

TRANSBOUNDARY WATER COOPERATION OF CENTRAL ASIAN COUNTRIES IN THE CONTEXT OF REGIONAL SECURITY

Mayra K. Dyussebekova^{*}, Yelena L. Nechayeva^{*}, Marina Y. Onuchko^{*}
and Zhanar Zh. Smakova^{*}

Abstract: The present work deals with the problem of transboundary cooperation of the Republic of Kazakhstan in the context of ensuring national security. The problem of transboundary watercourses and water resources in general and in Central Asia region in particular, has long attracted and still continues to attract the attention of researchers in various countries. This is explained, first of all, by the important role of such objects in the life of mankind. However, most researchers do not directly link this problem with national security issues though they certainly have a close relationship. In the present work the authors aim to show the relationship between these factors and evaluate the possibility of solving these problems through international cooperation. The article summarizes, systematizes and analyzes the latest regulatory and scientific matter, as well as explains the relationship between water supply deficit and potential for confliction with regard to water shortage in the Central Asian region. The authors note that the main causes of water scarcity in the Central Asian region, and thus a possible driver of an international conflict, is inefficient allocation of water resources, the extensive use of water and the resulting imbalance in the water consumption by various countries. It is revealed that the occurrence of conflict situations in the water sector is directly projected onto the relationships between states in other areas of international cooperation. It is shown that the avoidance of the noted conflict is possible only on the basis of a balance of economic interests of the countries of the region that share water resources. They must rely on international law. The development and conclusion of bilateral and especially multilateral agreements on consumption of transboundary water resources can greatly facilitate inter-state cooperation in the field of their use.

Keywords: Transboundary cooperation, national priorities, water security, shared use, international legal instruments.

INTRODUCTION

Having achieved independence, the Central Asian states have faced one of the most important challenges – the water resources management (Mansurov, n. d.). This problem is holistic and therefore requires the solution based on political, economic, and legal grounds.

The problem of use of transboundary water resources is beyond the scope of purely a resource problem. It is largely politicized, defined by a holistic character of relations between Central Asian countries and, primarily, between their political elites, their reluctance to make mutual concessions, their national egoism, which, in turn, is fueled by the political rivalry of the countries in the conditions of instability of their political and economic systems. Inter-state disputes on the use of transboundary water resources, which do not cease for more than 20 years, constitute a threat to

^{*} L.N. Gumilyov Eurasian National University, 6 Yanushkevich str., Astana 010008, Kazakhstan

the security of Central Asian countries. Although all attempts at international and regional levels to find a way out of tangled situation, was a fiasco. In Central Asia, there is joke that if every researcher working on water issues in the region would have brought a bucket of water instead of writing an article on this subject, the problem would have been already solved (Mansurov, n. d.).

Interstate conflicts on water recourses in the region have escalated in the late 1990-ies, when it became obvious that the old system of water management, established back in Soviet times and enshrined by the countries in the 1992 Agreement, stating that the bulk of the water recourses from the upper basin should be used in the lower basin, ceases to meet the needs of economic development of the countries of the region, while a compensatory mechanism, underpinning this distribution system, no longer works in the existing regional market economy.

Nevertheless, there is certain optimism with regard to the water situation in Central Asia. The point is that, according to historical experience, water conflicts are resolved sooner or later. And the way to this resolution lies through international cooperation and economic integration (Rogozhina, n. d.).

An international law as a system of norms and rules of the interstate construction of the contemporary world order, designed to harmonize the actions of equal sovereign states, can play an important role in the solution of this problem. As is rightly noted by R.A. Kalamkaryan, the international law “continues to be the most effective instrument of interstate cooperation” (Kalamkaryan 2003).

However, at present, the international legal approach to the solution of water management problems in Central Asian states remains poor and contradictory. Up to the present time, the doctrine of the international law does not contain a definite attitude to the title of a relatively independent body of international legal rules governing the use and protection of transboundary water resources, as well as to the list and the legal content of the special international legal principles of such regulation.

RESEARCH METHODS

The study of transboundary cooperation and water security in the context of unity and interconnection of these concepts is based on a systematic approach. The most important postulate of the systemic approach is the principle of multi-level construction of structural links, according to which the ordering between levels in complicated systems is conducted from highest to lowest. One of the most important points in the study of transboundary water body problem is its analysis at different levels, and primarily, the evaluation at the historical level. This circumstance justified the application of the methodology for historical analysis and almost equally dialectical methodology when studying the formation and development of international cooperation between the states of the Central Asia with regard to the

use of transboundary water resources. Another important research method is the comparative legal method, which is indispensable in the analysis of international customs, international treaties, bills of international organizations, laws and regulations on the issues concerning the use of transboundary water resources. The formulation of proposals for the legal settlement of the transboundary cooperation problems in the use of water resources necessitated the application of special methods of jurisprudence such as formal-legal, normative-dogmatic and legal modeling approaches.

RESULTS

It is rightly indicated that further development and security of Kazakhstan is solely dependent on the reasonable and proper management of available water resources and their rational use (water is renewed annually unlike other subsoil resources). Therefore, national security for Kazakhstan means water resources adjusted with neighboring countries, the controllability of these resources according to the water legislation of each country, and the competence of the special and independent state water authority (Kipshakbayev 2015).

It is stated that the level of water availability and water management situation in the territory of the Republic of Kazakhstan, located in the middle reaches of the rivers Ili and Irtysh, as well as the lower reach of the Syr-Darya River, depends on the water policy of the states located in the upper reaches of these rivers. This creates the vulnerability of positions and undermines, to some extent, the foreign security of the country impeding the fulfillment of its national interests. In this regard, the formation of a coherent and balanced regional mechanism of water and energy management is a high-priority task in the framework of the implementation of the Central Asian vector in foreign policy of the Republic of Kazakhstan and insurance of its national security (Zhangazy 2010).

In the current context, the following six priorities are considered by researchers as the most important for the Central Asian region:

- guaranteed access to water resources and water privilege;
- promotion of cooperation and peace;
- balance in multiple use of water through implementation of integrated water resources management;
- ensuring food security;
- improvement of the water resources and ecosystems quality;
- adaptation to climate and global changes in an urbanizing world (Water security is necessary for peace, it is necessary for the progress).

Priorities of the Central Asian region include the organization of transboundary water body management based on international law, the widespread implementation

of integrated water resources management and reforming with consideration of the need of agriculture, including irrigation.

Here's how the researchers of Kazakhstan see the main threats in the context of the issues concerned water and energy complex of Central Asia:

- Threats to foreign security since water resources have become a pressing tool in foreign policy and decision-making.
- Threats to human security due a contradiction in seasonal water demands and the requirements to hydrological regimes of rivers from the part of electrical energy industry and irrigation that leads to the fact that in winter periods part of the territory of Kazakhstan is flooded due to transition of reservoirs of upstream countries to the energy operation mode.
- Threats to environmental security because the operation of large waterworks (dams, reservoirs, dikes) violates the balance of the ecosystem of the water-collecting and surrounding areas.
- Threats to food security associated with a permanent risk of crop loss by farmers, who use water for the needs of agricultural production and suffer economic losses due to its deficiency (Zhangazy 2010).

Kazakhstan depends on a regular inflow of water from neighboring countries - Russia, China and Central Asian republics. A total of about 44 km³ of water resources of Kazakhstan fall on the transboundary rivers (Ural, Black Irtysh, Ili, Chu, Talas, Syr-Darya, etc.) that amounts to almost half of the total water reserves of the country which is 100.5 km³. This makes it absolutely necessary to cooperate and conduct a dialogue with neighboring countries on the water security issues. The use of transboundary rivers is regulated by several agreements, including Nukuss declaration of Central Asian states, adopted as far back as in 1995, the Agreement between the governments of the republics of Kazakhstan and Kyrgyzstan, signed in 2000, and many others. For management of shared water resources of China, the Kazakh-China Joint Commission on Use and Protection of Transboundary Rivers was established. According to the results of the regional meeting of the OSCE in 2007, Kazakhstan and Kyrgyzstan organized an International Basin Council for the Chu and Talas Rivers. Nevertheless, inevitable disagreements appear among the countries possessing the transboundary rivers in Central Asia. However, according to Kazakhstan government, all controversies must be resolved in a friendly atmosphere. Therefore, Kazakhstan established Strategic partnerships with all countries with which it shares transboundary rivers, i.e. China, Russia, Kyrgyzstan, and Uzbekistan. Kazakhstan is also committed to bring a spirit of constructive dialogue to the negotiating table. As noted by Lillian Darius, Deputy Head of the OSCE Center in Bishkek, "Efficient and transparent management of transboundary water resources is the key to eliminate possible rifts between Central Asian countries. A fine example of cooperation between Kazakhstan and Kyrgyzstan in managing transboundary

rivers proves the possibility of mutually beneficial agreement between the two countries, managing the upper and lower reaches of rivers” (Kozhakmatova 2009).

To foster dialogue on the use of transboundary water resources, there have been many conferences. As an example, we can note the International Conference on “Integrated water resources management in the Ili-Balkhash basin”, organized in 2010 by the EU, UNDP, OSCE and the Committee for Water Resources at the Ministry of Agriculture. Despite the fact that Kazakhstan is experiencing a shortage of water, it helps other countries in the region to cope with their problems. For example, in 2009-2011 Kazakhstan has provided assistance to Afghanistan in the amount of \$5 mln including funds aimed at improving water supply. In recent years, Kazakhstan has also allocated 3,700 tons of methane-diesel fuel at the cost of approximately \$1.93 mln to support agriculture of Kyrgyzstan and ensure spring sowing. Thus, Kazakhstan is impregnated with the spirit of regional cooperation in order to reduce uncertainties in the field of transboundary rivers (Zhangazy 2010).

Contemporary political, economic, and environmental realities of the region require the development of effective conceptual approaches. According to experts, the existing water resources will be entirely sufficient to meet the needs of all consumers providing coordinated functioning, compliance with established water consumption norms, the implementation of appropriate water saving technologies, etc.

The water issues arise in relations between Kazakhstan and China. Along with intraregional problems in use of water, the Central Asian states (primarily Kazakhstan) may face in the near future the consequences of aggravation of the issue of shared exploitation of the water reserves of transboundary rivers of Irtysh and Ili, which are running from Xinjiang, China. After Kazakhstan has gained its sovereignty, the issues about the necessity of legalization of the bilateral relations in this field were repeatedly raised to China, however these initiatives were not always met with understanding from the China’s side. Kazakhstan and China are connected by water resources, which include about 30 transboundary rivers, originating in China. Under the overall constraint of water reserves in recent years, Beijing is implementing a number of large irrigation projects on partial water removing from the largest transboundary rivers Ili and Irtysh (the latter is called Black Irtysh in the territory of China and down to the confluence into the Zaisan Lake). To understand the seriousness of this issue, it is enough to comprehend the importance of these rivers for both countries. The Irtysh is one of the main water arteries of Kazakhstan. The river basin is a home to about 2.5 million people. Major industrial centers of Ust-Kamenogorsk, Semipalatinsk, and Pavlodar with concentrated enterprises of nonferrous and ferrous metallurgy are located along these rivers. The water from the Irtysh River is consumed also by many regions in Central Kazakhstan. In 1971, the Irtysh-Karaganda canal was build above the city of Pavlodar to supply the Karaganda industrial region with water. In addition, this facility provides the

water supply of Ekibastuz and Temirtau cities, as well as is also used for irrigation. The water resources of the Irtysh River provide ecological balance in the area of Zaisan Lake, situated in East Kazakhstan. The second river (Ili) provides water to the Balkhash - the largest lake of Kazakhstan, located in the South-East of the country, which is the source of water for the population of Trans-Balkhash area, as well as the local agricultural sector and the enterprises of metallurgical industry. In environmental terms this lake plays a key role in ensuring a climatic balance of the South-East and Central parts of Kazakhstan. Transfer of the water of transboundary rivers to China is necessary to implement the state program for the development of Western China areas that is crucial for economic and social development of the country in general. Even today, the growing China's industry (primarily the oil industry, ferrous and nonferrous metallurgy) as well as the agricultural sector and the population centers under construction are experiencing acute water shortage. Therefore, the main purpose of the transfer of waters of the Irtysh and Ili rivers is providing rapidly developing economic regions of China with water resources. Another important aspect is that in a political sense Beijing is highly concerned about the situation in the Western regions of China, where there are separatist sentiments. Reasoning from this fact, the government of China hopes that active economic construction will lead to significant improvement of the local population living standards and weaken these negative trends (Sidorova 2008).

Certainly, the government agencies and scientific circles of Kazakhstan are well aware of the extent of possible threats and the need for a fundamental resolution of the transboundary rivers problem. However, the convention on basic intergovernmental agreement on water use in the transboundary rivers basin is still not achieved. Thus, all in all, despite the measures undertaken, there still are tensions around the issue of shared use of transboundary rivers. In the future, this tension will strengthen. It is also a fact that Kazakhstan will experience increasing demand for water resources, because in principle, the Republic is one of the most water-scarce countries in the Eurasian continent (Sidorova 2008). The further development of industrial enterprises and agriculture will also require an appropriate level of water supply. The predicted negative consequences that the country may encounter, issue a challenge of searching for rapid solution to the problem of transboundary rivers use, however, this immediately raises a number of obstacles. The first obstacle is the poor development of the theoretical and practical foundations of shared exploitation of water-power resources. Neither Astana nor Beijing has almost never worked a comprehensive set of measures for rational use, protection, and improvement of water quality. As a consequence, no economic mechanism of shared operation of the mentioned reserves of transboundary river basins was developed. The second obstacle is the inability of Kazakhstan to negotiate on an equal basis. One of the main reasons is almost complete dependence of Kazakhstan on China due to the configuration of the river network. As a state, located upstream, China is not

interested in discussion of this issue. At that, geopolitical balance of power existing in the region is definitely in Celestial Empire's favor. So that in the problem of transboundary rivers Beijing will continue using the current situation to maintain its unique position. Therefore, the search for a solution in the political arena seems to us a high-priority task. Without this approach the initiatives will not receive proper implementation. However, as experience confirms, Kazakhstan-China negotiation format, available at the current stage, cannot achieve the necessary efficiency in the solution of these urgent issues. As already mentioned, the status of China located upstream and possessing considerable political and economic power, affects the entire decision-making process (Sidorova 2008).

A different matter, if bilateral negotiations on the issue of water sharing (primarily with regard to the Irtysh River) would have acquired a multilateral character. In fact, the Shanghai Cooperation Organization (SCO) is capable of transferring the negotiating process into a multilateral format. First, it presents the countries, which somehow are combined with the transboundary watercourses, thus the solution to the problem of transboundary river use is a common task, universal in its essence. Second, the SCO has already gained serious organizational, structural and negotiation experience that is also important. And finally, thirdly, functioning of the effectively operating SCO-based commission for solving problems of transboundary rivers will benefit the interests of the organization, whose challenges include also providing security and creating conditions for sustainable development of the entire region. After all, delaying the settlement of this problem may cause in the future a real deterioration of the overall situation to the extent that threatens not only the economic security of Kazakhstan but the environmental security of all countries of Central Asia as well as Russia (Sidorova 2008).

DISCUSSION

Thus, the problem of water use in Central Asia bears significant potential for conflict that threatens regional security. The analysis of the situation in Central Asia allows drawing the following conclusions.

- Problems of water resources shared use can become a catalyst for strengthening inter-ethnic and interstate contradictions in these countries. Negative precedent for the resolution of controversial issues in the management of transboundary water reserves may lead to serious consequences for all Central Asian states.
- Water use in the region is becoming a powerful mechanism of economic and political pressure from some countries of Central Asia.
- Central Asia is sorely dependent on the volume of water resources and highly influenced by their scarcity and negative consequences. Desertification is accompanied here by a change in the qualitative and quantitative composition

of the population that could most adversely affect the productive forces of the Central Asian countries, lead to serious consequences of political, social, economic, and environmental character.

- The issues of shared use of water reserves in Central Asia are mainly of intraregional nature. However, the potential of these problems for confliction is currently supplemented by the aggravation of the issue concerning exploitation of water resources of Ili and Irtysh transboundary rivers outside the region.
- The decision of key problems proposed by any party is not always acceptable to others (Sidorova 2008). Furthermore, the initiatives of one of these parties regarding the use of water reserves is often perceived by other parties as attempts to exert pressure or to secure a preferential position in relation to particular water resources.

Certainly, in terms of expanding cooperation, the countries of Central Asia have reached a certain level: a legal and regulatory framework is currently being developed as well as an institutional cooperation mechanism between the states. Moreover, the international programs on improving ecological and socio-economic situation in the region are being implemented. However, a number of problems constraining cooperation in this area are still remaining. Therefore, today all Central Asian countries should realize that neither of national plans drawn up outside the framework of the regional strategy of shared operation of water reserves can be implemented without corresponding negative economic, social and environmental consequences for other states of the river basin. In order to effectively fit the local strategies into the regional scenario of sustainable development, it is necessary to enhance the role of political negotiations, improve inter-state agreements, as well as strengthen support for the intergovernmental basin organizations (Sidorova 2008).

We should agree with the opinion that the development of good-neighborly relations and comprehensive cooperation between the Central Asian states based on the principles and norms of international law is one of the most important conditions of preserving political and economic stability in the region. To this end, the Central Asian states need to place the highest value on international law when solving their foreign policy priorities. As known, compliance of Central Asian states with international law, or rather bringing their foreign policy in line with the requirements of contemporary international law has a positive effect on the status of intergovernmental relations (Makhkambaev 2011).

Mutual understanding, dialogue and cooperation are of key importance to find long-term and mutually acceptable solutions to any transboundary issues. Multilateral international treaties are a reliable basis for effective intergovernmental regional cooperation. Such treaties on the protection of the environment, resources, and their sustainable use aim at not saving them as such, but creating maximally favorable conditions for human existence and development (Traversi 2011).

This circumstance reflects the historical development of cooperation between the states in the area of shared use of water resources (Teymurov 2015).

Geopolitical phenomena associated with the emergence of new independent states in early 90-ies of XX century, which resulted in a fact that many previously national watercourses became transboundary, were an important factor that influenced the creation of environmental tools in the European region (Ryazanova 2015).

An important aspect of the state water policy is also an active international cooperation on the use and protection of water bodies. Further development of transboundary cooperation requires the establishment of bilateral and multilateral contractual framework on shared use and protection of transboundary watercourses (Kozyrin 2014).

One of the principles of water legislation of the Republic of Kazakhstan is the use of transboundary waters on the basis of international norms and international treaties ratified by the Republic of Kazakhstan.

Kazakhstan has bilateral agreements with all neighboring countries (except China) on shared economic use and protection of transboundary rivers and lakes, and is member country of the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (The Convention on the protection and use of transboundary watercourses and international lakes, 1992). However, problems still remain. These are the problems of distribution of water resources and the pollution of rivers, organization of water transport and fishing, and compensation for harm (Krasnova 2015). However, in recognition of the significance of further development of international cooperation of our state on the protection and shared use of water resources in order to ensure national security, maintain conflict-free use of transboundary waters, we may expect stepped-up action in this field.

It seems fair opinion that the regulation of the social and inter-social relations, where the sovereignty of one state overlaps with the sovereignty of another, the advantage of authority and administration based management of water resources essentially narrows; in the case of a transboundary river, the countries sharing such water body need to coordinate their public policies, because in international relations all states are equitable from the formal legal viewpoint. In this regard, a special role is granted to the economic and financial management tools, though their role is still underestimated (Sonnenfeld and Mol 2002).

CONCLUSION

To mitigate present challenges and strengthen international partnerships, it is necessary to improve the institutional structure of regional and basin organizations. Special attention should be paid to the development in major participants of

awareness and understanding of the principles and instruments of the International Water Law as a basis for regional cooperation, as well as enhancement and further study of the role of collaboration tools.

An important objective of the general strategy of strengthening international cooperation in the area of transboundary waters in Central Asia is the shared elaboration of measures to resolve the balance of regional countries' interests between quantitative and qualitative demands on the water supply of different sectors of economy, and to achieve the necessary functioning conditions of ecosystems with the purpose of adapting to climate change. These ideas should make a junction with those existing beyond the "water issues" and discussed at the highest political level. The nature of the water sector makes it an important resource for other interests. It is necessary that strengthening international cooperation in the field of water resources management would contribute to regional food and energy security, as well as improve environmental and socio-economic situation in the region.

References

- Kalamkaryan, R.A. (2003). *Koncepciya gospodstva prava v sovremennom mezhdunarodnom prave* [The concept of the rule of law in contemporary international law] [Text]. *State and Law*, 6: 51.
- Kipshakbayev, N.K. (2015). *Vodnaya bezopasnost' Respubliki Kazahstan* [Water security of the Republic of Kazakhstan] [Text]. Date Views: 14.09.2016 www.cawater-info.net/bk/14-4-1.htm
- Krasnova, O.I. (2015). *Razvitie prava nesudohodnyh vidov ispol'zovaniya mezhdunarodnyh vodotokov* [Development of the law of non-navigational uses of international watercourses] [Text]. *Topical Issues of Russian Law*, 4: 133-138.
- Kozhakmatova, N.S. (2009). *Vodnye resursy kak faktor vliyaniya na vzaimootnosheniya Central'no-Aziatskih gosudarstv: na primere Kyrgyzskoy Respubliki* [Water resources as a factor of influence on the relations between the Central Asian states: evidence from Kyrgyz Republic] [Text]. Ph.D. thesis in politics, Foreign Ministry of Russia, Moscow, p. 5.
- Kozyrin, A.N. (2014). *Vodnye resursy kak chast' kazny* [Water resources as a part of treasury] [Text]. *Public Law Research*, 1: 29-48.
- Makhkambaev, S.D. (2011). *Mezhdunarodno-pravovoe regulirovanie sotrudnichestva gosudarstv po ispol'zovaniyu transgranichnyh vodnyh resursov v regione Central'noj Azii* [International legal regulation of states cooperation on use of transboundary water resources in the Central Asian region] [Text]. Ph.D. thesis in legal sciences, Peoples' Friendship University of Russia, Moscow, p. 28.
- Mansurov, U., (n. d.). *Vopros vodno-ehnergeticheskikh resursov Central'noj Azii* [The issue of water-energy resources in Central Asia] [Text]. Retrieved from www.geopolitica.ru/en/node/2892#_ftn2
- Rogozhina, N.A., (n. d.). *Vodnye konflikty v Central'noj Azii i poziciya Rossii* [Water conflicts in Central Asia and position of Russia] [Text]. Retrieved from ru.journal-neo.org/2014/02/24/vodny-e-konflikty-v-sentral-noj-azii-i-pozitsiya-rossii/

- Ryazanova, M.A. (2015). Evropejskoe sotrudnichestvo v oblasti ispol'zovaniya i ohrany ot zagryazneniya transgranichnyh vodotokov [European cooperation in the field of use and protection of transboundary watercourses against pollution] [Text.] *International Public and Private Law*, 2: 25-29.
- Sidorova, L. (2008). Gosudarstva Central'noj Azii: problemy sovместnogo ispol'zovaniya transgranichnyh vodnyh resursov [The states of Central Asia: Problems of shared use of transboundary water resources] [Text]. *Central Asia and the Caucasus*, 1(55): 92-103.
- Sonnenfeld, D.A., and Mol., A.P.J. (2002). Globalization and the transformation of environmental governance: an introduction. *American Behavioral Scientist*, 45(9): 1318-1339.
- Traversi, C. (2011). The inadequacies of the 1997 Convention on International Water Courses and 2008 draft articles on the Law of Transboundary Aquifers. *Houston Journal of International Law*, 33(2): 480.
- Teymurov, E.S. (2015). Presnaya voda kak ob'ekt mezhdunarodnyh pravootnoshenij [Fresh water as an object of international jural relationships] [Text]. *Topical Issues of Russian Law*, 7: 197-200.
- The Convention on the protection and use of transboundary watercourses and international lakes (Helsinki, 17 March 1992), Printed at United Nations, Geneva—GE.09-20431, February 2009-1,070.
- Water security is necessary for peace, it is necessary for the progress [Text]. Date Views: 14.09.2016 [www.kazakhstanunsc.com /ru/wp-content/uploads/sites/4/2014/10/UNSC-Occasional-Paper-Water-Security-Paper-RU.pdf](http://www.kazakhstanunsc.com/ru/wp-content/uploads/sites/4/2014/10/UNSC-Occasional-Paper-Water-Security-Paper-RU.pdf)
- Zhangazy, R. (2010). O nekotoryh voprosah vodno-ehnergeticheskogo kompleksa Central'noj Azii: nacional'naya bezopasnost' i interesy Respubliki Kaz [On some issues of water and energy complex of Central Asia: National security and the interests of the Republic of Kazakhstan] [Text]. "Analytic", 3.

