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## HYDROPOLITICS OF CHINA TOWARDS KAZAKHSTAN: ROLE OF TRANSBOUNDARY ILE AND ERTIS RIVER BASINS

The issue of shared water resources has a political context as touches upon the national interests of riparian states. In recent history, there have only been a few instances of violent or hostile disputes. In the transboundary river basins of Ile, Ertis, Brahmaputra, and Mekong, China, as the upstream country, possesses a significant role in their power dynamics. Most of the transboundary rivers originate from Tibet and neighboring mountainous regions of China. Achieving a consensus on water distribution and quality management continues to pose a significant hurdle for countries. The Ertis and Ile rivers stand out as the most significant among all. The trend for our neighbor is to withdraw water from these basins for a purpose of developing the oil and gas fields, as well as cotton production in Xinjiang region.

In recent years, sharp reduction in flow along the Ile River has been observed during vegetation season, which is fraught with big problems, primarily to environment and hydropower of Kazakhstan. In fact, China is not a member of any international water-related conventions. China's plans for a grandiose construction of mega-dams and water transfer projects from transboundary rivers with neighboring countries like India, Mekong states and Kazakhstan is causing political tension and misunderstandings. The article examines China's transboundary water management strategies using "hydro-hegemony theory" to provide comprehensive analysis of its hydropolitics.

**Key words:** transboundary rivers, Ili River, Irtysh River, water security, water politics, hydro-hegemony.

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### Қытайдың Қазақстанға қатысты гидросаясаты: Іле және Ертіс трансшекаралық өзен бассейндерінің рөлі

Елдер арасындағы трансшекаралық өзен бассейндерінің су ресурстарын бірігіп басқару үлкен саяси мәселе болып табылады. Жаңа тарихта мұндай келіспеушіліктер зорлық-зомбылыққа немесе әскери әрекеттерге әкелген жағдайлар аз емес. Қытайдың Орталық Азиядағы Іле мен Ертіс трансшекаралық өзендеріне, сондай-ақ Қытай өзендердің жоғарғы ағысында орналасқан ел болып табылатын Оңтүстік және Оңтүстік-Шығыс Азиядағы Брахмапутра мен Меконгке қатысты гидросаясаты, халықаралық су құқығының бір өзен бассейніндегі елдер арасындағы қатынастардағы билік рөлін әлі де жете бағаламайтынын көрсетіп отыр.

Тибет пен Қытайдың Оңтүстік-Шығыс Азияға іргелес басқа таулы аймақтарында көптеген трансшекаралық өзендер, соның ішінде Іле мен Ертіс бастау алады. Суды бөлу және сапасын бақылау бойынша қанағаттанарлық келісімге қол жеткізу ұлттық мемлекеттер үшін үлкен мәселе болып қалуда. Қазақстан мен Қытайдың жағдайы осындай, олар 1700 шақырымдық шекара бойында 24 өзенді бөліседі, олардың ішінде Ертіс пен Іле ең ірі және маңызды болып табылады. Көршіміздің бұл бассейндерден мұнай мен газ кен орындарын игеру, сондай-ақ Шыңжаң ауданында мақта өндірісі мақсатында су алу үрдісі жыл сайын артып келеді.

Соңғы жылдары вегетация кезеңінде Іле өзенінің ағысы күрт азайғаны байқалады, бұл үлкен проблемаларға, ең алдымен экология мен гидроэнергетика үшін қауіпті. Шын мәнінде, Қытай 1997 жылғы БҰҰ-ның халықаралық су ағындарын кеме жүзбейтін пайдалану туралы конвенциясына қарсы дауыс берген әлемдегі үш елдің бірі болып табылады. Нәтижесінде Қытайдың бүкіл әлемде теңдесі жоқ мега-бөгеттерді салу жөніндегі ұлы жоспарлары, трансшекаралық өзендерден су бұру жобалары өзен бассейндері елдері арасындағы шиеленіскен қатынастардың көзіне айналуда, Меконг, Үндістан, соның ішінде Қазақстан сияқты көрші елдер арасында жанжал әлеуетінің туындауына алғышарттар жасайды. Осыған байланысты мақалада Қытайдың гидросаясатын егжей-тегжейлі түсіну үшін оның трансшекаралық су ресурстарын басқаруға қатысты тәсілі «гидро-гегемония» теориясы тұрғысынан талданған.

**Түйін сөздер:** трансшекаралық өзендер, Қазақстан мен Қытай, су қауіпсіздігі, су саясаты, гидро-гегемония.

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### **Гидрополитика Китая в отношении Казахстана: роль трансграничных бассейнов рек Иле и Ертыс**

Интегрированное управление водными ресурсами трансграничных бассейнов рек между странами, является огромной политической проблемой. В новейшей истории было немного случаев, когда такие разногласия приводили к насилию или военным действиям. Гидро-политика Китая в отношении трансграничных реках Или и Иртыш в Центральной Азии, а также Брахмапутры и Меконга в Южной и Юго-Восточной Азии, в которых Китай является страной, расположенной в верховьях рек, наглядно демонстрирует, как международное водное право недооценивает роль власти в отношениях между странами одного речного бассейна. В Тибете и других горных регионах Китая, прилегающих к Юго-Восточной Азии, берут начало большинство трансграничных рек, в том числе Или и Иртыш. Достижение удовлетворительного соглашения по распределению воды и контролю качества остается большой проблемой для национальных государств. Так обстоит дело Казахстана с Китаем которые разделяют 24 реки вдоль их 1700-километровой границы, из которых реки Иртыш и Или являются самыми крупными и значительными. Тенденция забора воды с этих бассейнов со стороны нашего соседа с целью разработки месторождений нефти и газа, а также хлопкового производства в районе Синьцзян с каждым годом возрастает.

В последние годы в период вегетации отмечается резкое сокращение стока по реке Или, что чревато большими проблемами, прежде всего для экологии и гидроэнергетики. Фактически, Китай является одной из трех стран в мире, которая проголосовала против Конвенции ООН о ненавигационном использовании международных водотоков от 1997 года. В результате планы Китая по грандиозному строительству мега-плотин, не имеющих себе равных по всему миру, проектов диверсии воды из трансграничных рек, становятся источником напряженных отношений между странами бассейнов рек, создавая предпосылки для возникновения конфликтного потенциала между соседними странами Меконга, Индии, в том числе и Казахстана. В этой связи, в статье проанализирован подход Китая в отношении управления трансграничными водными ресурсами через призму теории "гидро-гегемонии" для более детального понимания его гидро-политики.

**Ключевые слова:** трансграничные реки, Казахстан и Китай, водная безопасность, водная политика, гидрогегемония.

## **Introduction**

Currently, water is an indispensable resource and affects every aspect of life. More than 263 international basins cover almost half of the Earth's surface. In addition, more than 145 riparian states share one or more river basins. Because 263 river basins around the globe are transboundary, international cooperation on water between neighboring states becomes more complex as national borders push water issues to the political level. Transboundary water resources affect the national interests of the states sharing the river basin, giving upstream countries greater power, thereby creating the preconditions for political misunderstandings and conflict potential between countries.

In Southeast Asia, the Mekong and Brahmaputra Rivers as well as in Central Asia's Ile and Ertis river basins highlights China's superior control and influence over downstream nations. Currently, Sino-Kazakh relations are characterized as a comprehensive strategic partnership. In addition, the issue of transboundary water resources, which requires a

fair solution, is of strategic interest. However, one should take into account the fact of obvious gap between the economies of two countries. China as the world's second largest economy, significantly influences Kazakhstan in various arenas, including trade, economic relations and water resources. Accordingly, this situation makes it much more difficult to put forward any definitive proposals or conduct a win-win dialogue with a powerful upstream country. Rising China as a hydro-hegemon in the context of water scarcity remains out of the main field of view. China has completed more than half of the world's 50 largest dams. China's dam construction impacts interest of riparians (Lee, 2006). Asian transboundary rivers of great significance originate in China (Chellaney, 2011). The Tibetan Plateau, being the largest source of fresh water in the world, provides essential water resources to major Asian rivers. Transboundary rivers such as Ertis, Ile and the Amur River originate in China, which flow to Kazakhstan and Russia. Ten major rivers originate in China and flow to 11 countries. No river flows into China from outside, which gives China a unique

property of being an upstream state and a hydro-hegemon for all neighboring states (Chellaney, 2011).

### Materials and research methods

This study's approach is grounded in the perspectives of international and domestic scholars specializing in China's water diplomacy and management. The research utilized content analysis of the 1997 UN Convention, Chinese Water Code, strategies, and agreements, specifically those between China and Kazakhstan, in its examination of transboundary river cooperation. Major characteristics of China's water diplomacy were identified using the method of comparative analysis of China's water policy towards neighboring riparian states with which it shares a transboundary water basin, namely the Brahmaputra, Mekong, as well as Ertis and Ile. General scientific research methods, in which the authors use analysis, synthesis, induction and deduction were applied.

In the theoretical aspect, scientific research and concepts of foreign authors on hydro-hegemony were of great importance for a more detailed understanding of China's hydropolitics.

### Literature review

Mark Zeitoun and Jeroen Warner (2005) introduced the concept of hydro-hegemony to elucidate transboundary hydro politics. The outcome of hydro-political relations between riparian countries ranges from benefits derived from hegemonic cooperation to unfair and unequal aspects of domination. Consequently, the outcome of control over water resources directly depends on the form of hydro-hegemony established by the hydro-hegemon, usually in favor of the most powerful actor. The upstream state, without formal agreements, implements projects affecting the resource's flow and quality, as described by Waterbury (1997) as 'active unilateralism' (Waterbury, 1997: 279). In addition, this strategy allows for sole control with the annexation of land or construction of large-scale hydraulic works. Containment strategy requires consideration of the demands of other downstream countries, understanding and acceptance of generally accepted norms regarding the sharing of cross-border resources, as well as obligations to cooperate with competitors (Zeitoun, Warner, 2005).

According to Zeitoun & Warner, hegemony can manifest positively or negatively. Positive hegemony contributes to effective water management and international stability for weaker nations. (Zeitoun,

Warner, 2005). Downstream states may face adverse effects despite favorable hydro-political gains for upstream states. According to Katz D., (2011), director of the Institute of Business and the Environment at Tel Aviv University, power asymmetries occur "when riparian neighbors have unequal political power, lack of control over decisions, and inequitable distribution of shared water resources" (Katz, 2011). The negative form is associated with asymmetry in the water issue, which causes increased tensions and the potential for conflict of higher intensity. The "Results and Discussion" section analyzes China's unilateral/exploitative approach to water resources of the transboundary Ile and Ertis rivers, which establishes a dominant one.

Hydro-hegemon can establish any control over transboundary water resources and can choose any strategy it prefers, regardless of whether it is positive or negative. The analysis of China's hydro-politics in the Ile and Ertis river basins was based on the conceptual framework of hydro-hegemony in order to test this theory. Importance of cooperative water management for sustainable regional development, stability, and security in Central Asia cannot be overstated. A new interstate compromise is needed to resolve existing contradictions (Janusz-Pawletta B., Gubaidullina M., 2015).

However, law, dialogue and cooperation is a beneficial tool to resolve critical situations. According to Stephen Conolley McCaffrey, one of the recognized authorities in the field of international water law, a human right to water is recognized as a right by the UN in 2010. He has also advanced critical ideas linking water law to politics, permission conflicts, benefit-sharing and environmental protection, calls for dialogue as a way out of conflict regarding water resources (McCaffrey S.C. & M. Sinjela, 1997).

### Results and discussion

China's power lies significantly in controlling the sources of most transboundary watercourses. Ertis, Ile, Tekes, and Khorgos rivers are Kazakhstan's most significant fresh water sources, flow from China to Kazakhstan. In Xinjiang over the past decade, around 130 hydraulic structures and 13 reservoirs have been constructed on transboundary rivers, including new canals, dams, reservoirs and energy sources. The use of transboundary river resources between Kazakhstan and China remains unresolved. Forty major cross-border watersheds that China shares with neighboring states are the source of accusations toward China due to its domestic hy-

dropower dam building, industrial, and agricultural development policies. This article sheds light on China's water policy and its impact on relationships with Central, South, and Southeast Asian nations regarding shared water resources.

China's hydropolitics in South and Southeast Asia is aimed at hydropower potential of the transboundary water basins of the Brahmaputra and Mekong rivers, which are an important link for development and well-being of Chinese economy. China's hydropower development on the Brahmaputra and Mekong rivers, crucial for its economy, leads to ecological and economic concerns downstream in India, Bangladesh, and other non-hegemonic countries (Hanas, 2014). India and Bangladesh, being downstream, consider China's water project towards diverting water resources as a direct threat to a water security of these states. Water shortage in Brahmaputra will increase these problems to dangerous levels. Indian side is concerned about implementation of this project, considering Chinese water project as a de facto declaration of war against South Asia (Chelleney, 2011). China, having established operational control of the Brahmaputra River basin, does not even fulfill its obligations under the Agreement on the exchange of information regarding hydrological data on water flows with India (Hu, 2010).

Construction of eleven huge dams on the Mekong River has negative impact on downstream riparians. The long Mekong River originates in the Tibetan Plateau and flows through China to Myanmar, Laos, Cambodia, Vietnam and Thailand. According to Pradhan S., D., Chairman of the Joint Intelligence Committee of India, the Mekong River provides food security for approximately 60 million people living in its lower basin. In 2019, the Mekong River began to dry up, causing enormous damage to the lower riparian states (India Times, 2023).

Vietnam, Cambodia, Laos and Thailand cooperate over shared water resources under the Mekong River Commission with the UN support. The Agreement on Cooperation for the Sustainable Development of the Mekong River Basin was signed by the four countries. China and Myanmar, despite being excluded from the initiative, cooperate through bilateral agreements. China's water diversion projects and mega dam construction on transboundary rivers are creating tensions and straining relationships with its neighbors, most notably India, the Mekong countries, and Kazakhstan along the Ile and Ertis rivers. China's hydro-hegemony and the power asymmetry in the 2001 agreement facilitate ineffective formal negotiations for a more equitable water distribution

for Kazakhstan. The credibility of China's cross-border decisions hinges heavily on their context.

By implementing large-scale water transfer projects and constructing mega dams on transboundary rivers, China engendering political tension between its riparian neighbors. Particularly, power imbalance between China and Kazakhstan hinders fair distribution of water resources through formal negotiations, as stipulated in the 2001 agreement's clause safeguarding former hydro hegemony in the Xinjiang.

It should be noted that China abstained from voting for the 1997 UN Convention on the Non-Navigational Uses of International Watercourses (UN International Watercourses Convention, 1997). As a result, China is one of three countries that voted against the 1997 UN Convention on the Non-Navigational Uses of International Watercourses. Due to gaps in international water law, China as an upstream state, manages water resources from the shared rivers unilaterally.

China's hydro-policy on transboundary water resources is contrary to international water law and multilateral cooperation with delta countries at the institutional level. Either water remains a result/consequence of political tensions with its neighbors such as India, Russia, Kazakhstan and Nepal. Harman Doctrine assumes China's full control and discretion over shared waters originating within its territory, regardless of downstream states' interests. The Harman Doctrine has a conflicting origin, as a result of which it was not accepted by the international community. The doctrine is named after the US Secretary of Justice, who substantiated the position of the American side in the dispute with Mexico over the waters of the Rio Grande, Colorado, and Tijuana rivers, which originate in the United States.

Water relations between countries largely depend on their general political relations. American lawyer McCaffrey uses the example of two well-known cases of dispute over transboundary water issues between the explosive states of South Asia – India and Pakistan, proved the viability of consultations and involvement of recognized organizations as an arbitrator, namely the World Bank. Pakistan protested against the construction of Ratle and Kishanganga hydroelectric power stations on the Chenab River, arguing that the projects might negatively impact the rivers' flow. The World Bank facilitated negotiations between India and Pakistan for a water treaty (McCaffrey S.C., 1995).

Water relations between China and Central Asian countries is complicated as the parties

cannot come to a common agreement for a long time. Although China is one of the top five countries with the largest freshwater resources, its per capita water availability is only one-fourth of the world average, making it one of the most water-stressed countries in the world. China's water problems are exacerbated by extremely uneven spatial distribution. Northern China, which accounts for 65% of the country's territory and 45% of the total population, has only 17% of China's total freshwater resources, while Southern China has 83% of China's freshwater resources (Li & Wu, 2016). China has sought to harness the water resources of major rivers that cross Chinese borders to prevent a looming water crisis, in addition to spending billions of dollars on domestic water transfer projects such as the Mega South-North

Water Diversion Project, as well as water conservation and pollution control.

#### *Water allocation issue of the transboundary rivers Ili and Irtysh*

The issue of water allocation from the Ili and Ertis rivers is currently preventing a strategic partnership between Kazakhstan and China due to China's unilateral control of the transboundary rivers. 1,700-kilometer border between Kazakhstan and China is home to Ertis and Ili, the two largest and most significant rivers. The Ili and Ertis rivers originate in China, one from the Tien Shan Mountains and the other from the Altai Mountains. The 5000-km Ertis River is the world's second longest, running through three major countries, including China and Kazakhstan and Russia.



Data source: Food and Agriculture Organization of the United Nations: AQUAmaps Regional and Global River Layers.

**Map 1** – The Ili and Irtysh Rivers.

Source: Indicative Overview of Irtysh and Ili Rivers (1:126,600,000 approx.)

Xinjiang is oil and cotton in China, experiences significant development and modernization fueled by the country's control over water resources in both rivers. China's western development strategy relies on the utilization of water resources from trans-

boundary rivers. Unilateral approach to managing transboundary rivers causes concern for Kazakhstan. Implementation of China's development strategy for the western will inevitably lead to economically and environmentally negative consequences

for Kazakhstan (Zonn I.S., Zhiltsov S.S., Semenov A.A., Kostyanoy A.G., 2018). In 2000 Chinese government order to identified large-scale development of Western, particularly Xinjiang Autonomous region, as a crucial near-future strategy for reducing development gap with the West. This strategy aims to advance underdeveloped western areas, covering 6 regions (Gansu, Guizhou, Xinhai, Shaanxi, Sichuan, and Yunnan), 5 autonomous regions (Guangxi, Inner Mongolia, Ningxia, Tibet, and Xinjiang), and one municipality (Chongqing) (Fan, M., Xu, J., Yaning, C., Li, D., & Tian, Sh. (2020). Projected population growth from 20 to 100 million in Xinjiang by 2030 is integral to anticipations of rapid development there, driven by ethnic Chinese resettlement efforts to assimilate Uighur population. In order to address water scarcity in Xinjiang's growing population, industry, agriculture via water transfer from the transboundary rivers.

Black Irtysh-Karamai and the Irtysh-Urumqi operate in the XUAR. Two hundred square kilometers of the Lake Ulyungur's surface area have been expanded via the transfer of Black Irtysh water through the Black Irtysh-Karamai canal. The Irtysh-Urumqi canal is designed for distributing water to the Tarim Basin, which holds significant oil and gas resources. In particular, Xinjiang's oil and gas development is a key element in development strategy of the western regions for industrial and rapid economic growth. Xinjiang ranks second in the country in terms of oil production, surpassing the Shandong region. The Xinjiang Uyghur Autonomous Region is the most promising territory from a geological point of view. XUAR contains 40% of all coal in China, and in terms of crude oil production (22.6 million tons), XUAR has been ranked first among all other territories of the country for 15 years (Lee, 2006). The Black Irtysh-Karamay canal was constructed to transport water from the upper Irtysh to the Karamay oil field region. In addition, agriculture in western China, especially cotton production of the Xinjiang, is a key area for development of this region. However, implementation of the western development strategy, in particular the Xinjiang Uyghur Autonomous Region, requires additional water supply for industrial growth and the economy as a whole. Xinjiang's population has a tendency to grow from 18 billion to 20 with a potential for further increase has water resources of only, which can provide water to 18 million people [Medeu, Malkovsky, Toleubaeva, 2012].

Currently, Chinese side for Xinjiang development and its oil industry around the city of Karamay, transfers about 800 million m<sup>3</sup> of water from

the Ertis basin annually [Medeu, Malkovsky, Toleubaeva, 2012]. Subsequently, if China increases water intake from Ertis by at least half a cubic meter, then existence of the Lake Zaysan in Eastern Kazakhstan will be threatened, as well as the ecological balance of the region as a whole. Ertis River provides water to population, is a source for agricultural and industrial development not only within its basin, but also through the canal named after K. Satpayev a vast territory of low-watered Central Kazakhstan [Medeu, Malkovsky, Toleubaeva, 2012].

Eastern Kazakhstan with the largest industrial potential in Kazakhstan is the only region of the republic that does not face water shortage. Water of Ertis system is used in an area with a population of more than 4 million people. Reduced water availability in China which will impact the Black Irtysh's flow, Bukhtarma reservoirs inflow, the Lake Zaysan's status, Ertis water quality, among other consequences heightens complexity of environmental situation of the region as a whole.

Ertis is a source of fresh water for about four million people in Kazakhstan. Experience of the Syrdarya River shows that it is also possible to reduce capacity of the main water artery [Medeu, Malkovsky, Toleubaeva, 2012]. The river also supplies drinking water to the capital Astana, as well as three other main cities – Karaganda, Semey and Pavlodar.

Another transboundary river of strategic importance for Kazakhstan is the Ile River. Ile River is a major tributary to the largest in Kazakhstan the Lake Balkhash providing up to 80% of the water inflow. In addition, Ile River plays a significant role in the country's economy. About 70% of the Ile River flow is generated in China. Ile River provides up into the Lake Balkhash, thanks to which the level of the lake, the third largest endorheic reservoir on the planet, was in an environmentally stable state and prevented desertification processes in arid region of Central Asia. And if China exceeds the current level of water intake by 15%, then the Lake may repeat the fate of the Aral (Sarsembekov T.T., A.N. Nurushev, Kozhakov A.E., Ospanov M.O. (2004). Since it is a very shallow reservoir ecosystem of the Lake Balkhash is very vulnerable. Total volume of the lake approximately 11 times less than the volume of the Aral Sea before it dried out.

China's large-scale development of Xinjiang and the distribution of water resources from transboundary Ile and Ertis rivers will cause serious and far-reaching damage to the national economy in East Kazakhstan, significantly affecting the economy of Omsk region of Russia. Currently Ertis and Ili Rivers are the subject of negotiations between

Kazakhstan and China. Kazakhstan considers solving the problem of transboundary rivers as one of its priorities in water security. Since 1998, Kazakhstan and China have continued negotiations on the legal status of transboundary rivers. Negotiation process on cooperation over transboundary water resources are held in the framework of the Bilateral Cooperation Committee. Since 2003 when first meeting of the Kazakh-Chinese Joint Commission on the Use and Protection of Transboundary Rivers took place, have already been held 17 meetings.

China prefers to cooperate over transboundary water resources with its riparian neighbors separately and on a bilateral format, even if the river crosses the border of more than two states. Consequently, negotiation process over Ertis River has been held on a bilateral level despite the fact that the river concern three countries at once – China, the Russian Federation and Kazakhstan. Water level in the Ertis River in 2023 was one of the lowest in the last several generations. Although drought has been identified as a contributing factor, Kazakh experts have accused China in exacerbating the problem by diverting excessive amounts of water from the Ertis basin.

Accordingly, the intergovernmental Kazakh-Russian basin agreement regulates water use of the Ertis River between Kazakhstan and Russia. Since 2009 Kazakhstan has managed to take water issue to a new level in order to sign a long-waiting Agreement on water allocation and protection of transboundary rivers. Currently, work on the approval of a draft agreement on water allocation is being carried out with variable results. However, reaching a satisfactory agreement on the use of transboundary rivers with China will not be easy, as China used to delay the process of adopting the agreement and continues to divert the river's flow in favor of its national interests.

Agreement between Kazakhstan and China on construction of a hydroelectric complex on the transboundary Khorgos River was the most significant result for the entire work of the commission. According to the Agreement, which can serve as a model for similar mechanisms on other waterways, automatized water sharing allows the use of water resources in equal volumes for both sides.

The study demonstrates the costs of inaction and benefits of cooperation on water management among countries in the region. The risks and costs of insufficient water cooperation are significant, and the extent and quality of water cooperation will have a profound impact on the future development and political stability of the region.

Risks of inefficient water collaboration in Central Asia are significant. At the same time, in order to promote cooperation in the field of transboundary water management, Central Asian states should outline partnership mechanisms at various levels that can be strengthened. In addition, intensification of political and water dialogue is necessary. There are practically no regions in the world where water diplomacy does not play an important role, including for ensuring security. In addition, fundamental principles of international water law, such as (1) principle of equitable and reasonable water use, (2) principle of “no significant harm” and (3) principle of cooperation are prerequisite in signing agreement on water sharing between riparian states. Via the exchange of information and consultations, as well as creation of joint bodies riparian states promote cooperation over transboundary water resources (Janusz-Pawletta B., Gubaidullina M., 2015). Currently, countries continue to develop legislative support for all reforms in a water sector. Common methodology and cooperation tools are required to improve the legislative framework to improve and strengthen transboundary water cooperation.

## Conclusion

Since transboundary rivers cross the national borders of different states, issues related to them acquire an international and political character (Zeitoun & Warner, 2005). Upstream are given more extensive rights in the field of water use than downstream riparian, whose interests are infringed as a result of dominant control over transboundary rivers.

China's hydro-policy on the transboundary Ile and Ertis rivers, where China is a hydro-hegemon, clearly demonstrates how international water law underestimates the role of power in relations between delta countries (Zeitoun & Warner, 2005). China, being an upstream country has established unilateral control over transboundary rivers in its favor. In addition, Xinjiang intakes water resources from the transboundary Ile and Ertis Rivers in the framework of China's western development strategy to facilitate its economy sectors to the detriment of Kazakhstan. In fact, China voted against the 1997 UN Convention on the Non-Navigational Uses of International Watercourses. As a result, China's water policy regarding transboundary rivers is becoming a source of tension between countries, creating the preconditions for conflict potential.

The issue associated with water depletion and pollution is of strategic importance as, out of the

eight water basins of the republic of Kazakhstan seven are transboundary, part of their catchment area is located outside the country, (Medeu A.R., Malkovsky I.M., Toleubaeva L.S., 2012). Problems of regulating interstate water relations are of strategic importance for Kazakhstan. Inconsistency in cooperation over transboundary water resources with neighboring states, like China, Russia, Kyrgyzstan, Uzbekistan is one of the main threats to the water security of the Republic of Kazakhstan

The issue of transboundary cooperation between China and Kazakhstan in the Ile and Ertis river basins is a main priority area of Kazakhstan's water policy. For further cooperation it is recommended:

1. Accelerate a signing of fundamental documents on legal issues of water allocation and protection of transboundary rivers based on international law.

2. It seems appropriate to bring a consideration of the problem of transboundary rivers to the level

of the SCO and trilateral negotiations (Russia, Kazakhstan, China).

3. It is necessary to continue a construction of joint waterworks on transboundary rivers, which will prevent massive water intake from the Chinese side.

4. Modernization of water management infrastructure, introduction of advanced water-saving technologies and digitalization of water metering and distribution in transboundary rivers of the Republic of Kazakhstan.

5. The Lake Balkhash as an important geographical in accordance with the Helsinki Rules of 1997 and the principles proclaimed there should be declared as object of international law.

6. The "One Belt, One Road" program is beneficial to China, and within the framework of this program, Kazakhstan must put forward a requirement to resolve transboundary water allocation. As water issue over transboundary rivers is of strategic significance for Kazakhstan's security.

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