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International Experience in the Use of Transboundary Water Resources and Issues of its Regulation

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Abstract: *The article analyzes the ecological problems of regulating the use of transboundary waters and its protection. The contents of the documents accepted by the international community were studied. At the same time, the state environmental policy of the Republic of Uzbekistan regarding transboundary waters and the tasks it has set for itself have been studied, and suggestions for their improvement have been given. The methods used in this research were interviews and surveys where interviews were conducted with key stakeholders, including government officials, local activists, and the general public in Uzbekistan. Use surveys to collect quantitative data about public perception and awareness regarding changing views about the value of water. In summary, effective international cooperation, clear legal regulations, the establishment of a monitoring commission, and comprehensive protection measures are essential for the sustainable management of transboundary water resources in Central Asia.*

Keywords: *Transboundary Water, Environmental Problem, International Cooperation, Lakes, Water Resources, Clean Water*

Introduction

Today, the protection of transboundary water resources and their rational use are gaining urgent importance in the world (Qin, 2019). Issues related to this are complicated not only by the administration of one state, but also by the conflicting interests of two or more countries. The Uzbek people have used the saying "Water is free" in relation to livestock farming since ancient times (Baideldynov, 2019). However, as a result of the development of the society, we see that now this saying is losing its importance. During the visit of the President of the Republic of Uzbekistan to the Surkhandarya region, he put forward the following points: the main task is to deeply inculcate the idea that "water is not free" in the population, to make it a rule of daily life in the meeting together with neighborhood activists and the general public". (Oelkers, 2021) According to the norms of international law, transboundary rivers in Central Asia should include to regardless of the purpose of use respectively, rationally, the interests of all downstream parties taking into account and using in a fair manner, the middle of the rivers and not to harm downstream countries and peoples (Yan, 2019).

Research Methods

The research approach employed in this context appears to combine qualitative and normative methods. Qualitatively, the study delves into the shifting perceptions of water

usage among the Uzbek population, as highlighted during the visit of the President of Uzbekistan to the Surkhandarya region. The qualitative analysis aims to capture the evolving societal views on water access resulting from social development. In addition, a normative approach is evident, referencing international legal norms governing the management of transboundary rivers in Central Asia. The research evaluates the extent to which regional practices align with these norms, emphasizing fair usage while considering the interests of downstream parties (Robertson, 2022). Overall, this study likely employs a blend of qualitative analysis and normative assessment to comprehensively understand the complexities surrounding the protection and rational use of transboundary water resources in the global context.

Results and Discussion

Abovementioned thoughts are a clear example of how important water is becoming. Also, during this meeting, it was reported that the water level of two large transboundary rivers in the region, Amudarya and Syrdarya, will decrease by 15% in the next 20 years. In addition, the head of state put forward the following views regarding the opening of the Kushtepa canal by Afghanistan (Klimach, 2019). Shavkat Mirziyoev spoke about this canal at the next meeting of the Council of the Heads of the Founding States of the International Fund for Saving the Aral Sea, which was held in Dushanbe on September 15: "According to the essence, a new participant has appeared in the process of water use in our region, which is not connected with our countries on the basis of any obligations," he said. (Awaleh, 2020; Jawecki, 2019)It is natural that this should worry the Uzbek people. Because the Republic of Uzbekistan is not the primary user of river waters. This area is a problem not only in Central Asia, but the whole world community is thinking about it (Mason, 2019). For this reason, the task of joining the convention on the protection and use of transboundary watersourses and international lakes, as well as the creation of a single complex system of transboundary surface waterflow monitoring in Central Asia, and the management of transboundary river basins was assigned. (Wang, 2021) Despite the fact that different opinions have been advanced through conferences and events in cooperation with international and regional organizations regarding its solution, a clear international solution has not yet been found (Zaragoza-Martí, 2019).

In our opinion, it is necessary to pay more attention to mutual agreements between the countries that use water, to solve it diplomatically through friendly relations between these countries, to define the levels of importance of water and to develop a mechanism for its distribution (Petrasovszky, 2019).

Transboundary waters account for 60 per cent of the world's freshwater flows. 153 countries have territory within at least one of the 286 transboundary river and lake basins and 592 transboundary aquifer systems. (Ozenbayeva, 2022a)Through these statistical data, we can say that it is possible to understand how important it is to protect transboundary waters and use them wisely.

"Transboundary waters" means any surface or ground waters which mark, cross or are located on boundaries between two or more States; wherever transboundary waters

flow directly into the sea, these transboundary waters end at a straight line across their respective mouths between points on the low-water line of their banks (Byrne, 2021).

At the international level, there are a number of regional commissions for the joint rational use of transboundary waters. One of them is the International Commission for the Protection of the Rhine (the ICPR). This commission was established on 11 July 1950, Germany, France, Luxemburg, the Netherlands and Switzerland founded the ICPR in order to analyse the pollution of the Rhine, to recommend water protection measures, to harmonize monitoring and analysis methods and to exchange monitoring data (Chewaka, 2021). The success of international cooperation which the states in the Rhine catchment obtained after long negotiations and the legally binding Conventions made the ICPR to an example to follow in environment and water protection and serves as a guideline for several organisations. (Kim, 2020)In order to protect the rhine river, many conventions were adopted and they are:

1. Convention on the International Commission for the Protection of the Rhine against Pollution (Berne, 29 April 1963);
2. Convention on the Protection of the Rhine against Chemical Pollution (Bonn, 3 December 1976);
3. Convention on the Protection of the Rhine against Pollution with Chlorides (Bonn, 3 December 1976);
4. Additional Agreement concerning the Convention on the International Commission for the Protection of the Rhine against Pollution signed in Berne on 29 April 1963 (Bonn, 3 December 1976);
5. Additional Protocol to the Chlorides Convention (25 September 1991);
6. Convention on the Protection of the Rhine (Berne, 12 April 1999).

According to article 2 Convention on the Protection of the Rhine, convention preserve not only the Rhine, and also groundwater interacting with the Rhine; aquatic and terrestrial ecosystems which interact or could again interact with the Rhine; the Rhine catchment area, insofar as its pollution by noxious substances adversely affects the Rhine (Minaverry, 2020); The Rhine catchment area, insofar as it is of importance for flood prevention and protection along the Rhine (Kazemi, 2022). By this, it helps conserving, improving and restoring the most natural habitats possible for wild fauna and flora in the water, on the river bed and banks and in adjacent areas, and improving living conditions for fish and restoring their free migration (Nikanorova, 2019).

Development of interstate relations on issues of transboundary water resources use, development and promotion of mutually acceptable mechanisms of joint management of water resources and effective water use programs that ensure a balance between the interests of Central Asian countries (Korbmacher, 2022; Nainani, 2023):

a. To continue active cooperation of the Republic of Uzbekistan with the countries of the Aral Sea basin and regional interstate water management organizations in the issues of joint use of water resources of the region and interstate water management facilities (Ortega, 2021);

b. development and promotion of mutually acceptable mechanisms of joint management of transboundary water resources of the region, which ensure a balance between the interests of Central Asian countries (Fu, 2021);
c. promote the norms and principles of the conventions of the United Nations on transboundary waters (Fu, 2019);
d. improvement of the monitoring system in Syr Darya, Amudarya and other transboundary rivers, joint water control and monitoring, and organization of open data exchange system. (Eamen, 2021) In this way, it demands further strengthening of relations between neighboring countries, mutual assistance with them bilaterally and multilaterally, and taking into account the situation, assistance in introducing advanced technologies in water use and exchange of experts in a positive direction. serves as an important factor in the way of changes (Ozenbayeva, 2022b; Rybkina, 2019).

Conclusion

Central Asia in the use of transboundary waters in the region shared transboundary water resources between countries development of mutually acceptable mechanisms of use and management, increase the responsibility of relevant authorities and new cooperation upscaling and proposal development and region should be discussed with the countries.

All kinds of projects on transboundary rivers in the region (Construction of hydroelectric power plants, warehouses and other hydrotechnical structures and exploitation) regional states or governments in implementation joint implementation, construction of projects in agreement with use and profit sharing, as well as to another participant regardless of the organizational legal form that covers the issues of joint compensation of damages, large through the participation of the countries or governments of the region from transboundary rivers in the region by forming consortia reasonable and fair use and international legal management should be regulated.

Similar to the monitoring commission established between the countries on the use of the Rhine River, a commission consisting of a group of experts will be formed between Tajikistan, Uzbekistan, Afghanistan and Turkmenistan on the use of the Amudarya River, which will constantly monitor the water level, toxic or chemical substances dumped into it and it is necessary to identify as well as punish cases of dumping (Amini, 2021).

Taking into account the interests of each country of the region including water management projects with Central Asian countries explore the possibility of participating in co-financing and Joint plans for regional water resources management development and setting future tasks, including development of climate change adaptation measures at the regional scale and to exchange experience in areas of mutual interests (Wu, 2022).

Moreover, preserving transboundary rivers should include not only river water, and also canals, lakes, ground waters, tributaries and reservoirs must be protected belong to rivers.

In addition, it is possible to increase the efficiency in the use of water resources by keeping a list of polluters of water bodies, and through joint action of the state. Also, it would be appropriate to study the status of introducing modern water-saving technologies

in the distribution of water, and if it has not been implemented, it would be appropriate to set restrictions and set additional payments.

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