Role of Environmental Focus in Legal Protection and Efficient Management of Wetlands in the Republic of Kazakhstan

K. R. Balabiyev, A. O. Kaipbayeva

Abstract—The article discusses the legal framework of the government's environmental function and analyzes the role of the national policy in protection of wetlands. The problem is of interest for it deals with the most important branch of economy – utilization of Kazakhstan's natural resources, protection of health and environmental wellbeing of the population. Development of a long-term environmental program addressing the protection of wetlands represents the final stage of the government's environmental policy, and is a relatively new function for the public administration system. It appeared due to the environmental measures that require immediate decisions to be taken. It is an integral part of the effort in the field of management of state-owned natural resource, as well as of the measures aimed at efficient management of natural resources to avoid their early depletion or contamination.

Keywords—Environmental focus, government's environmental function, protection of wetlands.

I. INTRODUCTION

OVER the last decades of the XX century, the environmental problem of the present-day world has been really acute, for man puts increasingly high pressure on the nature destroying its biological balance. The environmental problem is multi-sided. It is felt in virtually every area of economic activities conducted by the human society. Extensive utilization of natural resources, huge amounts of waste, all these conflict with the capabilities of our planet (its resource potential, reserves of fresh water, self-purification ability of the atmosphere, waters, rivers, seas, and oceans).

Especially urgent in Kazakhstan is the issue of protection of water resources, including wetlands. The country has wetlands of local, republican, as well as of international importance. Managing key aspects of social life should address environmental protection and use of the environment. Firstly, it deals with the most important branch of economy – utilization of Kazakhstan's natural resources. Secondly, it is connected with protection of health and environmental wellbeing of the population [1].

Systematic environmental activities pursing the principles of care of the environment and natural resources is one of the government's key internal functions. The key idea behind it is that a special competent authority monitors the efficient management of natural resources.

According to art..34, p.1 of the Water Code of the Republic of Kazakhstan such resources include wetlands, fauna, as well environmental protection and ecological safety. Those may include areas of swamps, foehns, peatland and water bodies, both natural and artificial, permanent and temporary, stagnant and running, fresh, brackish, saline, and marine offshore zones where the low tide water is within six meters deep. The measures to be undertaken should be primarily based on the roadmap of elaborated and expected steps and actions prior to adoption and implementation of the environmental policy.

Pursuant to the Water Code of the Republic of Kazakhstan (the WC RK), art. 5, water bodies refer to concentrations of water in inland terrain or in subsoil that are limited by boundaries, have some volume and hydrological regime. Those include seas, rivers, and channels classified as the same, lakes, glaciers, and other surface water bodies, parts of subsoil containing ground water [2].

The wetland is the most productive natural environment. This is a cradle of biological diversity, a source of water and primary food products being a key factor for survival of numerous animals and plants. Wetlands are a habitat for numerous birds, mammals, reptiles, amphibian, fish, and invertebrates. For example, out of the world's 20,000 fish species, more than 40% live in fresh water. Wetlands also act as important reservoirs for genetic diversity of plants.

Wetlands bring huge economic benefits like water supply (we depend on volumes and quality of water). Some branches of economy cannot function without wetlands: the problem of keeping the groundwater level and retention of minerals in floodplains is of great importance in the agriculture; utilizing water thoroughfares is still a reliable and economic transportation mode; it is the wetlands that are the suppliers of phytogenic material; wildlife resources are also supported by the wetlands and act as a basis for the traditional way of life.

Wetlands are the natural areas where water plays an important role in the life of the environment and the related flora and fauna. They develop where the water table is at the ground surface level or close to it, as well as at shallow water areas. The Ramsar Convention (art. 2.1) permits that the wetlands may include riverine and marine coastal areas adjacent to wetlands, as well as islands and marine water zones located within the boundaries of wetlands where the low tide water is within six meters deep [3].

K. R. Balabiyev is with Kazakhstan Engineering and Pedagogical University of People's Friendship, Shymkent city, 160000 the Republic of Kazakhstan (phone: +7 7252 570314; e-mail: kaipmarzan@mail.ru).

A. O. Kaipbayeva is with International University of Kyrgyzstan, Bishkek city, 720001 the Kyrgyz Republic (phone: +996 312 310467, e-mail: 120v222@mail.ru)

II. RESULTS

According to the above, there are five key types of wetlands: marine (coastal wetlands that include coastal lagoons, cliffy coasts and coral reefs); estuaries (that include deltas, tidal and mangrove swamps); lacustrine (wetlands connected with lakes); riverine (located along the rivers and streams); boggy (relating to bogs as such, flooded areas, and marshlands).

The national policy for protection of wetlands includes development of a conservation strategy for the natural sites explicitly mentioned in the country's water code. Thus, the WC RK, art. 11, defines the objects of water relations as water bodies, hydroeconomic facilities and lands listed in the inventory of water resources, and classifies them into 1) surface water bodies; 2) subsurface water bodies; 3) sea waters of the Republic of Kazakhstan; 4) trans-boundary waters.

The abovementioned definitions are combined within the framework of the government's concept for protection of wetlands, legislative recognition of wetlands as an important natural site involving codification of liability for inefficient management of environmentally important resources.

The Ramsar Convention pays great attention to development by the Contracting Parties thereto of a national policy for protection of wetlands. The above effort will help to arrange for management and utilization of wetlands in combination with environmental conservation activities that will allow minimizing the threats of environmental impact on wetlands [4].

Given the fact that each Party to the Convention is represented by an independent state with its own focus in policy, economy, and form of government, with their specifics in the field of human resources, educational, legal and other systems, with different geographical parameters directly relating to wetlands, the Convention develops a strategic plan that could be used as a universal model for each Party, but would not suppress the individuality of each state [5].

The issue of developing a national policy and the strategic plan for management of wetlands is regulated in detail by the Ramsar Convention that has been developing management strategies for the Contracting Parties thereto for many years.

The first Strategic Plan of the Ramsar Convention for 1997-2002 was adopted by the resolution of the Contracting Parties in 1996 at the 6th session of the Contracting Parties Conference (CPC-6) in Brisbane, and represented a model international instrument for the Convention member nations to elaborate their custom-tailored environmental protection models including those for wetlands and other natural sites.

In 2002, the second Strategic Plan of the Convention was adopted for 2003-2008 by the resolution of CPC-8 (Valencia 2002) which was a more sophisticated document. The bottleneck of the second strategy was an excessively wide range of circumstances included into the list of actions to be taken by the member nations. Therefore, the third Strategic Plan for 2009-2015 was adopted at the ninth Contracting Parties conference.

As opposed to other strategic plans it focused on priority issues requiring immediate decisions to be taken by the majority of convention member nations, contributed to the general understanding of the Convention's goals and principles at the global, national, and subnational level, promoted progress in the field of efficient management of wetlands and the related benefits for biological diversity and human wellbeing, international coordination of national and subnational efforts aimed at achievement of the Convention's goals [6].

All the Convention's Strategic Plans target the challenges in the field of efficient management and protection of wetlands. They provide helpful assistance to governments in management and protection of wetlands, as well as in conservation of national resources.

By adopting the strategic action plan to be followed until development of an appropriate regulation dealing with wetlands, the government determines a policy for further activities to be undertaken. Although mistakes may be made in the course of strategy implementation, it is those mistakes that can possibly help in finding efficient ways to achieve the goals and secure protection of natural sites.

As regards the governments' attitudes toward the wetland protection strategy, their opinions may differ, which is why the first thing to be done is to compare and determine priority issues which involves development of the focus areas and addressing the legal framework, as well as mandatory determination of the key authority or subdivision responsible for introduction and practical implementation of the strategyrelated activities.

The Ramsar Convention puts great emphasis on creation of a specialized authority in the member states that would deal with management, coordination and implementation of the governmental policy in the field of protection and efficient management of wetlands, while observing that the functions of a supervisory or an executive authority may rest with different structures, but protection of wetlands should still be a common business for all the agencies in questions [7]. It recommends establishing national wetland committees conferring executive, advisory or other functions upon them. At the same time, the Convention's recommendation is that not only senior government officials and representatives of other authorities, but also those of local, regional, conservation, scientific and other structures, including those representing nongovernmental organizations sit on the committee.

In the opinion of the Convention, the presence on the committee of the officials representing different fields helps to share the information, identify problem areas, ensure coverage of a wide range of problems relating to wetlands and opportunities to actually implement and promote the activities aiming to tackle the challenges at the governmental level, up to the global community.

On May 2, 2007 the Ramsar Convention took effect in Kazakhstan. As of now the Republic has a committee or body in place responsible for implementation of the policy of conservation and efficient management of wetlands. Therefore it is advisable that to ensure compliance with the provisions of the Ramsar Convention a Coordination Council be set up, and

TABLE I

the Kazakh Ministry of Energy is assigned responsible for addressing pressing wetlands-related issues [8].

The Republic has 10 sites categorized as wetlands of international significance with a total area of 3,281,398 ha [9].

tem No.	Site	Placed on the list on	Province	Area, ha	APP
1	Tengiz-Korgalzhyn Lake System	11.10.76	Akmola Province	353341	Korgalzhyn Reserve
2	Lakes in the lower reaches of the Irgiz and Turgai Rivers	11.10.76	Aktyubinsk Province	348000	Irgiz-Turgai Wildlife Reserve Turgai Nature Reserve
3	Estuary of the Ural River and the adjacent Caspian shore	10.03.09	Atyrau Province	111500	Akzhayik Wildlife Reserve
4	Koybagar-Tyuntyugur Lake System	07.05.09	Kostanay Province	58000	-
5	Kulykol-Taldykol Lake System	07.05.09	Kostanay Province	8300	-
6	Zharsor-Urkash Lake System	12.07.09	Kostanay Province	41250	Zharsor-Urkash Nature Reserve
7	Naurzum Lake System	12.07.09	Kostanay Province	139714	Naurzum Reserve
8	Alakol-Sasykkol Lake System	25.11.09	Almaty Province East Kazakhstan Province	914663	Alakol Reserve
9	Estuary of the Ili River or southern part of Balkhash Lake	01.01.12	Almaty Province	976630	Balkhash, Karoy, and Kukan Nature Reserves
10	Small Aral Sea and estuary of the Syr Darya	02.02.12	Kyzylorda Province	330000	Barsa-Kelmes Reserve

(APP - areas of preferential protection that either partially or fully accommodate wetlands)

Despite the substantial progress made recently in the field, wetlands are still ecosystems that are the most exposed to risks due to their ongoing melioration, transformation, contamination or excessive utilization.

The need for elaboration and adoption of a wetlands protection strategy is accounted for by the fact that the regulations that apply to natural sites fail to fully cover the issues faced by wetlands, and only partially touch upon them as a result of them being associated with other natural sites. That is the way wetlands are covered in the Kazakh Land Code i.e. they are viewed as a part of water resources lands.

For example art.12 of the Water Code of the Republic of Kazakhstan incorporates wetlands into surface water bodies and groups water bodies into 1) reservoirs i.e. rivers, canals equivalent to rivers, lakes, storage lakes, ponds or other inland water bodies, territorial waters; and 2) glaciers, marshlands. While surface waters consist of surface water, bottom and banks.

Taking into consideration the abovementioned we suppose that a regulatory instrument shall be developed which will govern relations existing in the field of wetlands, contribute into efficient resolution of the existing problems by singling them out of a total of natural resources, and categorize them as a separate natural site that requires protection.

In addition to the Strategic Plans of Protection, Efficient Utilization and Management of Wetlands the government's role will be boiled down to adoption of documents, memoranda, agreements both with locals residing in the areas with wetlands, and with owners of land plots, etc. Consequently it renders even more pressing coordination of activities of agencies, structures, private sector, locals, which is unrealizable without a thorough, thought through and structured governmental policies ensuring environmental protection, including without limitation that of wetlands.

The critical nature of the action plan regarding the site being protected i.e. wetlands narrows down the time horizon for attainment of final results. As time goes on, and new formats and legal aspects emerge and regardless of the measures domestically taken by countries seeking to protect and ensure efficient utilization of wetlands, no strategy, concept or policy can be invariable.

Kazakhstan's environmental policies target a whole range of prospective goals. They focus on maintenance at certain levels of an environment that is favourable to humans, making sure that biodiversity is preserved on the basis of a socially justified combination of economic and environmental interests of the society and environmental security of the state.

The Balhash-Alakol basin exemplifies a vast range of areas covered by the state's environment and efficient nature management policy:

- ✓ research, technical and information support of integrated basin management by providing a scientific substantiation of the flowchart of comprehensive utilization of the Balhash-Alakol basin's recreational potential;
- ✓ assessment of the snow and ice resources of the runoff zone forming in a climatically changing environment, research done to substantiate restoration of ecosystems and development of the estuary of the Tentek River as well as Alakol and Sasykkol lakes;
- ✓ elaboration of a scientific basis for enhancement of the sustainability of the Balhash-Alakol ecosystems;
- ✓ maintenance of the water level in the holding basin "Sorbylak" in accordance with the substantiated locations of sewage treatment facilities and other measures;
- ✓ development and implementation of measures to mitigate the adverse effects of industrial enterprises;
- ✓ expanded utilization of geothermal waters;
- ✓ organization environmental tours in the Balhash-Alakol basin;
- ✓ charting of maps of the Balhash-Alakol basin's natural potential, resources and the environmental condition;
- ✓ restoration of the hydrometeorological and environmental monitoring network in the basin;

✓ intergovernmental regional monitoring of transboundary rivers in the basin jointly with PRC.

Its history and geography have made Kazakhstan a major Central Asian country. With a view to causing the neighbouring countries to take joint actions Kazakhstan has been promoting initiatives aimed at ratifying the Helsinki Convention, thus ensuring fair and reasonable utilization of the runoff of transboundary water ways, prevention any potential transboundary leaks of hazardous substances, creation of transboundary biosphere areas, and opportunities to jointly conduct environmental assessments of the boundary areas of Kazakhstan and those of the neighbouring countries.

A missing regulatory framework governing relations between the countries undermines performance of the obligations due to the international law's failure to contain any restrictive provisions or regulate water relations by contract.

The most pressing issues that need to be addressed on a priority basis include full inventory taking of all sites with historic contaminations and assessment of their environmental impact; elaboration and implementation of legal, economic or other mechanics that rules out occurrence of new contamination; implementation of the Program of Elimination of Radioactive Piles Forming in the Course of Uranium Mining; and Program of Elimination of Unattended and Self-Flowing Hydrygeological Wells.

Since 2014 the Republic of Kazakhstan has been implementing its state water resources program. It has been developed by the Ministry of Environment and Water Resources of Kazakhstan and provides for higher security via more efficient management of water resources in the following areas:

- guaranteed supply of water resources to the locals, environment and industries by taking measures to conserve water and increase the available water resources;
- boost efficiency of water resources management;
- \checkmark ensure preservation of aquatic water systems.

The program period spans 2014-2020. The funds allocated for the program in 2014-2020 will total 8.2 trln. tenges, out of which 5.4 trln. tenges will come from the Republican and local budgets, and 2.8 trln. tenges will come from sources other than the budget [10].

III. CONCLUSION

Thus, documentary formalization of the national or governmental wetland protection policies is a conclusive stage of determination of the governmental policy focus on achievement of a favourable environmental condition. By recognizing wetlands as a natural resource that requires legal protection, the Republic of Kazakhstan not only recognizes their existence, legal status, and procedure for engagement in economic activities, but also formalizes the legality of coercive measures imposed on individuals or entities committing offences against wetlands.

In his address to the nation President N.A. Nazarbayev made it particularly clear that given the limited nature and potential depletion of natural resources it is crucial that the country should change the way it treats its natural resources. We must properly manage our natural resources, transform such practices into sustainable growth, maintain national security and global involvement of the country in resolution of the worldwide and regional problems [11].

The critical sites that require proper care and preservation also include wetlands. Assignment of a legal status to wetlands in Kazakhstan is a milestone of the government's environmental policy. Nonetheless, we have to be ready to face the fact that statutory formalization of wetland protection practices will not yield instantaneous results and occurrences of adverse wetland impact will continue to exist, however the numbers of such occurrences will undoubtedly drop.

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