

Transboundary Water Management in Central Asia. Legal Framework to Strengthen Interstate Cooperation and Increase Regional Security

Barbara JANUSZ-PAWLETTA and Mara GUBAIDULLINA*

Introduction

As a result of the collapse of the Soviet Union and appearance of five new independent republics in Central Asia, many natural resources, including main watercourses, have acquired transboundary character. The uneven distribution of water resources in Central Asia resulted in an interdependence of the upstream and downstream countries. Tensions have also been caused by the diverging water related political economic interests of the riparian states and poor management of the resources at all levels: regional, basin, national and local. Deserts, semi-deserts, steppes, combined with the arid climate make the whole ecosystem of the region vulnerable.

One of the main current challenges in Central Asia is the targeted transition from the old principles of distribution of water resources set up in the Soviet period towards the system of integrated water resource management (IWRM). It is not a mere technical issue, but it requires an integrated approach to the use of water in such areas like agriculture, energy

* PhD, DAAD Scholar at Kazakh-German University (DKU) in Almaty. Contact: janusz-pawletta@dku.kz.

Professor at the International Relations Faculty, Al-Farabi Kazakh National University, Almaty, Kazakhstan. Contact: maragu@mail.ru

and industry. During Soviet times the system of water management was centralised in order to avoid conflicts over water allocation. It also included its own unique system of obligatory energy supplies to upstream countries (Kyrgyzstan and Turkmenistan) by downstream countries (Kazakhstan, Turkmenistan and Uzbekistan) in return for water services. Transition from 'centralism' in water management led to imbalances in the distribution of water resources, which in turn immediately created political economical tensions among Central Asian countries.

Nowadays, due to the limited reserves of fossil fuels, Kyrgyzstan and Tajikistan are vitally interested in the exploitation of energy potential of the Central Asian transboundary water resources. Every year in winter time people in Kyrgyzstan and Tajikistan suffer from insufficient energy supply, what forces them to release water in winter to generate energy. In turn, downstream countries – Kazakhstan, Turkmenistan and Uzbekistan – rely on water storage in winter and its release in summer time to run their irrigated agriculture, the major source of their economic development. Both types of water usage require opposite operational regimes of hydro-technical facilities in winter season: (1) to release water for hydro-energy or (2) store water for irrigation purposes. Moreover, the population growth, industrial development, and increased recognition of the needs of ecosystems caused raise in water consumption, and exacerbated the need for a new regulation of water allocation system. All these challenges are well-known at the local level (Sarsenbekov, 2004; Rakhmatulina, 2008; Gubaidullina, 2015; Dukhovnyj, 2008; Džajloobaev, 2005; Rysbekov, 2012) as well as at the international level (Sehring, 2007; Vinogradov, 2002; Micklin, 2000; Eschment, 2011; Janusz-Pawletta, 2012). They were highlighted during the International Decade for Action Water for Life (2005-2015), which summed up in June 2015 in Dushanbe. The international forum brought together about 1,500 politicians and experts from 100 countries. The Dushanbe Water Declaration was adopted unanimously, however current water issues and controversies for central Asia transboundary waters remained.

Nowadays, the need for rational use of water resources based on mutually beneficial interstate cooperation seems to be the key factor in sustainable development of the region and political stability and security in Central Asia. It is obvious that in order to resolve existing tensions, a new interstate compromise is needed. It would equally recognise needs

and interests of all Central Asian countries and lead to a unified regional management of water resources. This approach requires a consideration of economic and social interests of the countries and takes into account the ecological balance within water basins of Central Asia (Mukhametzyanov, 2006). The level of interstate cooperation still seems underdeveloped because of, on one hand, the dominance of national interests that reduce the potential of mutual attractions and, on the other hand, the lack of an effective legal framework for management of shared water resources. International bilateral agreements on transboundary waters in Central Asia are used only for 157 out of 263 existing watercourses. They cover different areas of water management: from a pool of 145 analysed contracts and agreements, 37% are related to water use, 39% to hydropower, 9% to flood control, 6% to industrial water use, 4% to navigation and pollution, and 1% to fishing (Âsinskij *et al.*, 2011).

The remaining issue from year to year is the inconsistency of hydropower and irrigation drainage modes of cross-border rivers. The situation with water issues is commonly called “dependent independence.” Where is the key to solving water problems in the region? The question and possible solutions lie in the political and legal frameworks and within the responsibilities of the Central Asian countries.

Water-Security Based Challenges to Interstate Cooperation in Central Asia

The regional security in Central Asia is determined by various factors. One of them is the allocation of transboundary water resources with a growing potential for escalation, both at national and local levels – within riparian states – and at the regional level, including at river basin level. As summarised in the classical theory of political realism (Morgenthau, 1954; Aron, 1962), like any other conflict, water conflicts in Central Asia are caused by the discrepancy of interests of the involved parties. In Central Asia the problem of allocation of water is of a vital strategic importance for each riparian country and is often being used as leverage in their international relations (Khakimov, 2013). Unlike oil and gas, water continues to be perceived as “free of charge.” It is often used neither with consideration of vital interests of other riparian states, nor taking into account various water dependent sectors, nor the sectorial interdependence.

In order to ensure their own energy security, Tajikistan and Kyrgyzstan decided to exploit the existing hydropower plants (HPP) throughout the year and build new large hydropower facilities: Rogun HPP (on Vakhš river) and Daštadžumskaâ HPP (on Panj river) in Tajikistan, as well as two Kambar Ata HPP (on Naryn river) in Kyrgyzstan. These plans sound alarming to the neighbouring Uzbekistan. Uzbeks fear that additional regulation of these rivers will allow Tajikistan and Kyrgyzstan to fully control the flow of water. Thus, the energy priorities of the upstream countries conflict with the agricultural interests of downstream countries. The first need electricity, the latter water for the irrigated agriculture. As a result, countries accuse each other of creating disintegration instead of convergence.

Water became a source of conflict among Central Asia's riparian states, turning into a factor of national and regional instability, impeding the process of regional unity (ICG, 2002). An example was the conflict situation in the Fergana Valley caused by unresolved issues of water distribution in 1998. The conflict led to a crisis between Central Asian countries (*idem*). Regional instability, potential for conflict, and growing security threats to the entire Central Asian region are acknowledged by the European Union as a consequence of continuing poor management of the water sector (Council of the European Union, 2010). There are similar political concerns from the UN General Assembly about water cooperation in Central Asia, which is perceived in its global dimension.¹

The possibility to resolve the existing conflict over water resources in the Aral Sea basin depends on the readiness for cooperation between Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan. More than twenty years after independence, these countries remain insufficiently prepared for it. It also depends on the level of cooperation between the post-Soviet Central Asian countries with Afghanistan, an important upstream country in the Aral Sea basin. Its economic rehabilitation will necessarily

¹ See for instance the Resolution I (A/RES/55/196) A/55/PV.87. *International Year of Freshwater, 2003* [<http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N00/770/65/PDF/N0077065.pdf?OpenElement> accessed on 10.11.2015], the Resolution on the report of the Second Committee (A/58/485) 58/217. *International Decade for Action Water for Life (2005-2015)* [<http://www.un.org/waterforlifedecade/pdf/a-58-217-english.pdf> accessed on 10.11.2015], the Resolution on the report of the Second Committee (A/65/436/Add.1) 65/154. *The International Year of Water Cooperation, 2013* [<http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N10/521/80/PDF/N1052180.pdf?OpenElement>, accessed on 10.11.2015].

impact the availability of water resources in Central Asia in total (UNECE, 2011; p. 15) but this aspect lies outside the focus of this paper.

One of the main bodies dealing with the management of transboundary rivers of the Aral Sea basin is the Interstate Coordination Water Commission (ICWC) and its executive bodies the Basin Water Organisations (BWO) 'Amu Darya' and 'Syr Darya.' They were created in the early nineties and incorporated into the International Fund for Saving the Aral Sea (IFAS). However, a paradox remains in that the operation mode of the basin of Aral Sea is developed without the involvement of power engineers. Moreover, the modes are implemented without representatives of the water industry. In Central Asia, cooperation in joint water use has *de facto* no legal regulation.

Water Related Conflicts Between Kyrgyzstan and Uzbekistan

Conflicts between Kyrgyzstan and Uzbekistan are long lasting. Uzbekistan is the largest consumer of water resources in Central Asia, especially of water originating from Kyrgyzstan. It should be noted that Kyrgyzstan is the only country in Central Asia where water resources are almost fully formed on its own territory. It has about 30,000 rivers and streams² offering significant water and hydropower resources, one of its main economical assets. During summer Uzbekistan needs water for irrigation to be discharged from Toktogul reservoir, the largest water reservoir in Central Asia located in Kyrgyzstan. In turn, Kyrgyzstan consumes gas from Uzbekistan. While not having sufficient funds for timely payment of gas supply, Kyrgyzstan decided to release water during non-growing period to produce electricity in the winter time. The change of working regime of Toktogul caused flooding of human settlements and agricultural land in Fergana Valley and respectively droughts in the summer time due to the insufficient amount of water to be discharged (Valentini *et al.*, 2004).

Kyrgyzstan has raised the question of payment for water from its reservoir that goes to Uzbekistan and Kazakhstan. Kyrgyzstan's Prime Minister Temir Sariyev spoke at a meeting in Dushanbe (2015) about the lack of financial mechanism for Kyrgyzstan and Tajikistan for water delivered to downstream countries.

² <http://www.open.kg/about-kyrgyzstan/nature/water-resources/lake/1402-ozera-kyrgyzstana.html> accessed on 10.11.2015.

The growing interstate tension is an outcome of weak political dialog on water allocation, which led to conflict escalation. In regards to this, interstate water and energy conflicts are regular. Uzbekistan conducted military exercises of airborne divisions in the close proximity of the border with Kyrgyzstan and near the Toktogul reservoir. In turn, Kyrgyzstan warned in 2006 that, in case of destruction of the water facilities, the water flow “will sweep from the face of the earth the Fergana Zarafshan Valley” of Uzbekistan (Kirsanov, 2006). Uzbek President Islam Karimov in 2012 expressed his concern about the tense situation around water resources in the region. He said that, “because of problems with water resources in Central Asia, not just serious confrontations, but even wars may arise in the future.”³

Water-Related Conflicts Between Tajikistan and Uzbekistan

Huge reserves of Tajikistan’s water resources are the subject of political disagreement and mutual political threats between Tajikistan and Uzbekistan. In the attempt to overcome the constant problem of electricity supply for its population and industry, Tajikistan has reactivated a Soviet project of construction of a HPP in Rogun. Uzbekistan’s sharp opposition to this plan became a real threat to the regional security (Blank, 2012).

The dispute over Rogun HPP project went even beyond Central Asia. Iran, Afghanistan, Pakistan and India expressed their interest to invest in the construction of Rogun. In 2010 the conflict between Tajikistan and Uzbekistan reached its peak when both sides threatened each other.⁴ International mediation suspended development of the conflict. Upon request of Tajikistan in 2014 the World Bank finalised its assessment of the Rogun construction. It stated that under normal security conditions a hydroelectric power station can be built.⁵ It gave Tajikistan a powerful

³ This quote is from a press statement of September 7, 2012 [http://www.akorda.kz/ru/events/akorda_news/meetings_and_receptions/page_segodnya-prezident-respubliki-kazakhstan-nursultan-nazarbaev-i-prezident-respubliki-uzbekistan-islam accessed on 11.11.2015].

⁴ See reports on Deutsch Welle [<http://www.dw.com/ru/>]: “Rogun. Brussels urges Countries involved in the Project for Dialogue,” August 31, 2012; “Tajikistan relies on ‘Water Diplomacy,’” August 21, 2013; “Uzbekistan and Kazakhstan sign joint Statement,” September 12, 2012 [<http://www.eurodialogue.eu/Uzbekistan-and-Kazakhstan-sign-joint-statement> accessed on 19.07.2015].

⁵ See for instance: “The World Bank has Published Interim Results of Evaluation Studies of Rogun,” October 1, 2013 [<http://www.worldbank.org/eca/rogun> accessed on 11.11.2015]; Centre for the Study of Regional Problems “Continent-A,” September 3, 2014 [<http://e->

argument in the debate in favour of the construction of this widely contested hydroelectric plant, but at the same time making a new opening for a discussion on possible participation of Uzbekistan and Kazakhstan in Rogun project (Faskhutdinov, 2014).

Water-Related Conflicts Between Kazakhstan and Uzbekistan

The problem of water pollution is an example of legal and territorial issues between Kazakhstan and Uzbekistan, and other Central Asian countries.⁶ In 2010-2014, Presidents Nazarbayev and Karimov addressed publicly their common problems in the sector of water and energy, highlighting them as one of priority topics. In 2014, they recognised the need to apply political agreements between Kazakhstan and Uzbekistan at all technical levels, including legal and administrative measures related to water issues. This rapprochement of the two countries on water issues is explained among other things by the fact that Kazakhstan, Uzbekistan and Turkmenistan are located downstream of the two largest rivers of Central Asia – Amu Darya and Syr Darya – and depend on Kyrgyzstan and Tajikistan to use these water flows. In 2001 the Kyrgyz Parliament adopted the law on water, which introduces in article 5 “payment for water use in interstate water relations.”⁷ Kazakhstan and Uzbekistan reacted nervously and considered this law as a basis for concerted actions. Indeed both countries are downstream of the Aral Sea basin, and experience similar dependence on the upstream countries. This situation contributes to the strengthening of rather good neighbour water relations.

However disputes exist between Kazakhstan and Uzbekistan about violation of the intergovernmental agreement on equitable use of the Naryn–Syr Darya cascade of reservoirs. The conflict is related to the management of Syr Darya basin and the need for Kazakhstan to construct a water reservoir at Koksarai to protect its Southern region from catastrophic winter floods of Syr Darya (Kudryashov, 2008). The seriousness of the problem

center.asia/ru/news/view?id=5535 accessed on 11.11.2015]; KzInform, July 19, 2014 [<http://kzinform.com/ru/news/20140719/37101.html> accessed on 11.11.2015].

⁶ Towards the development of regional cooperation to ensure the water quality in Central Asia. Diagnostic UN European Economic Commission UNEEC report, Geneva (2010).

⁷ Law of the Kyrgyz Republic n°76 of July 23, 2001 on the interstate use of water bodies, water resources and water structures of the Kyrgyz Republic [http://online.zakon.kz/Document/?doc_id=30264741 accessed on 11.11.2015].

manifested in February 2004 and a conflict broke out between Kazakhstan, Uzbekistan and Kyrgyzstan about the water management of the Syr Darya basin (Uzhulis, 2004).

Water-Related Conflicts Between Kyrgyzstan and Kazakhstan

Interstate cooperation in Ču and Talas river basins shared by Kazakhstan and Kyrgyzstan is promoted as the most successful example of interstate bilateral relations in the water sector among Central Asian countries. It originated from the agreement signed in 2000 on the Use of water management facilities of intergovernmental status on the rivers Ču and Talas. Its implementation, not always successful (Wegerich, 2008), has been facilitated by an interstate bilateral water basin commission. Kazakh-Kyrgyz tensions on water issues have been sporadic. One of the sources of misunderstanding was the project initiated by Kyrgyzstan to build two more hydroelectric power stations near Kambar Ata.⁸ The Kazakh government has opposed this plan.

Water-Related Conflicts Between Turkmenistan and Uzbekistan

Turkmenistan, more than other countries of the region, suffers from a shortage of fresh water. State projects to solve this problem is the construction of the Karakum canal and the lake Altyn Asyr (Golden era), an artificial reservoir in the desert, to be filled with water derived from the river Amu Darya (Zonn & Kostianoy, 2014, p. 100). This might lead to depletion of the Aral Sea basin, and impact on ecosystems and water availability in the whole region, especially in relations with Uzbekistan (McCray, 2004, p. 68).

International Law Principles and Mechanisms of Transboundary Water Basins Management

Transboundary water management needs to be based on sound international legal framework. In the case of Central Asia, it requires the development of a sustainable interstate legal cooperation based on principles and instruments deriving from international water law. First of all, it shall be

⁸ See the Tashkent Declaration of the International Environmental Conference “Cross-border environmental problems in Central Asia: the application of international legal mechanisms to address them” [<http://mytashkent.uz/2010/11/23/tashkentskaya-ekologicheskaya-deklaratsiya/>].

referred to principles of law governing the management of transboundary waters. Their proper implementation into interstate praxis is in turn based on certain legal mechanisms of cooperation. Better implementation of the international legal standards into the transboundary water management is the right way to secure regional stability, development and mutual cooperation.

According to international legal standards water management in Central Asia shall consider water's development, use, protection, allocation, regulation, and control, in terms of the quality and the quantity of waters (ILA Berlin Rules, 2004, art. 1). Management of transboundary watercourses requires application of fundamental precepts reflected in a large number of international water law treaties and in customary water laws. The most important of them are: (i) principle of equitable and reasonable utilisation of waters, (ii) principle of "no significant harm," and (iii) principle of cooperation. These have been implemented into the currently binding legal framework of the transboundary interstate cooperation in a limited scope (Rahaman, 2012). All three principles reflect general rules of law to determinate the scope of states' rights and obligations for purposes other than navigation in respect to international watercourses. Improvement of the application of these principles in legal practice of interstate relations of Central Asian is still on its way to come.

The legal meaning of these precepts might be summarised as follows. First, the equal right of states to utilise international watercourse does not necessarily mean that all riparian states enjoy an equal share in a particular watercourse. Second, reasonable use of waters does not equal most productive use or application of most efficient methods known,⁹ but is used to be defined in recognised international water policy instruments. Third, since countries shall take appropriate measures to minimise environmental harm within a state as well as across boundaries,¹⁰ there is no doubt that no

⁹ For instance 1997 UN Water Convention stipulates in article 6 that utilisation of an international watercourse in an equitable and reasonable manner requires to take into account all relevant factors and circumstances including factors of a natural and socio-economic character, population dependence on the watercourse, existing and potential uses of the watercourse, conservation, protection, development and economy of use of the water resources of the watercourse, availability of alternatives, of comparable value, to a particular planned or existing use.

¹⁰ See for instance *Gabcikovo-Nagymoros Case (Hungary vs. Slovakia)*, 1997 ICJ n°92 & 53; Art. 5 of 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lake.

state has the right to use or permit the use of its territory in such a manner that it causes damage in or to the territory or the properties (for instance to transboundary water resources) or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.¹¹ A prerequisite of carrying into effect the equitable, reasonable and no harming transboundary water management is the states' obligation to cooperate (UN Water Convention, art. 8).

After the collapse of the Soviet Union, independent national water systems were established in Central Asia. Interstate cooperation in the management of transboundary rivers still requires improvement. States may cooperate using various instruments, especially through information exchange and consultations.¹² Prior notification of planned activities which could cause significant transboundary harm (this essential procedural mechanism is known as environmental impact assessment) presents to states an obligation of customary character regardless whether watercourse states concluded any respective agreement on this issue.¹³ In determining the manner of cooperation states "may consider the establishment of joint mechanisms or commissions to facilitate cooperation" (UN Water Convention, art. 8).

These mechanisms of cooperation are not common in interstate treaty practice on transboundary water management in Central Asia. Despite the fact that more than twenty years have passed since independence of Central Asian states, neither the above-mentioned law precepts, nor the typical legal instruments of cooperation have been fully implemented into the legal framework on transboundary watercourses in the Aral Sea basin. They still remain a subject of interstate negotiations of multilateral and bilateral character (Janusz-Pawletta, 2015).

¹¹ See for instance *Trail Smelter, Arbitral Tribunal Judgment (USA vs. Canada) 1938/1941*, 3 R.I.A.A. 1905, *Case Concerning nuclear test (New Zealand and Austria vs. France) 1974*, ICJ Rep. 457, Art. 3 *Convention on Biological Diversity (1992)*, Preamble to *Information from the United Nations Framework Convention on Climate Change*, Principle 21 of *Stockholm Declaration*, Para 21(e) *World Charter for Nature*.

¹² See for instance *UNGA Res. 3129 (1973)*, Art. 3 of *Charter of Economic Rights and Duties of States*; *UNGA Res. 3281 (XXIX), (1974)*, *UNEP's Draft Principles for the Conduct of States in the Conservation and Harmonious Utilisation of Natural Resources Shared by Two or More States (UNEP/GC.6 /17(1978))*

¹³ See for instance *Pulp Mills on the river Uruguay (Argentina vs. Uruguay)*, 178-80, *Judgment of International Court of Justice from April 20, 2010* [<http://www.icj-cij.org/docket/files/135/15877.pdf> accessed on 22.04.2010].

International Law Sources Framing Cooperation on Transboundary Watercourses

The proper management of transboundary waters depends on effective implementation of regulations deriving from international water law acts. Such acts, providing for legal principles and mechanisms of transboundary water management, create obligations of binding nature for state parties. Each Central Asian state is committed to a number of international norms, according to which it has specific legal and institutional obligations towards neighbouring countries sharing common transboundary watercourses. On one hand, these international acts have a great impact on the management of Central Asia's water resources, but on the other hand, they have not been able to foster a mutually beneficial and clear legal framework for the management of transboundary water resources.

The first type of such acts is of general thematic scope: (i) the UN Convention on the Law of the Non Navigational Uses of International Watercourses, signed in 1997, entered into force only in 2014. In Central Asia, only Uzbekistan is party to (ii) the Convention on the Protection and Use of Transboundary Waters and International Lakes and its Protocol on Water and Health, regroups the downstream countries of Central Asia (Uzbekistan, Turkmenistan and Kazakhstan). Both acts offer an advanced framework for cooperation and resolution of disputes based on the hydrological approach, as well as the protection of ecosystems, which would enhance the development of Central Asia water basins. There is however little chance that the upstream countries of the Aral Sea basin – Kyrgyzstan and Tajikistan – will join the conventions framework. This hampers development of a stronger multilateral platform for regional legal cooperation in the management of water resources (Ziganshina, 2011).

Integrating the environmental dimension into water management is a difficult process worldwide. It is based on the broadly acknowledge association between the needs in water experienced by both people and nature (UNEP, 2011). There is a number of environmental conventions, which govern some aspects related to Central Asian transboundary water resources (waters, wetlands, bio resources, etc.). When states have signed them, they are obliged to follow their provisions in managing waters of both: (i) transboundary character (when the commitments deriving from the convention are shared by both relevant states), and (ii) national character

(through adapting national legislation, which must stay in accordance with the state's international commitments). Among the most important global agreements, which were adopted by all Central Asia states, let's mention: (i) the Convention on Environmental Impact Assessment in a Transboundary Context (or EIA or Espoo Convention) and its Protocol on Strategic Environmental Assessment (or SEA Protocol), to which Kazakhstan and Kyrgyzstan are parties, but not Uzbekistan, Tajikistan and Turkmenistan. The convention is of great importance for implementation of nexus, where new projects in water, agriculture and energy sectors with possible harmful environmental impact must be discussed with potentially affected neighbouring states; (ii) the Convention on the Transboundary Effects of Industrial Accidents (or Industrial Accidents Convention) has Kazakhstan as its only member. This convention protects human being and nature from frequency and severity effect of industrial accidents, which may occur in all sectors of nexus; (iii) the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (or Aarhus Convention) enjoys the widest participation among the Central Asian riparian states except for Uzbekistan, providing important condition for putting into effect the concept of nexus in the basin.

Beside these international regulations, the Central Asian states cooperate also in the following framework: (iv) the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (or Ramsar Convention, 1971); (v) the Convention on Biological Diversity (1992); (vi) the Convention to Combat Desertification (1994); (vii) the United Nations Framework Convention on Climate Change (1992). Despite a large number of international legal commitments accepted by Central Asian countries, they do not serve as a tool to strengthen transboundary interstate dialog and secure sustainable management of water resources.

In addition to commitments of global character, some legal provisions regulating the use of water and related resources come from sub-regional agreements, namely within the Commonwealth of Independent States (CIS). The Agreement on Interaction in the Field of Ecology and the Environmental Protection signed in 1992 regroups all Central Asian states. In terms of management of transboundary water resources, basic regulation includes the Agreement between Belarus, Russia, Kazakhstan and Tajikistan on the Main Principles of Interaction in the Field of Rational

Use and Protection of the Transboundary Water Bodies, signed in 1998. It strongly requires more states' engagement into environmental protection; however, since Tajikistan is the only riparian state of the Aral Sea basin, it has a limited application for regional cooperation in Central Asia. The Agreement on Informational Cooperation in the Field of Ecology and the Environmental Protection of 1998 (CIS Agreement on Informational Cooperation) should play a more relevant role since it has been ratified by Kazakhstan, Kyrgyzstan and Tajikistan. However, interstate cooperation in the water sector based on the CIS legal framework does not seem to be effective, neither serves as a platform to develop common water management system. The main reason is the limited participation of Central Asia riparian states to these acts. This hampers the creation of a single legal approach to the resolution of existing water challenges.

The Insufficient Development of the Level of Interstate Legal Cooperation in Water Management in Central Asia

The legal framework for interstate cooperation on transboundary water resources in Central Asia has been developing since the collapse of the Soviet Union. The greatest challenge to the newly set up framework was to retain in operation the system of regional cooperation "water vs. energy" (Granita *et al.*, 2012). The legal and institutional framework developing since the nineties proved unable to solve the conflict of interests, but remained strong enough to prevent its further escalation. At present, the existing framework of cooperation urgently needs strengthening and modernisation to be able to properly implement nexus approach to governance of Aral Sea Basin.

Currently, the only truly regional law source of a general nature – the Agreement on Cooperation in the Joint Management, Use and Protection of Water Resources of Interstate Sources – was adopted by all five Central Asian states immediately after the disintegration of the single water management system maintained by the Soviet Union before 1992. This and some other following documents, which contributed to the building of the legal system over water and related resources, sorted out the most urgent issues in their use and allocation between newly independent states of Central Asia. Unfortunately, nowadays this system has just declarative character (no adoption of foreseen additional protocols), is outdated or just improperly

implemented and therefore does not reflect current nexus relations at the regional level (UNECE, GTZ, EC IFAS, 2010).

The scope of existing regional legal framework covers interstate cooperation in all aspects of nexus, including energy, agriculture and environment, but is far from perfect. It directly refers neither to the legal principles of equitable and reasonable utilisation of resources, nor to the basin management principle. Although it covers the Aral Sea basin in terms of geographical scope, it fails to address surface water originating from Afghanistan, and does not regulate groundwater regime.

The legal framework reflects the prohibition of causing significant harm, and includes provisions on the protection of international watercourses and their ecosystems, which are however mostly of a general nature. The obligation to conduct an environmental impact assessment (EIA) procedure requires coordination of national EIA procedures, however due to various thresholds to trigger obligations under the EIA, there is limited effective implementation of this mechanism. The dispute settlement system works despite absence of clear regulation to non-compliance monitoring and possible consequences. The regional agreements recognise the need to create joint bodies.

While omitted in the binding documents, the modern law precepts are reflected in non-legally binding three groups of region-wide documents: (i) the Framework Convention for the Protection of the Environment for Sustainable Development in Central Asia (2006), which is not in force yet; (ii) Regulations of Heads of States which, despite a rather uncertain legal nature, have a wide impact on institutional cooperation among states; (iii) other “soft law” documents issued by the Heads of Central Asian states give political directions of development for the entire Aral Sea Basin,¹⁴ though with no legal force.

Conclusions

The current problem of water allocation and management is complex, and affects the interests of all Central Asian countries and their neighbours. Water in Central Asia is now seen as a factor that may be used to threaten

¹⁴ Nukus Declaration of Central Asian States on Sustainable Development of the Aral Sea Basin (1995); the Ashgabat Declaration (1999); the Tashkent Statement (2001); the Dushanbe Declaration (2002); and the Joint Statement of the Heads of State-Founders of IFAS (2009).

the security of the region. The problem of water allocation is included in the overall perspective of political security; the threat of such a level is usually derived from the claims of hegemony and the propensity to use force to settle disputes between states and within them. These trends are compounded by the weakness of democratic institutions and the absence or insufficient development of pluralism and the rule of law. Delays in its solution may bring the region in critical conditions for interstate cooperation since the availability of water affects states' economic and political development.

The “water vs. energy” nexus has become a major factor in domestic and cross-border security: downstream countries sell gas and electricity to their neighbours at market prices, and stop deliveries in case of a debt. This gives rise to conflicts at different levels. The mechanism of settlements and compensation for water, existing since Soviet times, is not working anymore. Therefore, a new mechanism is needed. According to the United Nations, Central Asia annually loses more than \$ 1.75 billion, because of the inconsistency of decisions in the field of transboundary water coordination.

Russia declared its direct economic interests in solving water issues in Central Asia at the 2015 Dushanbe Forum. Academician Boris Kizâev, director of the Russian Research Institute of Hydraulic Engineering and Land Reclamation said:

Russia is interested in stability in the region, and any conflict, including on the basis of water, is not desired. In conditions of sanctions, Russia needs vegetables and fruits. In this sense, Russia is ready to consider joint projects on water, land, energy and labour resources. Russia is able to compensate Tajikistan and Kyrgyzstan's lack of electricity in the winter by supplying it to the region through the power system of Kazakhstan (Bukhari-zade, 2015).

Currently each of the Central Asian countries seeks to solve its water problem unilaterally, without considering interest of riparian states. But water shall be a factor that unites the region. It would require more political will on the side of Central Asian leaders, as well as improvement of the existing legal framework based on international water law on transboundary watercourses. A fairly well-established legal regime for interstate cooperation in the governance of transboundary water resources shared by Aral Sea basin riparian states has been developing already for the last twenty five years: the Almaty and Kyzylorda Agreements, the Nukus Declaration, as well as the Bishkek Agreement on Syr Darya, which is not active anymore.

They have a political signification, but are only declarations and protocols of intentions, which make up the framework. A joint mechanism of water use has not been developed.

The existing regime of interstate cooperation in the Aral Sea Basin is nowadays subject to gradual and constant, but protracted development. A difficulty in proper implementation and enhancement of existing policy documents, legal regulations as well as effectiveness of the institutional mechanisms of transboundary water governance is an important indicator of current challenges to interstate cooperation on the scarce resources, such as water. The existing framework of cooperation needs strengthening and modernisation to be able to properly implement existing and future challenges to interstate multilateral cooperation in the Aral Sea Basin. The states' obligation to cooperate is a prerequisite of carrying into effect the equitable, reasonable and no harming transboundary water management. The fundamental importance of cooperation between riparian states is the inevitable result of the fact that an international watercourse is a shared natural resource.

Experts agree that the issues of water use in Central Asia cannot be resolved in a bilateral format. The region needs an independent supra-national body that would deal with a complex solution of water, energy and agricultural issues and legal order. Water law facilitates creation of a proper water management strategy for every transboundary water basin. The level of today cooperation among Aral Sea Basin riparian states could still be improved for the sake of mutual benefits, especially in the view of magnitude and complexity of water usage problems between all mentioned countries. Its proper management is to be seen as one of the greatest challenges of the years to come in bilateral relations.

References

- ARON Raymond, 1962, *Paix et guerre entre les nations*, Paris: Calmann-Levy.
- ÂSINSKIĬ V.A., MIRONENKOVA P. & SARSEMBEKOV T.T., 2011, «Institucional'noe i pravovoe obespečenie upravleniâ bassejnami transgraničnykh rek Central'noj Azii kak faktor razvitija gidroenergetiki v regione» [Institutional and legal support to manage the basins of Central Asia's transboundary rivers as a factor of development of hydropower in the region], *Evrazijskaâ èkonomičeskaâ integraciâ*, 4/13, pp. 82-88.

- BLANK S., 2012, "Rogun Dam Project Epitomizes Central Asian Security Dilemmas," *Eurasia Daily Monitor* 9(168), September 17, [[http://www.jamestown.org/programs/edm/single/?tx_ttnews\[tt_news\]=39852&-cHash=dc1280f4b7850f9dfd3a14a84d65f4cb#.VbEIKbUmyuI](http://www.jamestown.org/programs/edm/single/?tx_ttnews[tt_news]=39852&-cHash=dc1280f4b7850f9dfd3a14a84d65f4cb#.VbEIKbUmyuI) accessed on 19.07.2015].
- BUKHARI-ZADE Nodira, 2015, «Vodnye resursy v Central'noj Azii: zavisimaâ nezavisimost'» [Water resources in Central Asia: a depending independence], *Fergana News*, June 17 [<http://www.fergananews.com/articles/8589> accessed on 10.11.2015].
- COUNCIL OF THE EUROPEAN UNION, 2010, *Joint Progress Report by the Council and the European Commission to the European Council on the implementation of the EU Central Asia Strategy*, Brussels, June 28, 11402/10, COEST 194, NIS 77 [http://eeas.europa.eu/delegations/kazakhstan/documents/eu_kazakhstan/joint_progress_report_eu_ca_strategy_en.pdf accessed on 10.11.2015].
- DUKHOVNYJ V.A., 2008, «Ustranenie granic, razdelâûsikh vodu» [Removal of borders dividing water], *Navstreçu 5-mu Vsemirnomu vodnomu forumu. Sovmestnye dejstviâ po obespeçeniû bezopasnosti plotin v Central'noj Azii: materialy meždunarodnoj konferencii*, Tashkent, pp. 53-82.
- DŽAJLOBAEV Abdybaj Š., 2005, *Analiz dejstvuûsikh soglašenij s točki zreniâ nacional'nykh interesov Kyrgyzskoj Respubliki* [Analysis of existing agreements from the viewpoint of Kyrgyzstan's national interests], Bishkek: Departament vodnogo khozâjstva Kyrgyzskoj Respubliki.
- ESCHMENT Beate, 2011, *Wasserverteilung in Zentralasien. Ein unloesbares Problem?*, Bonn: FES Press.
- FASKHUTDINOV G., 2014, «Rogunskâ GES: Dušanbe polučil pravo načat' stroitel'stvo» [Rogun HPP: Dushanbe has received the right to start the construction], *Deutsche Welle*, September 3 [<http://www.dw.com/ru/рогунская-гэс-душанбе-получил-право-начать-строительство/a-17896724> accessed on 11.11.2015].
- GRANITA J., JÄGERSKOĞA A., LINDSTRÖMA A. *et al.*, 2012, Special Issue "Water and Security in Central Asia: A Rubik's Cube," *International Journal of Water Resources Development* 28(3).
- GUBAIDULLINA Mara, 2015, « Une gestion commune régionale de l'eau en Asie centrale. Les ressources hydrauliques à la rescousse du besoin d'intégration sectorielle, d'entente et de politiques communes du post-soviétisme appliqué ? », in Pierre Chabal (dir.), *Concurrences interrégionales Europe-Asie au XXI siècle*, Bruxelles: Peter Lang, pp. 227-247.
- ICG – International Crisis Group, 2002, *Central Asia: Water and Conflict*, Asia Report n°34, May 30 [[http://www.crisisgroup.org/~media/Files/asia/central-asia/Central Asia Water and Conflict.pdf](http://www.crisisgroup.org/~media/Files/asia/central-asia/Central%20Asia%20Water%20and%20Conflict.pdf) accessed on 10.11.2015].

- ILA BERLIN RULES – Berlin Rules on Water Resources of the International Law Association, 2004 [<http://www.ila-hq.org/en/committees/index.cfm/cid/32> accessed on 10.06.2013].
- JANUSZ-PAWLETTA Barbara, 2012, “Legal Mechanisms of Cooperation to Manage Transboundary Watercourses in Central Asia,” *Central Asia: Regionalization vs. Globalization: IX KIMEP International Research Conference proceedings*, Almaty, pp. 7-12.
- , 2015, “Current Legal Challenges to Institutional Governance of Transboundary Water Resources in Central Asia and Joint Management Arrangements,” *Environmental Earth Sciences* 73(2), pp. 887-896.
- KHAKIMOV S., 2013, «Pravovye aspekty vodno-energetičeskikh problem Central’noj Azii (vzglád iz Tadžikistana)» [Legal aspects of the waterpower problems of Central Asia (a look from Tajikistan)], *Vodno-energetičeskie problemy Central’noj Azii i perspektivy ikh rešeniâ. Sbornik materialov meždunarodnoj naučno-praktičeskoj konferencii 17-19/11/2013*, Almaty, pp. 22-37.
- KIRSANOV I., 2006, “Battle for Water in Central Asia,” *Eurasia Heritage* 12 [<http://www.fundeh.org/publications/articles/48/> accessed on 10.11.2015].
- KUDRYASHOV A., 2008, “Academician Bekdjan Tashmukhammedov: Rainfall Control May Double Uzbekistan’s Water Resources,” *Ferghana.news information agency*, July 8 [<http://enews.ferghananews.com/article.php?id=2413> accessed on 19.07.2015].
- MCCRAY T.R., 2004, *Uzbekistan*, Philadelphia: Chelsea House Publishers.
- MORGENTHAU Hans J., 1954, *Politics Among Nations. The Struggle for Power and Peace*, Second Edition, New York: Alfred A. Knopf.
- MUKHAMETZANOV A., 2006, “Water CentrAsia: Problems and Prospects,” *CentrAsia. Information Analysis Portal Eurasia*, August 21 [<http://www.centrasia.ru/newsA.php?st=1156136880> accessed on 10.11.2015].
- MICKLIN P., 2000, *Managing Water in Central Asia*, London: Royal Institute of International Affairs.
- RAHAMAN M.M., 2012, “Principles of Transboundary Water Resources Management and Water-Related Agreements in Central Asia: An Analysis,” *International Journal of Water Resources Development* 28(3), pp. 475-491.
- RAKHMATULINA G., 2008, «Perspektivy sotrudničestva gosudarstv Central’noj Azii v vodokhozâjstvennoj sfere» [Perspectives of cooperation of Central Asian states in the hydraulic sphere], *Central’naâ Aziâ: sostoânie i perspektivy regional’nogo vzaimodejstviâ: materialy VI Ežegodnoj Almatinskoj konferencii*, Almaty: KISI, pp. 212-227.
- RYSBEKOV Y., 2012, «Strany Central’noj Azii: k voprosu o razdelâemykh (transgraničnykh) vodakh i effektivnosti vodopol’zovaniâ» [Countries of Central Asia: question of divided (transboundary) waters and the effectiveness of water use], *Sbornik naučnykh trudov NITS MKVK*, Tashkent, pp. 17-29.

- SARSENBEKOV T., 2004, *Ispol'zovanie i okhrana transgraničnykh rek v stranakh Central'noj Azii* [Utilisation and protection of transboundary rivers of Central Asian countries], Almaty: Atamura
- SEHRING Jenniver, 2007, "Gebrochene Verträge. Multilaterale Abkommen zu Flüssen in Zentralasien," *WeltTrends* 15/57, pp. 65-78.
- UNECE – UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE, 2011, *Strengthening Water Management and Transboundary Water Cooperation in Central Asia. The Role of UNECE Environmental conventions*, Geneva [http://www.unece.org/fileadmin/DAM/env/water/publications/documents/Water_Management_En.pdf accessed on 19.07.2015].
- UNECE, GTZ, EC IFAS, 2010, "Strengthening the institutional and legal frameworks of International Fund for Saving Aral Sea: review and proposals," Discussion Paper.
- UNEP – UNITED NATIONS ENVIRONMENT PROGRAMME, 2011, *The Greening of Water Law: Managing Freshwater Resources for People and the Environment*, Nairobi [http://www.unep.org/delc/Portals/119/UNEP_Greening_water_law.pdf accessed on 11.11.2015].
- UN WATER CONVENTION, 1997, *Convention on the Law of the Non-navigational Uses of International Watercourses*, General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement n°49 (A/51/49) [http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf accessed on 26.11.2015].
- UZHULIS B., 2004, "Water Conflicts in Kyrgyzstan as a Factor of Political Risk in Central Asia," October 11 [http://www.c-asia.org accessed on 10.11.2015].
- VALENTINI K.L, OROLBAYEV E.E & ABYLGAZIEVA A.K, 2004, *Water problems in Central Asia*, Bishkek: MISI, Socinfromburo & Friedrich-Ebert-Stiftung.
- VINOGRADOV Sergej, 2002, *Pravovoe regulirovanie transgraničnykh vodotokov: Istočniki, instrumenty i osnovnye principy* [Legal regulation of transboundary watercourses: sources, instruments and main principles], Moscow.
- WEGERICH Kai, 2008, "Passing Over the Conflict. The Chu Talas Basin Agreement as a Model for Central Asia?," in Rahaman M.M. & Varis O. (eds.), *Central Asian Waters*, Helsinki: Water and Development Publications, pp. 117-131.
- ZIGANSHINA D., 2011, *The Role and Relevance of the UN Watercourses Convention to the Countries of Central Asia and Afghanistan in the Aral Sea Basin*, International Water Law Project, [http://www.internationalwaterlaw.org/blog/category/central-asia/ accessed on 26.11.2015].
- ZONN I.S., BELUSOVA A.V. & KOSTIANOY A.G., 2014, *The Turkmen Lake Altyn Asyr and Water Resources in Turkmenistan*, Berlin, Heidelberg: Springer.

Abstract

The shortage of water resources and their inefficient use in Central Asia is exacerbated by the weak transboundary water management. It results in the imbalance between needs and water consumption, the economic and social instability, and the violation of the environmental sustainability of Central Asian countries. Water resources allocation generates competition for the right to own it.

Today's regional water security is threatened by risks and challenges for the development of Central Asia. Allocating shared water resources of transboundary character according to international law is one of the key factors of security in the region. Management of transboundary watercourses requires application of fundamental precepts of international water law like (1) principle of equitable and reasonable utilisation of waters, (2) principle "no significant harm," and (3) principle of cooperation. A prerequisite for carrying them into effect is the states' obligation to cooperate based especially on information exchange and consultations, as well as establishment of joint bodies. After the collapse of the Soviet Union and setting up of separate water systems in the Central Asian countries, the regional cooperation in management of transboundary rivers still requires improvement.

Keywords: international water law, transboundary watercourses, regional security

Résumé

Gestion de l'eau transfrontalière en Asie centrale. Quel cadre juridique pour renforcer la coopération interétatique et accroître la sécurité régionale ?

Le manque de ressources en eau et leur utilisation inefficace en Asie centrale est exacerbé par la faiblesse de la gestion des eaux transfrontalières. Il entraîne un déséquilibre entre besoins et consommation d'eau, une instabilité sociale et économique, et la violation de la pérennité environnementale des pays d'Asie centrale. La distribution des ressources hydriques génère une compétition pour le droit à la posséder.

La sécurité hydrique régionale d'aujourd'hui est menacée par des risques et des défis pour le développement de l'Asie centrale. La distribution des ressources hydriques partagées dans un cadre transfrontalier selon le droit international est l'un des facteurs de sécurité de la région. La gestion de rivières transfrontalières nécessite la mise en application de préceptes fondamentaux du droit international de l'eau, tels que: (1) le principe de l'utilisation équitable et raisonnée des eaux, (2) le principe du « aucun préjudice grave », et (3) le principe de coopération. Le prérequis pour que ces principes entrent en vigueur est la coopération entre les États, en particulier sur l'échange d'informations et les consultations, ainsi que la création d'instances conjointes. Depuis la fin de l'URSS et l'apparition de systèmes hydrauliques séparés dans les pays d'Asie centrale, la coopération régionale pour la gestion des rivières transfrontalières demande encore à être améliorée.

Mots clés : droit international de l'eau, rivières transfrontalières, sécurité régionale

Аннотация

Управление трансграничными водами в Центральной Азии. Каковы правовые рамки для укрепления межгосударственного сотрудничества и повышения региональной безопасности?

Нехватка водных ресурсов и их неэффективное использование в Центральной Азии усугубляется слабым управлением трансграничными водами. Это приводит к дисбалансу между потребностями в воде и ее потреблением в странах региона ЦА, к социальной и экономической нестабильности, нарушению экологической устойчивости. Распределение водных ресурсов порождает конкуренцию за право ею обладать. Сегодня региональная водная безопасность находится под угрозой рисков и вызовов для развития Центральной Азии. Совместное распределение водных ресурсов, которые характеризуются как трансграничные, должно проводиться в соответствии с нормами международного права. Это один из ключевых факторов обеспечения безопасности в регионе.

Управление трансграничными водотоками требует применения фундаментальных принципов международного водного права, таких как: (1) принцип справедливого и разумного использования воды, (2) принцип «не навреди», не нанеси значительный ущерб, и (3) принцип сотрудничества. Предпосылкой для проведения в жизнь этих принципов является обязательное сотрудничество государств, в частности, по обмену информацией и проведению консультаций, а также создание совместных органов.

После распада Советского Союза и создания в странах Центральной Азии отдельных систем водоснабжения, региональное сотрудничество по управлению трансграничными водами по-прежнему нуждается в совершенствовании.

Ключевые слова: международное водное право, трансграничные водные ресурсы, региональная безопасность

Book abstract