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"WATER DIPLOMACY: ADDRESSING TRANSBOUNDARY RIVER ISSUES BETWEEN KAZAKHSTAN AND CHINA"

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In the arid landscapes of the Sino-Kazakh trans-boundary river basins, where water scarcity is a stark reality, the management of 24 shared rivers between China and Kazakhstan presents a formidable challenge. These rivers follow a clear upstream-downstream pattern, with their mainstreams converging to shape a delicate hydrological network. Negotiating water use and allocation amidst such constraints is an intricate task often beset by obstacles.

Despite these challenges, the imperative of addressing water scarcity, conserving river basin ecosystems, and accommodating burgeoning development has propelled both nations towards cooperation in water allocation. A foundational agreement, built upon the principle of equity and rationality, outlines the framework for the use and protection of these trans-boundary rivers. However, the translation of this agreement into operational practices faces hurdles in the management of shared water resources in both countries.

Efforts toward equitable distribution of interstate water resources require navigating a complex terrain. Operational challenges persist, demanding innovative solutions and sustained cooperation. These include issues such as infrastructure development, pollution control, and the socio-economic impacts of water management decisions. Overcoming these hurdles necessitates a concerted commitment to dialogue, transparency, and mutual understanding.

In essence, while the overarching agreement reflects a shared commitment to cooperative management, translating principles into actionable measures remains a work in progress. Both China and Kazakhstan must address the operational challenges head-on, forging collaborative mechanisms that ensure the sustainable utilization and protection of their shared water resources. Only through such concerted efforts can the goal of equitable distribution be realized, securing the future of both nations and their ecosystems.

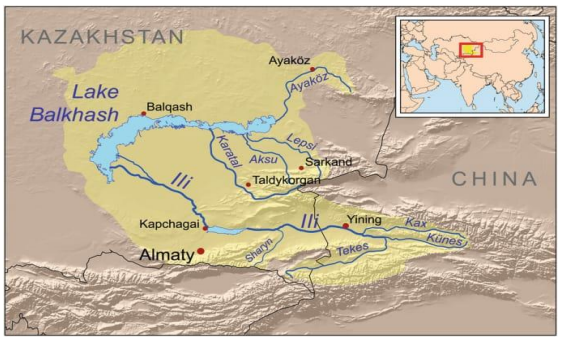

Figure 1. Transboundary rivers originating from China.

THE PROBLEM OF CONTESTATION OVER THE ILI AND IRTYSH RIVER

According to experts, Kazakhstan is one of the countries of the Eurasian continent that is largely experiencing a shortage of water resources. About half of the republic's surface water (44.9 cubic kilometers) comes from the territory of neighboring states.

About 90% of the total annual runoff reduction is accounted for by the reduction of runoff in neighboring states. The PRC, in turn, is also experiencing a shortage of water resources and needs ever-increasing volumes of them to meet the needs of industry, agriculture and supply of growing cities. In this context, the issue of regulating water relations between Kazakhstan and China has a strategic purpose for both states.

In general, the problem of using the water resources of transboundary rivers is not new for China and Kazakhstan. It came into being at the turn of the 70-80 - ies-back in the days of the Soviet Union. At that time, an agreement was reached with the People's Republic of China to develop an interstate agreement regulating the joint use and protection of transboundary rivers. However, due to the different approaches of the parties to this problem, a final solution to the issue was not reached. Since gaining independence, Kazakhstan has considered solving the problem of transboundary rivers as one of its priorities.

Twenty-four rivers that cross the territories of both Kazakhstan and China present a central and challenging aspect of their bilateral relations concerning the shared use of water resources. A critical point of contention involves the escalating extraction of water from the Ili and Irtysh rivers within the People's Republic of China.

The matter at hand revolves around the utilization of water from the transboundary Irtysh and Ili rivers, reaching a critical juncture in the autumn of 1998. During this period, authorities in the Xinjiang Uygur Autonomous Region (XUAR) of China initiated an accelerated construction project, known as the Black Irtysh-Karamay Canal. This canal was designed to divert a portion of the upper Irtysh River's waters to the Karamay oil field near Urumqi. China has expressed its intention to annually draw more than 450 million cubic meters of water from the Irtysh River to address the persistent water shortage in the region. The long-term plan aims to increase this volume to 1.5 billion cubic meters. Additionally, there are plans to extract water from the Ili River.

This announcement has raised significant concerns in Kazakhstan. Experts caution that implementing China's proposals could disrupt the existing water supply regimen, severely impacting industry and agriculture in the northeastern and central regions of Kazakhstan. Of greater significance is the potential deterioration of the ecological situation in the areas surrounding lakes Balkhash and Zaisan, which could parallel the tragedy of the Aral Sea.

The Irtysh River holds considerable economic importance for Kazakhstan, with approximately 2.5 million people residing in the river basin within our republic's territory. Major industrial centers, including Ust-Kamenogorsk, Semipalatinsk, and Pavlodar, are situated in this area.

EVALUATION OF THE CONDITION OF TRANSBOUNDARY RIVERS WITHIN THE ILI RIVER BASIN.

Basin of the Ili River			
Area	Countries	Countries' share	
413,000 km²	Kazakhstan	353,000 km	85,4%
	China	60,000 km	14,6%

The Ili River stretches for a total length of 1,439 kilometers, with 815 kilometers of its course running through Kazakhstan. Originating in the eastern Tien Shan mountains, it begins at the meeting point of the Tekes and Kunes rivers. Prior to reaching Lake Balqash, the river creates an extensive delta characterized by expansive areas of lakes, marshes, and dense vegetation reminiscent of jungles.

In China, approximately 15 reservoirs are situated along the tributaries of the Ili River (such as the Kash, Kunes, and Tekes rivers), with plans for about 40 additional small reservoirs. In Kazakhstan, the largest reservoir is the Kapshagai hydropower station located on the Ili River, complemented by several smaller hydropower stations along its tributaries.

Key Pressure Points:

- In China, an extensive 600 million hectares of land are under irrigation, whereas in Kazakhstan, the irrigated land area is significantly smaller, standing at 8.18 million hectares. Out of this, 6.53 million hectares are dedicated to grasslands for the grazing of various livestock such as cattle, sheep, goats, horses, and camels.

- The regulation of flow by numerous reservoirs in the lowlands indirectly affects floodplain vegetation. The reduction in the frequency or duration of flood events due to these reservoirs contributes to the deterioration of floodplain vegetation, negatively impacting animal grazing. Conversely, in the river delta during winter, high water discharges from the reservoirs to meet peak energy demands result in complete flooding of the delta, further disrupting the riverine ecosystem.

THE NEGOTIATION PROCESS BETWEEN KAZAKHSTAN AND CHINA:

Interstate cooperation between Kazakhstan and China began in 1965. An agreement was signed on the distribution and use of water of the Khorgos border river. In 1975 and 1983 amendments and additions were made to this agreement. Then, in 1989, a Temporary agreement was signed on the distribution and use of the waters of the Sumba border river. In 1992-1993, the countries signed Protocols on the joint construction of a combined water intake hydroelectric facility on the Khorgos River.

In 1998, official negotiations on transboundary river usage commenced between Kazakhstan and China. Over five rounds of negotiations, both nations established a Joint Working Group of Experts on Transboundary Rivers. The initial meeting in Almaty in November 2000 resulted in a preliminary list of 23 transboundary rivers and a three-stage action plan. Subsequently, an Agreement on cooperation in the use and protection of transboundary rivers was signed in Astana on September 12, 2001.

The Kazakhstan-China Joint Commission on the Use and Protection of Transboundary Rivers was formed based on this agreement. The first commission meeting in Beijing in October 2003 focused on developing regulations and resolving issues related to the 2001 agreement. The commission also agreed on a 2004 work plan.

Subsequent meetings in Almaty (2004), Shanghai (2005), and Almaty (2006) addressed issues ranging from emergency notifications to technical matters related to the Dostyk hydroelectric power station on the Khorgos River. The fifth meeting in Beijing (2006) emphasized the joint construction of the Dostyk hydroelectric complex.

From the sixth meeting onwards, discussions became more focused, addressing water allocation and protection issues. A pivotal moment occurred during the sixth meeting in Beijing in December 2009, where the Kazakh side, supported by Chinese President Hu Jintao, elevated the discussions to the national level. The meeting extensively tackled water allocation and protection issues, presenting draft concepts and agreements.

The seventh meeting in Karaganda in 2010 resulted in an agreement on the joint construction of the Dostyk hydroelectric complex, a significant milestone. Subsequent meetings in Semey (2011) and beyond focused on mutual inspections, scientific research, and technical aspects of water allocation on transboundary rivers, with joint work finding concrete implementation. In 2013, an agreement on the joint sharing of resources from the Ili and Irtysh transboundary rivers by 2014 was adopted.

PROPOSALS AND IMPROVEMENTS OF LEGAL FRAMEWORK AND INSTITUTIONAL MECHANISMS FOR COOPERATION.

Deepening cooperation with the People's Republic of China can be further enhanced by establishing bilateral agreements focused on specific transboundary watercourses. Drawing on the progress made in recent years, lessons learned from the implementation of agreements such as those concerning the Khorgos River for joint water and power development, and the experience gained from managing critical water development facilities of intergovernmental significance can serve as valuable precedents.

In crafting new agreements, particular attention should be given to resolving the hydrological unity of the Balkhash-Alakol basin through a comprehensive assessment of the condition of Balkhash Lake. Given the strategic importance of Balkhash Lake, efforts should prioritize the development and implementation of programs aimed at water conservation and enhancing the efficiency of water use within the basin. These programs should focus on improving irrigation and drainage systems to increase lateral inflows into the Ile River and, ultimately, into Balkhash Lake. Similar attention should be directed towards the Ertis River basin, with a focus on the conservation of the Zaysan Lake basin.

Crucially, initiatives to expand joint monitoring programs and exchange hydrological information among specific hydrological stations are essential. Such collaborative efforts will contribute to enhanced understanding and management of transboundary water resources, promoting sustainable development and safeguarding the interests of both nations.

CONCLUSION

In conclusion, the management of transboundary rivers between China and Kazakhstan represents a complex yet crucial aspect of their bilateral relations. As both nations grapple with water scarcity, population growth, and economic development, the equitable distribution and sustainable utilization of shared water resources emerge as paramount concerns.

While efforts have been made to establish cooperative frameworks and agreements, operational challenges persist, particularly concerning the extraction of water from critical rivers such as the Irtysh and Ili. The potential consequences of unilateral actions, as demonstrated by China's plans for the Black Irtysh-Karamay Canal, underscore the urgency of effective collaboration in managing these waterways.

The negotiation process between Kazakhstan and China has yielded significant milestones, from the establishment of joint working groups to the signing of agreements on water allocation and protection. However, further improvements in the legal framework and institutional mechanisms

are necessary to address evolving challenges and ensure the sustainable management of transboundary rivers.

Moving forward, both nations must deepen their cooperation through bilateral agreements focused on specific watercourses, drawing on past experiences and lessons learned. Priority should be given to initiatives aimed at conserving water resources, enhancing monitoring and information exchange, and promoting sustainable development within shared river basins.

By forging collaborative mechanisms and committing to dialogue, transparency, and mutual understanding, Kazakhstan and China can overcome the complexities of transboundary river management. Only through concerted efforts can they secure the future of their nations and ecosystems while fostering peace, stability, and prosperity in the region.

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