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NATIONAL WATER LAW OF TURKMENISTAN; ITS COORDINATION WITH INTERNATIONAL WATER LAW. PRIORITIES AND PROBLEMS. LINE OF ACTIVITIES FOR IMPROVEMENT

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ABSTRACT

Present report analyses approaches and principles used in water policy of Turkmenistan, combines pragmatic and radical views on legislative reforms in water sector and on interstate water relations, and describes traditional and new cooperation practices in joint transboundary water management both in terms of their effectiveness and their timeliness.

Then, it describes briefly the main points of national legislative and standard-legal documents and of interstate and international deeds signed, ratified or recognized by Turkmenistan. Until present time we have used water legislation developed and adopted during Soviet period. This legislation is well known for trainees-professionals; therefore the report gives detailed description of processes and tendencies in rational water use and conservation management over last ten years.

After getting independence, Turkmenistan has declared a range of standard and legal documents of the former USSR as valid. The most significant changes are related to the conclusion of bilateral agreements with the Islamic Republic of Iran and the Republic of Uzbekistan and have quite detailed analysis in this report. Accurate fulfillment of the reached agreements by the Parties points to good elaboration of mutual obligations and to timely made decisions.

Conducted analyses of the legal base helped to outline prospective directions in the following issues: a) water legislation improvement; b) connecting positions of riparian countries to prevent growing pollution of transboundary waters; and c) development of interstate cooperation in view of sustainable development of the whole Central Asian region.

INTRODUCTION

Turkmenistan is a country with pragmatic internal and foreign policy determining long-term development of the country as a whole. At the same time Turkmenistan is notable for its radical approach to solution of problems that require immediate measures. This equally relates to economic and social fields. Combination of such approaches to strategic and tactical issues led to declaration of the policy of constant positive neutrality, which serves as a foundation for new legislative and standard-legal base being formed during last ten years.

This is of prime importance for understanding the position and policy of Turkmenistan in all fields of international and interstate cooperation, on the one hand, and the internal processes, on the other. This relates also to water relations. Combination of pragmatism in strategic partnership and radical approach to solution of urgent issues allows:

- to avoid considerable deterioration of water infrastructure and, consequently, conflict situations between competing water consumers and economic sectors inside the state;

- to keep traditional friendly relations between politicians and professional of Turkmenistan and the Republic of Uzbekistan; this furthers quite rapid formation of the legal base within interstate cooperation in water issues;
- to develop mutually beneficial cooperation in water related fields with the Islamic Republic of Iran.

Apparently, the more number of parties negotiating, the more difficult and slower achievement of mutual agreement. Analysis of the world experience shows that galloping and more radical legislative reform leads to complicated correction of mistakes made during such reform and under the pressure of momentary tasks and interests. At the same time one should take into account dynamic character of situation, since relatively small issues, which have not been solved today would turn into quite knotty problems tomorrow.

Analysis of the legal base adaptation to changing conditions inside and outside the state is a good illustration of tendencies and a tool for identifying mistakes made and selecting future priorities.

TURKMENISTAN'S WATER LEGISLATION AND ITS PROSPECTIVE DEVELOPMENT

Adopted in 1978 Water Coder of Turkmen SSR has been effective until present time. Effective Water Code, being a component of the state legislative system, still regulates rational water use and conservation in the country.

According to the Constitution of Turkmenistan, Article 78, paragraph 4, the Cabinet of Ministers (KM) governs economic and social development and ensures rational use and protection of natural resources.

Article 12 in the Cabinet of Ministers law states, that "CM on its meetings considers measures on the protection and the rational use of land, mineral wealth, water, flora and fauna."

According to approved by the President Decree of 15 June 2000 such as "Regulations for the Ministry of Water Resources of Turkmenistan (MWRT)" MWRT is a public authority governing water economy of the country, and in its activity it follows the Constitution, legislation, President's bills, CM's decisions and present regulations".

Paragraph 4 of the Regulations determines the main tasks of MWRT, such as "... water resources management, planning, distribution, accounting, and control over their rational use..."

Thus, during socio-economic reforms portion of functions from the Water Code is fulfilled through Decisions and Decrees of the President and CM. This helps to avoid continuous revision, elaboration, and strict regulation of vital water issues that otherwise could lead to legal confusion and loss of controllability in water sector. Being direct standard-legal documents, such Decrees are fulfilled by government organs, including MWRT and municipalities in due time.

As shown below, such regulation procedure of water relations practically provides success in the solution of issues both at the national level and at interstate level under transition period.

When state priority is given to sustainable development of the society, as in Turkmenistan, any revolutionary ways in such conservative field as water and land relations should be excluded.

Radical reforms of the legislative base in water sector should be undertaken after the consequences of the legal reform in land relations and in private business. Development of land

and economic relations and, mainly, of people consciousness takes a lot of time. In this context it is necessary that we support and do not push positive tendencies, create favorable conditions for individual business, and do not impede natural development by laws radically changing "rules of game".

Land laws allowed to develop private sector in agricultural production. Program of the President of Turkmenistan Saparmurat Turkmenbashi, called as "Strategy of socio-economic reforms in Turkmenistan up to 2010", gives forecasts of private landowners expansion on the most part of irrigated lands.
Current land use form is a land rent with allotments of 1...4 ha. Tenant farmers still have no financial abilities to purchase own equipment, to cover maintenance of irrigation and drainage system and other services without government subsidies. In spite of rapid expansion of private companies dealing with agricultural products processing and water-related services, agricultural infrastructure has been still based on public enterprises.

Decrees of the President and the Cabinet of Ministers set out the following regulation principles in water consumption and use:

- Water for household and drinking purposes of population is free; municipal and government budgets cover costs of construction, reconstruction, and operation of water supply systems for settlements;
- Water for industrial use is supplied according to fixed tariffs;
- Exceeding the water intake limits and disposal of untreated industrial wastes entail penalties;
- Water for irrigation is free within the specific limit, i.e. maintenance of on-farm systems served by water-related organizations is partially covered by 3% of profit from sales of agricultural products and partially by budget subsidies;
- Construction, reconstruction, and operation of waterworks at state, interbasin, interrayon, and interfarm levels are financed through government budget.

As far as private sector strengthens (particularly, in financial terms) and stabilizes in its water requirements, we will need to regulate water relations through stable water code. This ensures appropriateness of changes in current standard-legal base as well as effectiveness and efficiency of the latter.

Conducted during last ten years reforms in water management mainly addressed the hierarchical issues of existing system and the optimization of relations between water-related organizations (WRO) and various water users.

Regarding rational water use and conservation, procedures, mechanisms and tools for planning, distribution of responsibilities, management and allocation have not been considerably changed in legal terms.

Implementation of the President's Program "Clean Water" and revival of the old national traditions of water saving through declaration of the public celebration "Water drop is a fraction of gold" form favorable conditions for the adoption of new water code.

Pollution preventing measures can be easily provided and controlled in industrial production, while control over the application of chemicals in agriculture is difficult and causes potential threat to surface and ground waters quality. In the future protection of water resources from agricultural pollution can become very urgent and will require both additional research and appropriate treatment in future water code.

Current water code does not include:

- provisions determining water use and conservation procedures in view of radically changed land laws;
- provisions on Mirab's status;
- provisions on public awareness and participation in decision making.

All these are weighty arguments for the development and the adoption in the nearest future of better water laws, which meet current conditions and short-term outlook.

EXPERIENCE AND POLICY OF TURKMENISTAN IN SETTLEMENT OF TRANSBOUNDARY WATER ISSUES

After getting independence, Turkmenistan as a successor of former USSR within the Turkmen SSR, has confirmed its obligations in agreements between IRI and USSR on boundary rivers and waters. These obligations are set out in:

- Agreement of 20 February 1926 between USSR and Persia about joint use of boundary rivers and waters along the borderline from the river Geri-Rud (Tedjen) to the Caspian Sea;
- Protocol (paragraph 11) to Agreement of 2 December 1954 between USSR and Iran about settlement of borderline and financial issues;
- Treaty of 15 May 1957 between USSR and Shahinshah Government of Iran about Soviet-Irani boundary and procedure of borderline conflicts and cases adjustment;
- Soviet-Irani Agreement of 11 August 1957 on boundary rivers Araxs and Atrek;
- Agreement of 5 March 1958 between USSR and Shahinshah Government of Iran about preparation of draft projects on the equitable use of boundary rivers Araxs and Atrek for irrigation and power generation.

Article 1 in the Agreement of 20 February 1926 states, that "waters of the river Geri-Rud (Tedjen), beginning from Pul-i-Khatun bridge and then downstream along the borderline, are divided into ten equal shares, including three shares of Persia and seven shares of USSR".

Appendixes to above-mentioned Agreement considered issues of river channels stability and determined measures on the prevention of channel deformations where bank line forms the border. They also set procedures, officers and officials responsible for the observance of terms.

This Agreement covered the following rivers: Tedjen, Chaacha, Meana (Kara-Tikan), Kelat-Chay (Naftie), Archinyan (Archangan), Lain, Kelte-Chinar, Archibil (Firuza), Chandyr (Chondor), Sumbar, Atrek. Thus, almost all mountain rivers with fixed flow were covered by this Agreement.

Besides, the Agreement set procedures of share measurement and division. It also provided for future construction of reservoir upstream Pul-i-Khatun for floodwater capture and storage.

At present time we have reached agreement and started construction of "Drujba" reservoir with small hydropower station near Pul-i-Khatun. This is fixed in "Agreement between Turkmenistan and Iran on construction and operation of water-retaining structure "Drujba". It is important to notice, that joint Irani-Turkmen administration will operate this structure.

This Agreement is a striking example of cooperation development under conditions of independence. Growing regulation of transboundary waters between IRI and Turkmenistan visually show capacities of international cooperation in the solution of urgent water issues on a base of mutual understanding and friendship.

Water use by former Soviet republics was regulated through "Plans of integrated water use in the Aral Sea basin" and other similar documents of the Ministry for Land Reclamation and Water Management of USSR. Last documents of Soviet period reflected both concerns of water depletion in the region and environmental issues, as well as planned measures on river water quality management. The documents themselves were well worked out and discussed among professionals on democratic base.

After collapse of USSR Turkmenistan and Republic of Uzbekistan have signed agreements about basic water allocation principles. These principles proved to be viable, and we gained experience in joint management of the AmuDarya river. Interstate Commission for Water Coordination (ICWC) played and still plays positive role in this respect. All above led to the conclusion of permanent Agreement in 1996 between Turkmenistan and Uzbekistan on cooperation in water management issues. This agreement is based on the following principles:

- the Parties keep friendly and good-neighbor relations;
- the Parties recognize the necessity of joint use of interstate rivers and other water sources;
- the Parties refuse to apply economic and other ways of pressure when solving water issues;
- the Parties acknowledge the interdependence of water problems and the responsibility for rational water use;
- the Parties focus on the increase of water inflow to the Aral Sea;
- the Parties understand the necessity of respecting mutual interests and settling water-related issues through consensus;
- the Parties aim at further development and strengthening of friendly relations and cooperation.

Above-mentioned Agreement was signed in Turkmenabad on 15 January 1996 and set out, that:

- lands used by Uzbekistan and located within the borders of Turkmenistan is a sole property of Turkmenistan;
- waterworks and water management organizations at Karshi and Amu-Bukhara canals and Tuyamuin reservoir, located in Turkmenistan, are the property of Uzbekistan;
- lands for Karshi and Amu-Bukhara canals and for Tuyamuin hydrounit are put at Uzbekistan's disposal on chargeable base;
- Parties will make all necessary attempts to provide normal operation of the interstate waterworks located within their territories;
- companies and organizations, including those dealing with interstate waterworks operation, that are located on the territory of the other Party act according to international rules and the laws of this Party;
- the Amudarya river's flow is divided (at Kerki gauging station) into equal shares (fifty-fifty);
- Parties should allocate portion of their shares to the Aral Sea;
- Parties should stop disposal of drainage waters to the AmuDarya river since 1999;
- Parties jointly implement measures on the reclamation of lands, on reconstruction and operation of interstate collectors and irrigation systems, and on construction of water disposal canals;
- Parties will prevent channel deformations and flooding of adjacent areas, caused by operation of Amu-Bukhara, Karshi, Sovetyab, Dashoguz, Tashsaka, Kylychbay, and Shabat-Gazavat water systems;
- Parties will make necessary attempts against flooding of lands located along Daryalyk and Ozerny collectors crossing Turkmenistan, and will bear costs of the collectors reconstruction and operation proportionally to drainage flow.

Present Agreement provides for protection of the AmuDarya river water from pollution by drainage waters. Protection from pollution by industrial and domestic wastes is subject to future interstate agreements.

The most interesting point in this Agreement is a mechanism adopted to stop drainage water disposal to the AmuDarya river. Republic of Uzbekistan undertook Right-bank Collector project. In its turn, Turkmenistan decided to construct set of structures called as "Golden lakes" (or as "Turkmen lake" in the international press), that is a radical, in engineering view, solution of a range of problems caused by collector-drainage and flood waters. Here, one can emphasize the following problems:

- worsened health of people due to pollution of drinking water sources and accumulation of toxic substances in man organism;
- decreased productivity of agricultural lands, including desert pastures, due to their flooding, water logging and salinization;
- risk of biodiversity reduction due to changing conditions of local species habitat.

All the projects being implemented in Turkmenistan should undergo the State Environmental Impact Assessment. It is clear that difference between approaches of various countries will increase with the adoption in CAR of standards and procedures regulating nature use. Taking into account substantial physical and geographic distinctions in landscapes (even inside one country), this is normal and natural process, which can be handled at the regional level. Therefore, one of directions in regional cooperation could be coordination and unification of environmental impact assessment procedures according to international experience and standards.

Positive factor is mutual recognition by Turkmenistan and Uzbekistan of proprietary rights to waterworks, located within the territories of those countries, that function to the benefit of the both or one of the countries. At the same time projects have no exterritorial right and thus do not break the law of territorial integrity. Land for waterworks are given on a chargeable base. We have agreements on rendering assistance in these waterworks operation. All these interstate agreements are actually fulfilled by authorized public agencies.

Another positive moment is acknowledgement by the Parties only of a share of transboundary AmuDarya flow without claiming to the whole amount of water crossing their territories. First, this demonstrates priority of interstate agreements and obligations over national ones, and this is universally recognized principle of international laws. Second, framework Conventions and Declarations should be considered just in this context when they set equitable or, more precisely, mutually agreed allocation of transboundary flow.

Since legislation of the most countries all over the world recognizes priority of international and interstate legal documents signed and ratified by a state over its national legislative acts, these documents do not contradict to each other. In this case we have divided jurisdictions of the national legislative acts and the interstate treaty or agreement. This means, that action of supposedly contradicting acts apply to controlled waterworks differing by territorial or by physical or by functional character.

For instance, equitable distribution of costs related to reconstruction and operation of interstate collectors is determined in above-mentioned Agreement with flow shares based approach, while national documents determine these costs by "length" principle. This example is a good model for solving transboundary water problems.

As a rule, most issues seeming as undecidable from legal point of view have several technically sound options. In this case technical experts preparing draft interstate agreements bear great responsibility. For example, if it is possible to avoid conflict between power generation and irrigation regimes of upstream reservoirs by increasing capacities of on-system and/or on-farm network (including resources of landowners) through construction in midstream and downstream areas of small reservoirs filled in autumn-winter period, one should fully study this option without its a priori rejection.

Suggested technical option can both solve water supply of fields and considerably increase water use efficiency. Evidently, farmer will use water from his own reservoir more carefully than from "common" or "public" sources. Safety and "ecological compatibility" of small ponds are much higher. Moreover, small ponds used for fishery could contribute to "proteins" problem and diversify nourishment.

Above alternative is also good in view, that each state solves transboundary problem within its own jurisdiction area and through own resources and untapped reserves. As it was mentioned earlier, water sector is characterized by its exclusively dynamic nature. Radical decisions must be made timely and not after or before formation of appropriate conditions. Otherwise, there is a risk of making no headway or returning to more productive "pragmatic" approach with wasting time to correct mistakes made.

It appears from the above that legal provision of regional water cooperation comprises wide search and evaluation of ideas and system analysis of options. It would be useful to analyze other alternatives of optimal water and power use in the region besides "water in exchange for fuel and power" approach.

Increase of water available for irrigated fields through the increased regulation of flow by new large upstream reservoirs entails huge capital investments of several neighboring states, which have no such funds. Located in mountains large dams can cause catastrophic damage in case of break. Since they are located on natural waterways, their ecological safety, particularly for regional biodiversity, raises doubts. Further operation of such structures is most likely planned by national water management and energy organizations, and this again says about doubtful efficiency of such alternative.

Regarding integration of national and international legal regulations we must agree, that any framework Agreement requires additional internal decisions for the fulfillment of such agreement. This can be observed on positive example of Turkmen-Uzbek agreements. Framework character of Agreement is not a restricting factor. Quite the contrary, it gives free selection of options to fulfill obligations.

One can remember, that bilateral agreements were preceded by the ratification of Almaty Declaration and the adoption of "The Program of Concrete Actions" that also had declarative character. It was implied that each of state-signers would stuff those documents with clear content. Turkmenistan considers Helsinki Rules on the Use of International Rivers as correct. Thus, Turkmenistan in its internal and foreign policies takes into account concerns, problems, priorities and positions of neighboring Central Asian states. Therefore Turkmenistan has never laid down unsatisfiable conditions and asserted claims in case of circumstances, which were inherited problems of neighboring states.

One should pay attention, that above-mentioned interstate Agreement between Turkmenistan and Uzbekistan is not only the first permanent agreement, but also the most accurately implemented

one. Deviations from approved water allocation limits do not exceed 10% and are approved by the Parties beforehand.

Interstate Coordination Water Commission (ICWC) plays an invaluable role in settlement of water issues at interstate level. Being one of the first regional organizations, ICWC proved to be most sustainable and effective in the development of mutual understanding between new independent states of Central Asia.

Analysis of agricultural production and water intake volumes in Turkmenistan shows that Turkmen share of the AmuDarya river is quite effectively used under current technical state of irrigation and collector-drainage systems. Evidently, improvement of these systems will require long time and huge capital investments, and we have some progress in this direction.

Strategy of water sector development in Turkmenistan implies, that in view of expected agricultural production growth, population growth and industrial development water requirements will be provided mainly through the increased efficiency of available water resources. This is also important for right understanding of Turkmenistan's positions in context of emerging proposals to review current interstate procedures of transboundary water allocation.

OUTLOOKS AND DIRECTIONS FOR THE IMPROVEMENT OF TURKMENISTAN'S WATER CODE

Legislative adjustment and regulation is not required for the whole range of water issues. However, water management can be effective only with account for all interfering requirements and conditions. Necessity in the improvement of legislation means that there are certain complexities and practical problems in water sector that need to be overcome with legal support. At present time the most urgent tasks are:

- to improve technical state of irrigation systems, particularly at on-farm level;
- to improve reclamation state of lands;
- to introduce water saving technologies both into irrigated agriculture and industrial production;
- to develop water resources in order to raise water availability for lands;
- to increase efficiency of hydro-reclamation systems management.

To a different degree these tasks have been solved through governmental executive agencies. With the development of private land ownership most burden of costs and responsibilities will be imposed on landowners. As was mentioned earlier, the most acceptable approach is "to promote (pragmatically) positive tendencies and to suppress (radically) negative ones" in order to keep natural rates of transition to market relations. Theoretically, such approach should underlie the whole legislative system of the state and, particularly, the new "Water Code".

Changes in water legislation should be directed to:

- public water management organizations, including municipal companies, which should be under jurisdiction of the government or local authorities;
- water consumers and users with focus on agricultural producers;
- Associations of Water Users;
- all physical and juridical persons desiring to work in water infrastructure at professional or semi-professional base, including consulting, extension and innovation, supply, repair and construction, design, training, and research companies and NGO.

Solution of those tasks entails development of appropriate procedures for:

- financial and economic support system, including: tax remissions, accounting system, insurance, pricing system, and production price structure;
- system of control and responsibilities for rational and environmentally compatible water use, including water and land cadastre, government and public monitoring (with positive role of NGO), preventive punishments on persons causing decreased fertility of soils, depletion or pollution of water fund;
- public participation in decision making processes regarding management and control of rational water and land use;
- delegation of authority and responsibilities from the government or landowners to physical and juridical persons rendering water services.

Based on such approach, it would be expedient to determine the following aspects of water use and conservation in legislative system:

- costs incurred by juridical persons and directed to the improvement of the technical state of irrigation and drainage network, and to the increase of soil fertility and water saving should be included in tax-free working expenses. It is clear that we should adjust procedure of actual costs evaluation;
- while assessing land and water use, it is necessary to use legally based set of criteria in order to monitor changes in land and water resources in time and to evaluate efficiency of their use. Results of such evaluation will allow us to apply financial and economic incentives or penalties;
- to ensure informed decision making we need to fix jurisdiction of social organizations and informal groups regarding access to information, procedures of discussion, decision making and fulfillment;
- in order to keep controllability and responsibilities of all concerned parties we need to set out in laws procedure, criteria, and indicators required to decide whether or not one can delegate authorities and responsibilities from the government or a landowner to other concerned parties.

Another relevant issues of legal regulation are well elaborated in current water code. However, even above-mentioned directions to the improvement of legislative base show specific character of tasks to be tackled by legislators.

OUTLOOKS AND DIRECTIONS TO THE EXTENSION OF INTERSTATE WATER COOPERATION

First, we need to identify parties of the interstate cooperation. Those are:

- in the first place, agencies for water resources (ministries, departments, etc.);
- Ministries of Agriculture as major water consumers;
- environmental agencies as a main monitoring organ;
- hydrometeorological services - provision of information;
- municipal services - water supply and sanitation;
- research and design organizations;
- community.

At the regional level the most weak points of the interstate water cooperation are the following:

- insufficient accuracy of forecasts on water availability for the main rivers in the region;
- low accuracy and spatial and temporal density of hydraulic measurements;
- low information rate and reliability, and unstable forms, principles, and procedures of decision making on a base of received information;

- insufficient financing of interstate water organizations, particularly their operational branches, such as BWO "AmuDarya" and BWO "SyrDarya".

First three items are related to information provision of management. In this case costs and use of outputs cannot be determined on a basis of territorial distribution or content. Donor communities actively assist Central Asian countries to raise accuracy of forecasts and hydrometry. Efficiency of transboundary flow management can be considerably increased if the countries agree and adopt common protocol of completely or partially automated collection, transfer and processing of information provided with a package of empirical scenarios of water management situation. The latter will serve as a base for decision making on existing Agreements without influence of "human" factor and on professional basis.

Undoubtedly, none of mathematical models can replace high-qualified operator. The model can serve only as a backup tool for situation analysis. However, common principles of decision making during development of any water management scenario can considerable reduce risk of solely man mistakes.

It is quite possible, that with time and improved scenarios the model of transboundary flow management will be a logical extension of signed interstate Agreements.

Last item is a natural consequence of complex economic situation in Central Asian countries and can be solved with stabilization of their economies. Herewith, it would be enough to introduce costs sharing among the states of each basin, for instance, using principle of "territorial location of waterworks".

Population growth, increase of industrial production, and expansion of chemicals in agriculture raise threat of anthropogenic pollution of transboundary waters. If criteria of water quality evaluation in riparian countries are different, there will be situation when waters in upstream country will be considered as satisfying hygiene and sanitary conditions, while the same water resources in downstream countries will be considered as polluted. This arises conflict, which should be removed from the beginning. For this purpose experts should agree and approve procedure and criteria of surface and ground waters evaluation, identify anthropogenic and natural causes of water quality deterioration. Then, we can start to adjust standards at expert level. This can be done on bilateral base.

Finally, another direction without restrictions on forms, content, terms and which can be enforced by a document as a framework Convention or Declaration is the creation of environmentally friendly public consciousness. This direction is very important since engineering and institutional decisions often fail due to "human" factor. All over the world people consciousness remains behind rapidly developing technological opportunities. Our nations need to reduce this gap in order to provide good living conditions for future generation and achieve sustainable development. In this context objective of the Governments is to fill signed documents on sustainable development with clear content.