LEGAL ASPECTS OF HYDROPOWER IMPACTS ON TRANSBOUNDARY DNIESTER RIVER ECOSYSTEM

Ilya Trombitsky

*Eco-TIRAS International Association of River Keepers, Chisinau, Moldova,
ilyatrom@mail.ru*

<https://doi.org/10.53937/9789975315975.82>

Abstract: *The article is dedicated to the legal aspects of bilateral water relations of Moldova and Ukraine on their joint Dniester River demonstrating that only the following international legislation on transboundary waters could help both riparians to save the river for future generations. Current situation with domination of hydropower as dominating used is unacceptable from the sustainable development view. The newly created Dniester River Commission could be a tool to establish a dialogue and a platform for wise decision making. The success could be only reached in case of following the best international standards due to climate change consequences for the region, which provoke droughts etc.*

Key words: *Dniester River, legislation, ecosystem, transboundary waters*

INTRODUCTION

The Dniester River is a main water source for Moldova and Western Ukraine for drinking and irrigation purposes. It also plays an important role as the European biological corridor for migration of bats and birds and as a habitat for many native wild species of animals and plants. The development of hydropower in last decades creates new challenges for functioning of river ecosystem, produces social economic threats and even puts under the question the existence of the river [1].

These changes dealing with hydropower produce the dramatic impact on water and wetlands biodiversity, lowering water self-purification capacities and put under danger further development of agriculture, taking into account also the impact climate change factor. The unsustainable management of the river basin territory (deforestation, water erosion, ground water extraction etc.) is strengthening the negative HPPs impact. So the current water use in this basin

is oriented mainly to serve one user, which deteriorates many other needs and even put in danger social economic needs of the population.

Meanwhile the international and bilateral legislation gives the recommendatuions of how both countries should behave in this case.

MATERIALS AND METHODS

Current work is based on analysis of the European and global best practices of the transboundary watercourses management summarised in international and regional agreements and experience of lobbying of their principles on national and bilateral levels. The experiences for the period from 1994 have been analysed as well as the policies and human-made threats to Dniester River produced by unsustainable decision making and no-action. The current and planned hydropower plants (HPP) in Dniester River basin have been reflected on Fig. Numerous small HPP are not noted.

Existing and planned hydropower plants on Dniester River

RESULTS AND DISCUSSIONS

Moldova became an active player in water relations with countries-neighbours from the beginning of 90th. At the same time the weak preparedness to change the attitude from old Soviet to new European both in Moldova and Ukraine have produced the stagnation in water relations and practical implementation of best practices. The non-governmental sector and especially initiatives of the BIOTICA Ecological Society and Eco-TIRAS International Association of River Keepers played a key role in promotion of the progress, lobbying the new modern bilateral legislation.

Transboundary watercourses are the subject of international law. The Helsinki Water Convention (1991), where both Moldova and Ukraine are the parties, stipulates, that "...the Parties shall, in particular, take all appropriate measures: ...to ensure that transboundary waters are used with the aim of ecologically sound and rational water management, conservation of water resources and environmental protection; ... to ensure that transboundary waters are used in a *reasonable* and *equitable* way, taking into particular account their transboundary character, in the case of activities which cause or are likely to cause transboundary impact; ... to ensure conservation and, where necessary, restoration of ecosystems." [2].

The parties of the Convention should respect the polluter-pays principle, by virtue of which costs of pollution prevention, control and reduction measures shall be borne by the polluter; moreover, the Riparian Parties shall cooperate on the basis of *equality and reciprocity*, in particular through bilateral and multilateral agreements, in order to develop harmonized policies, programmes and strategies covering the relevant catchment areas, or parts thereof, aimed at the prevention, control and reduction of transboundary impact and aimed at the protection of the environment of transboundary waters or the environment influenced by such waters ...

The purpose of the EU Water Framework Directive (2000/60) [3] which both Moldova and Ukraine should respect according to their association agreements with the EU (2014) is the prevention of further deterioration and protection the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems [4].

Finally, Ukraine is a Party of the Protocol on Strategic Environmental

Assessment (2003) to the Convention on EIA in a Transboundary Context from March 2, 2016 [4], but Moldova has ratified this agreement only in July 2018, despite the fact, that the country is in the situation that it was extremely useful to do already several years ago. At the same time the Cabinet of Ministers of Ukraine has adopted the Program of Hydropower development in Ukraine until 2026, not taking into consideration the duty to realize the SEA of this document and to coordinate it with environmental and medical authorities like the SEA Protocol stipulates.

Currently two bilateral treaties dealing with waters exist between Moldova and Ukraine. The Agreement on boundary waters (1994) [5] establishes the institute of governmental plenipotentiaries who represent national water agencies and are responsible for boundary waters. Another one is a Dniester River basin treaty (2012) [6]. Helsinki convention says, that where two or more joint bodies exist in the same catchment area, they shall endeavour to coordinate their activities in order to strengthen the prevention, control and reduction of transboundary impact within that catchment area. In case of Dniester this stipulation is respected [2].

Bilateral treaty on Dniester River basin [6] shall apply to uses of the waters of the Dniester River basin for purposes other than navigation and to measures of protection, preservation and management of water and other natural resources and water ecosystems related to the Dniester River basin. I.e., it could apply also to hydropower use of the river. The Contracting Parties shall assume that no use of the Dniester River basin's water resources enjoys inherent priority over other uses. In the event of a conflict between uses it shall be resolved with reference to the whole complex of the geographic, hydrographic, hydrologic, climatic, environmental and demographic factors, and also the social and economic needs of the states of Contracting Parties, with special regard being given to the vital need of population and ecosystems for ample water supply.

In conditions, when hydropower development dominates in the river basin contradicting the interests of practically all other users, it is evident that the newly created River Commission should propose both governments the solutions to minimise the negative impacts of hydropower and not permit its further development on the river like it is planned by the Cabinet of Ministers of Ukraine by construction of six new HPP in plain river upstream (Govt Resolution

from 13.07.2016 [7], i.e. more than 3 months after entering into force the provisions of SEA Protocol).

There are currently three components of hydroconstruction on Dniester River provoking concerns. At first is the numerous microHPPs development in the Carpathians which changes its role as a water storage. Another important issue is the plan to construct a cascade of six hydropower plants on the Dniester plain part. In view of the natural, cultural, and historical value of the Dniester on all its sections above the existing Dniester reservoir, construction of any hydropower plants on it is unacceptable. The river should be preserved in its natural state in the interests of present and future generations. Environmental legislation and the conclusions of scientists - biologists, geographers, environmentalists, historians, etc. - clearly indicate to the fact that the construction of hydropower plants cannot be permitted under any conditions. Strong opponents of the new dams on the Dniester are also local communities. Beside local effects the raising of level could produce the river water losses due to infiltration to karstic reservoirs bed [8].

The Lower Dniester ecosystems health currently depends on functioning of the Dniester Hydro energetic complex (DHEC) composed from HPP-1, HPP-2, its reservoirs and of the Pump-Storage Hydropower Plant, mode of functioning. It is very acute issue for the Dniester. In present due to plans of Ukraine of enlargement of the DHEC, the negotiations on the agreement on functioning of the DHEC are initiated with the Republic of Moldova. Due to multiple impacts of the DHEC on the whole Lower Dniester ecosystem (its deterioration due to change of water temperature, hydrological regime, self-purification capacities, etc.) its ecosystem degrades as the results of periodic water deficit for potable purposes and irrigation, adverse impact on fish populations, deterioration of wetlands of international importance (Ramsar sites) and impact on birds populations etc. [9] In general such developments both have deep environmental and social-economic consequences for the population of the Republic of Moldova and Odessa oblast of Ukraine. In this case we observe the tendency to ignore by not referring in the draft agreement the related EU legislation, noted in the Association Agreements MD-EU and UA-EU, including the European Energetic Agreement and environmental directives, as well as the measures, which match ecosystem necessities, minimization of

the HPP negative impacts on the river (simulation of natural water discharges, establishing of minimal discharge during the year, etc.) and the results of the necessary Environmental and Social Impact Assessment's study [1].

CONCLUSIONS

Moldovan government shall insist on respect by Ukraine of basic internationally recognized principles of cooperation on transboundary waters, including the "polluter pays principle", the equal access of different water users to water resources, as well as the use of transboundary waters in a sustainable, reasonable and equitable way according to Helsinki Water Convention. The modality of bilateral negotiations on the agreement on functioning of DHEC content should avoid any secrecy, making the process fully transparent, and invite the EU and the UNECE to be actively involved into improvement of the draft agreement. The compliance mechanisms of the mentioned conventions and the SEA Protocol represent another tools to be used to change the attitude of Ukrainian government to the issue.

Because the Dniester River Commission will start its activity in September 2018, it should play a leading role in protection of environmental interests in frames of the preparation of the DHEC agreement and to actively involve interested actors into work of Dniester River Commission.

At the same time, taking into consideration that all decision in the Commission are adopting by consensus, it is a serious challenge that one of Parties of the Dniester River basin treaty will not be ready to balance interests of all users, and in this case the active involvement of compliance committees of the correspondent multilateral environmental agreement will become necessary.

Acknowledgement: *The author thank the EU "Black Sea Basin Joint Operational Programme 2014-2020" that is responsible for the funding of the project "Creating a system of innovative transboundary monitoring of the transformations of the Black Sea river ecosystems under the impact of hydropower development and climate change" in which framework this research was carried out. The content of this publication is the responsibility of its author and can in no way reflect the views of the European Union.*

BIBLIOGRAPHY

1. Efros I. Why the Ukrainian hydropower infrastructure on Dniester will destroy Moldova and how to prevent such a disaster? An "awakening" report on the content and implications of the Ukrainian - Moldavian Agreement on the operation of Dniester Hydropower Complex for the understanding of International Donors, Moldovan Government and population of Dniester River Basin // https://www.eesc.europa.eu/sites/default/files/files/analytical-report_impact-of-hydro-infrastructure-dniester_en_0.pdf
2. Convention on the Protection and Use of Transboundary Watercourses and International Lakes as amended, along with decision VI/3 clarifying the accession procedure // http://www.unece.org/fileadmin/DAM/env/water/publications/WAT_Text/ECE_MP.WAT_41.pdf
3. Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:32000L0060>
4. Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (Kiev, 2003// <https://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>
5. Agreement between Government of the Republic of Moldova and Government of Ukraine on Joint Use and Protection of the Boundary Waters. Chisinau, November 23, 1994.
6. Treaty between Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on cooperation on conservation and sustainable development of the Dniester River basin (Rome, November 29, 2012) // <http://eco-tiras.org/index.php/dniester-river-basin-treaty-rome-2012>
7. Programme of Hydro Power Development of Ukraine for the Period until 2026// Cabinet of Ministers of Ukraine Regulation 552-r from July 13, 2016.
8. Gontarenko V.N. Impact of Dnestrovsk Hydropower Plant on Water Regime of Dniester River Mouth // Int. Conf. on Protection and Restoration of Dniester River "Dniester-SOS". Odessa, 1993. Part 1. P. 39-43.
9. Corobov R., Trombitsky I., Syrodoev G., Andreev A., 2014. Climate change vulnerability: Moldavian part of the Dniester River basin., <http://eco-tiras.org/docs/ecotirasFinal-small.pdf>