ahmedov. Tashkent “Fan”, 1982. -42 pages
5. Abu Rayhan Beruni. Selected Works, III, Geodesy. The author of the introduction, translation and comments is A. Ahmedov. Tashkent “Fan”, 1982. -71 pages
6. Abu Rayhan Beruni. Selected works. - T .: Fan, 1968. Tashkent. II. Page 48.
7. Askarov A. Ancient culture of the Bronze Age of South Uzbekistan. - Tashkent: Fan, 1977; Bukinich. D.D. Brief preliminary information on water supply and irrigation of Old Termez and its region. // Trudy AN UzSSR, ser. I, history, archeology, issue. 2. - Tashkent, 1940; Masson VM Jeshun settlement (the problem of becoming an economist) // MIA - L., 1971. - № 180; Dzhurakulov MD .. Kholmatov NU Mesolithic and Neolithic Middle Zerafshan, - Tashkent: Fan, 1991; Latin A. Questions of the chronology of ancient agricultural cultures of Fergana, - M.-JL, 1935; Latin A. Questions of the history of irrigation of ancient Fergana // Short messages of the Institute of History of Material Culture. - M., 1956. - Issue. 64; Lunina S. B. The city of Yuzhno Sogda in the VII-XII centuries. - T .: Fan, 1984; Muhammadjanov AR To the history of irrigation in the Kushan epoch. In kn. Central Asia in the Kushan epoch. T. 3. - M .: Nauka, 1975; Gulomov Ya.G. History of Khorezm irrigation. From ancient times to the present. - Tashkent, Science Publishing House, 1959; Shaidullaev Sh.B. Northern Bactria in the era of the early Iron Age. - Tashkent, 2000; Ulzhaeva Sh., Khakimova M. "Irrigation and water resources in Uzbekistan: history and prospects", - Tashkent, TIKHMMI, 2019; Khamidov H., Nazarov K., etc. Mechanisms for improving water treatment and ecological thinking (scientific monograph). - Tashkent: TIKHMMI, 2020
8. Askarov AA, Abdullaev BN Dzharkutan (to the problem of Proto-Russian civilization in the south of Uzbekistan). - Tashkent: Fan, 1981;
9. https://www.agro.uz/uz/information/about_agriculture/434/5220/
10. 10.https://www.agro.uz/uz/information/about_agriculture/434/5220/
11. 11.https://uza.uz/oz/society/zbekiston-khitoy-va-zha-onda-suv-tan-isligi-muammolari-10-07-2019
12. https://regulation.gov.uz/ru/document/13767 Resolution of the President of the Republic of Uzbekistan "On approval of the Concept of development of water resources of the Republic of Uzbekistan in 2020-2030"