

Water Economy Resources as a Geopolitical Asset of the EAEU Countries and the Formation of Sovereign Development Strategies

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Abstract. Water is a vital resource for all mankind. Its resources can both accelerate and limit the social development and technological progress of any society, can be the cause of both prosperity and poverty, can lead to both cooperation and conflicts on a local, regional or global scale. The article is devoted to the problem of joint exploitation of water resources. Their fair distribution in the Central Asian region is relevant, requires coordinated approaches and the creation of joint roadmaps. They could diversify emerging risks by creating favorable conditions for the accelerated development of all Central Asian countries and building a unified infrastructure for energy exchange and water use, taking into account the interests of the world's main regulators of the scientific and technological process, who have historical claims to the dominance and assimilation of some parts of the economy in the national economies of Central Asian countries. The opportunity not to fall under the institutions of global governance will help to create conditions for local national elites not to lose their sovereignty and fulfill the tasks of sustainable technological development of Central Asian industries in a situation of digital transformation and post-crisis recovery.

Keywords: Central Asian region, water resources, Russia, USA, China, Iran, Turkey, water conflicts, EAEU, Industry 4.0

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Introduction

The relevance of the research topic is determined by the growing political and geo-economic instability in Central Asia. Here, long-standing conflicts between neighbors are unfolding, and historical claims to water resources arise, which are important for countries to enter Industry 4.0. as self-sufficient and sovereign entities building their industrial future. Russia, Turkey, Iran, China, the UAE, Saudi Arabia, the countries of the Anglo-Saxon world are implementing their projects that affect the economies of the countries of Central Asia, do not take into account national interests of the countries of Central Asia, and propose that of the countries of Central Asia should develop under their own dominance in some global industries or neo-colonial leadership and mediation.

Water resources, as well as technology, land and capital, are becoming one of the key factors in the post-Soviet republics that ensure the national security of the countries of Central Asia, determine their competitiveness in the technological and agricultural sectors, determine national sovereignty and the implementation of nationally oriented policies by the leaders of these states. Finding a reasonable compromise will help build your own effective development and obtain a multiplier effect from integration according to the cluster principle (Soviet geographic zoning zones and territorial-industrial complexes and industries of common customers and consumers of the planned economy of the Soviet period). At the same time, each country located on the path of the rivers is trying to maximize its geographical advantages and build a unique hydraulic network on the territory and in river basins that are of strategic importance for peaceful and accelerated modernization during the transition to the robotic-humanoid way of Industry 4.0. [1:15]. The proposed scenarios of various players have a number of features and do not always correspond to the desires of countries not to lose their specialization in the global division of labor and to confirm the uniqueness of their role in international economic relations, while transnational capital and countries offer long-term support in exchange for access to all resources, including water, for their enterprises (branches) in the countries of Central Asia [5:32].

The purpose of the study is to conduct a historical and economic analysis of the distribution of water resources between the states of Central Asia, considering existing risks and emerging threats, to propose ways for a harmonious policy in the field of industry and agriculture in order to take into account the needs of all countries and get their share in water resources; summarize historically applied approaches to the development of Central Asian territories to obtain multiplier effects in various national sectors, especially those dependent on water, such as agriculture, energy and food security [4].

Materials and methods

The water policy of the countries of Central Asia is considered. It is necessary to create competitive corporations, stimulate the use of new technologies and attract investments for the development of territories, stimulate foreign direct investment and import of Industry 4.0 technologies.

Scientific methodology should contribute to the systematic, step-by-step involvement of the countries of the region in water "road maps" while maintaining the processes of sovereign development of national industries and the priorities of their own national economy before the growing influence of global corporations and transnational capital, seeking to reduce the self-sufficiency of the countries of the Central Asian region, their own energy/raw materials/ water security and maximize the profits of foreign actors, provoke countries to waste the resources of their own economies and mineral resource base on the creation and growth of cross-border chains of transnational corporations that continue to export the resulting products and capital from Central Asia [7:18].

The authors use the methodology of the balance approach, which is in demand by the international scientific community, who wish to use it in the activities of UNESCO, SCO and BRICS to harmonize efforts for equal access to resources, taking into account the reindustrialization of the post-Soviet space [10: 64–67].

The authors use an analysis of the October 1991 Tashkent Conference., which led in February 1992 to the signing by five republics of the Agreement on the Management, Use and Protection of Transboundary Water Resources, propose to classify the resources themselves from the standpoint of their industrial use, a possible instrument of collateral, exchange, trade and investment in creating a joint field of interests and in determining common priorities for the balanced development of the economies of Central Asia.

There are many publications on this topic, which can be divided into 3 groups:

Anglo-Saxon historians, geographers, thinkers and naturalists who consider this region from the perspective of geopolitics (Heartland) or the West's strategy for the colonization and enslavement of the East from the perspective of logistics and food chains that allow solving issues of delivering unique goods to Europe. They identify outposts for the dominance of "civilizational forces" in the "kingdoms of savagery and ignorance", which have become a tasty morsel for the West, the possibility of confronting alternative projects of the Great Turan (the new Ottoman Empire), Ancient Persia (Iran and the ideas of a joint Shiite state together with those close to the faith countries of the global South), Arab caliphates and monarchies of our time (competing projects of the Saudis and Arabs from the Gulf countries, such as Qatar and the UAE), Chinese expansion in Asia (the assimilation of the Celestial Empire of all states under the idea of Great China, developing lands of close geography and the development of the Great Silk Road in the export of its goods from the Asia-Pacific region to the New World, the Middle East and Africa). These views were outlined and described by researchers J. Kay, J. Perry, J. Garten, N. Knight, D. Wallace-Wells, N. Ferguson, R. Sharma, K. Van Wolferen, B. Hughes, K. Baer, R. Kipling, P. Buchanan, C. Gati, G. Greene, K. P. von Kaufmann, S. Maugham, H. Mackinder, S. Huntington and R. Kaplan;

the second group of researchers is based on the Russian tradition of expanding the Russian Empire at the expense of the lands of Asia and with their civilized and full inclusion in a joint Russian, and later in the Soviet project, as well as the Russian, post-Soviet project, through the emerging integration platforms in the form of the CIS, Shanghai organization of cooperation and the "Eurasian project" through the platform of the Eurasian Economic Union. The pre-revolutionary period can include such authors as L.N.Gumilyov, B.A.Turaev, I.N.Nadezhdin, N.I.Roerich, E.P.Blavatskaya, N.N.Miklukho-Maclay, P.P.Semenov-Tyan-Shansky, V.F.Oshanin, A.R.Bonsdorf, L.F.Kostenko, M.D.Skobelev, K.Antarova, Yu.N.Tynyanov, M.V.Pevtsov, V.V.Rozen, N.M.Przhevalsky, G.N.Potinin, G.E.Grum-Grzhimailo, V.A.Obruchev, P.K.Kozlov, V.I.Danilov-Danelyan, N.P.Ostroumov, V.V.Radlov, N. A. Severtsov, K.I.Antipin, G.P.Vasiliev, M.I.Venyukov, N.I.Grodekov, N.A.Aristov, G.S.Zagryazhsky, F.V.Poyarkov, V.V.Bartold, V.V.Grigoriev, S.N.Abashin, E.I.Makhov, V.P.Nalivkin, D.Schimmelpenninck van der Oye

the group of researchers is the work of authors of the Soviet and post-Soviet period, who consider their countries as monopoly owners of natural resources and want to more deeply extend, through their management, their influence on the entire politics of the regions of Central and Central Asia, such as D.M.Mamatkanov, S.Primbetova, G.A.Rudova, T.T.Sarsembekova., T.U.Usulaliev, S.K.Alamanov, etc.

Results

The countries of the Central Asian region are characterized by an arid climate, so water plays an extremely important role in their development and post-industrial formation. Climate change and growing environmental problems focus attention on the water problems of Central Asia, because its territories contain arid steppes, deserts and semi-deserts, which make these countries dependent on interstate rivers, and this requires constant compromise.

Water resources have always played an important role in the development of mankind and determined the development of civilization. After all, the availability of water has always been not only a vital need, but also an economic benefit, a resource for the wealth of nations. Today, water shortage is the most important factor hindering economic growth and preventing people from maintaining health in most Asian countries. Central Asia is the owner of colossal water resources. She received the post-Soviet idea of planned diversified access of people to water as the basis of the technological and environmental sovereignty of developing countries in the region.

Inappropriate and ineffective use of water resources, lack of modern technologies, rapid population growth, poverty of the working masses in dire need of development resources, deterioration of irrigation structures and reservoirs have led to an acute water shortage both in rural areas and in industrial centers and foothills.

Water resources in the region are distributed unevenly, therefore the water issue is one of the most important for the states of Central and Central Asia. In the region, the

volume of renewable water resources averages 118–120 km³ per year and consists of the waters of the Amu Darya, Syrdarya and underground water reserves (14.7 km³). 55.4% of the total water resources flowing into the Aral Sea are formed in Tajikistan, 25.3% in Kyrgyzstan, 7.6% in Uzbekistan, 3.9% in Kazakhstan, 2.4% in Turkmenistan, the rest 5.4 % in Afghanistan and parts of China and Pakistan¹.

More than 10,000 rivers originate in the mountainous regions of Kyrgyzstan and Tajikistan and more than 80% of water reserves are formed [11:69–72]. Kyrgyzstan and Tajikistan, being in the upper reaches of rivers and having no other wealth, are forced to support the national economy through hydropower, while Kazakhstan, Uzbekistan and Turkmenistan build their economies on agriculture and industry. Therefore, if it is beneficial for downstream countries to collect water in winter and use it in summer, then upstream countries need to collect water in summer and use it in winter, which leads to water imbalance and interruptions in water supplies when using it. And water is important as a key resource between countries in their globalizing international economic relations, in upholding nationally oriented value chains, increasingly subject to the pressure of the selfish aspirations of transnational corporations and accompanying the growing harm caused by the uncontrolled exploitation of the entire infrastructure of the countries of Central Asia by global governance institutions [12:47–52].

Before independence, there was a centralized water and energy complex that provided countries with the opportunity to interact in common interests. With the collapse of the Soviet Union, the system not only collapsed, but also entailed a conflict of interests that cannot be overcome to this day, making contradictions multi-level, from national to regional and global, forcing the elites of Asian states to engage in constant bargaining for their national interests.

States have made attempts to resolve the water issue through international organizations. The first step was taken in October 1991 following the results of the Tashkent Conference; already in February 1992, all five republics signed the Agreement on the Management, Use and Protection of Transboundary Water Resources² [13:381].

Today, cooperation in the field of water use is within the competence of the Interstate Commission for the Coordination of Water Resources - an intergovernmental body dealing with issues of water distribution and protection of water resources; the commission was created under the auspices of the International Fund for Saving the Aral Sea, which includes all five republics. This commission coordinates the distribution of waters of the Syrdarya and Amu Darya [5]. There is a Scientific and Information Center under the commission, and there is also a Water Resources Management Organization for the Syrdarya and Amu Darya basins. The work of these structures does not give the expected result, since the key problem is not solved - optimization of multi-seasonal water demand.

1 Rakhimov Sh. Kh., Khamraev Sh. R., Problems of water resource management in the Aral Sea basin. Available from: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.cawater-info.net/library/rus/saniiri80_3.pdf.

2 How the ICWC was created. Memoirs of the founders and veterans of the ICWC. Available from: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.cawater-info.net/library/rus/icwc_story_behind.pdf

The development of irrigation and hydropower is an important task of the water policy of Kyrgyzstan. The development of water-economic relations and the market for services in the water sector is important in both the internal and external water policy of Kyrgyzstan, which seeks to secure water leadership in the region and introduce mechanisms for uninterrupted water supply to its neighbors. Today, Kyrgyzstan's position in interstate water relations is unfavorable for the national interests of the country itself. Indeed, in a year, 22 km³ of water from Kyrgyz reservoirs goes to neighboring Uzbekistan and Kazakhstan. This means that 80% of the accumulated water goes to neighbors³. Huge amounts of money are allocated from the state budget every year for the maintenance of these reservoirs. Therefore, it is necessary to raise the issue with neighboring states about paying for the costs of maintaining reservoirs. This can be solved within the EAEU, through the use of a classifier system for sold water and/or supplying it at reduced or zero prices as part of joint development projects or strengthening the unified Eurasian infrastructure of countries in the processes of digitalization and ICT industry delegation of general powers to each other [16:46–48].

The construction of water relations with Kazakhstan is formed based on its noticeable dependence on river flows from neighboring countries, which bring 44% of surface water resources into the country⁴ of the entire region. Therefore, the Kazakh authorities are interested in improving the existing situation and are taking a number of measures to develop more beneficial water relations for themselves, without taking into account the interests of other players in Central and Central Asia.

Tajikistan, in turn, adheres to a reasonable and legitimate position, according to which transboundary water use should be built on the principles of international cooperation, taking into account all national interests and on the basis of bilateral agreements between countries, taking into account the problems and their competitive advantages, and the investment climate. Since the country's water resources must, first of all, satisfy domestic water demand, Tajikistan is taking and implementing a number of steps to improve water policy, showing its good attitude towards partners in water agreements with a set of services in the joint Eurasian market, where it has long been planning to become an equal participant integration of countries for more than 9 years [17:45–48].

Uzbekistan's position as a "regional leader" was determined in Soviet times in the interests of the entire Union. There was a program for distributing the flow of regional and local rivers between the countries of the region. This allowed Uzbekistan to increase the production of valuable agricultural products several times. To create a non-stop and guaranteed supply of water to all sectors of its economy, the country operates one of the most powerful water management systems in the world, built on the water resources of the Syr Darya and Amu Darya. To date, an agreement has been signed between Kyrgyzstan

³ Muralieva N.M. Water potential of the Republic of Kyrgyzstan. Problems and potentials of economic development. Available from: <https://cyberleninka.ru/article/n/vodnyy-potentsial-respubliki-kyrgyzstan-problemy-i-potentsialy-ekonomicheskogo-razvitiya/viewer>

⁴ Kasymova V., Alamanov S. et al. Positions of Central Asian countries on the issue of the use of transboundary water resources. Available from: <https://centrasia.org/newsA.php?st=1386175860>

and Uzbekistan on joint management of the water resources of the Kempir-Abad reservoir, on the basis of which a joint venture will be created (at the same time, the Kyrgyz side undertakes not to build hydraulic and other structures that impede the natural flow of the river, and to prevent technical pollution of the water) [18:101–105].

It is historically known that Turkmenistan experiences a significant shortage of water resources⁵, since all surface water resources of the country are transboundary. Therefore, for Turkmenistan, which does not have its own surface water resources, the Amu Darya is a key source of water necessary for the development of the country, to meet the needs of a growing population and an expanding market.

Today, the expected sharing of water resources remains one of the most acute conflict issues between countries, not so much because of the lack of water, but because of the ineffective and irrational use of it, the lack of norms and rules, which are long overdue for discussion and adoption for the basic distribution of the scarce resource that produces the authorities of any state have additional and significant trump cards in geopolitics, and for their own power [6:59–63].

Since the time they gained their independence from the USSR, which ceased to provide a plan for each of the former Soviet republics, advisory advice has been given, without taking into account the factors of joint integration and the participation of different states in the development of national industries. The countries of Central Asia require increasingly intensive irrigation, since agriculture is the basis of their economic growth and provides advantages in national development and international cooperation [2:56].

Due to the lack of a unified political will among states, they are forced to be interdependent in water issues, while individual states focus on their national interests for the sake of developing their economies. Initiatives of some participants on water use issues may be viewed by other parties as attempts at a voluntaristic approach in relation to certain hydro resources. Thus, in order to reduce tensions and resolve interethnic conflicts, for the mutually expedient use of transboundary water resources and their protection, it is necessary to conduct systematic negotiations and consultations on a mutually beneficial basis, taking into account the interests of all residents of the region. A highly effective and optimal approach to solving the water problem is needed for the sustainable development of the Central Asian region, in order to avoid regional wars, to help in their growing integration among themselves and in increasingly increasing cooperation with Russia and Belarus [3:563–565]. The authors propose mechanisms for classifying water resources, their restructuring in favor of the unity of interests of the countries of Central and Central Asia within the framework of the Eurasian project [8:98] and maintaining a balance of interests with other countries leading an active investment and technological policy/expansion in the region. The authors propose to create a joint "water map" of interests for the EAEU countries [9:30–32], take into account the interests of Tajikistan, Turkmenistan

⁵ Volmuradov K.M. Water resources of Turkmenistan: Potential, use, technology and ecology. Available from: <http://chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.cawater-info.net/library/rus/almaty/volmuradov.pdf>

and Uzbekistan, build interactions with China [19:9–20] and Muslim countries such as Iran, Turkey, Saudi Arabia, Afghanistan, Pakistan, India, UAE, the Anglo-Saxon bloc of states [14:35], trying to substantiate the idea of alternative development of Central Asia [15:45–48] from the standpoint of hegemony and post-colonial world order.

Conclusion

Preservation by countries of their interests in the process of their ongoing digitalization and reindustrialization, the search for a unified approach to the Eurasian market through the development and adoption of water “road maps” for industry and agriculture, taking into account existing technological regulations, should become the national security priorities of the states of the region. In addition, the management of hydropower resources in the Central Asian region should be considered by a water-energy consortium with the participation of the states of the EAEU, SCO, etc.

Work for the benefit of common interests and for the emerging in-depth integration of national industries in the region should be carried out on the basis of water consensus when formulating the priorities of each national economy, giving all states a chance to improve the quality of life of their population and enter Industry 4.0. Countries must have access to future benefits; the basis of technical development has always been, is and will be water and steam [19].

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