

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Mechanism of Water Resource Inter-Industry Protection.

Elmira F. Nigmatullina*, Maria B. Fardeeva, and Rimma R. Amirova.

Kazan Federal University, Kremliovskaya str, 18, 420008, Kazan, Russian Federation.

ABSTRACT

Development of the water resource inter-industry protection mechanism becomes a major concern for water management in Russia. Introduction of Environmental Impact Assessment (EIA) interstate procedure of production hydroelectric power stations (HPS) construction projects, on condition of international parameter level development of rivers and lakes pollution comparative assessment, taking into account multi-cluster ecosystem and landscape synergetic approach, is comprehended. The public-private partnership role in water management economy sector and first of all in water management infrastructure meliorative, fishery, water transport, housing and communal services is estimated. Proceeding from the competence analysis of the Russian Federation and subjects of the Russian Federation, it is offered to create an obligatory full-fledged organizational legal realization mechanism of activities for establishing water protection zones that will demand creating procedural and procedural action registration the rights and duties exercising of imperious subjects on regional level. It is emphasized that development of the interdisciplinary protection mechanism of water resources including statute tools and actions, based on the multi-cluster space ordered placement of ecogeosystem will answer fully to successful co-evolution of nature and person and the principle of basin management.

Keywords: interdisciplinary mechanism, water resources, cluster, landslides, water protection zone, coastal protective strips, subjects of the Russian Federation.

**Corresponding author*

INTRODUCTION

On current development stage of human society, the sustainable development concept for territories assumes a multifold assessment of their components condition for definition of the natural resources use optimum scenario. And issues of the nature rational use, protection of ecosystem and species variety have to be solved not just by environmental professionals, biologists, geologists, etc., who are carrying out environmental monitoring and tracing pollution, but also supported by the express subjects possessing state authority and providing law enforcement in the sphere of environmental protection.

DATA AND METHODS

Various manifestations of interdisciplinary approach can be observed in many social concepts. According to M. Oriu evolution of public process is bound to methodological primacy of objective over subjective. In each community the normative instructions regulating relationship of its participants, where the temporary condition of the discipline right is replaced by the "established", objective statute right [1], are formed. However social institutes do not consider changing social requirements for society; moral requirements of time result from the processes, which were taking place in the past. This "applied" aspect of the law is represented especially heavy during the proceeding reform in Russia; despite outwardly fissile dynamics, processes of legal regulation in our country do not always lead to desirable results.

In the methodological aspect it is about synthesis of scientific specific direction knowledge and scientific research. In this regard, rules of interaction and distribution of natural, informational resources become a basis for creating institutes and influencing decisions of social agents. Meanwhile, rather legible differentiation between social reference groups in late industrialism, in the recent period, concedes to diffusion and interdependence of the carried-out activity.

In social solidarity aspect non-governmental organizations on nature preservation carry out the role of essential political and administrative agents, which by means of electronic Internet resources form public opinion on various sectors of the modern state policy. IFAV, MBK, VVF, AKOPS, EkoMir and Greenpeace, as well as many others belong to their number. Such dominance of a network form of social organization in modern society promotes development of subject structure pluralism in creating humane state where democratic process, open government and transparent decision mechanism belong to the main components.

The last decade of the past century is celebrated by the global anthropogenic impact on the planet biosphere, which is leading to natural complexes destruction having transnational character. In these conditions destruction of disciplinary borders, shift of object discourses will allow to create adequate instrumental research program for ecological safety of the planet. The similar step is very significant in the methodological plan as an important basic point in the course of further selection of necessary analytical tools complex, system of research techniques.

In this regard the Mongolian party special initiative deserves attention, the plan is to construct the hydro-power object cascade on Selenga River [2]. We believe that it will lead to irreversible consequences for ecosystems of the Selenga and Lake Baikal as Selenga is the cross-border river, which delivers half the water to the world's largest fresh-water Lake Baikal, recognized as object of the world UNESCO heritage.

Meanwhile, earlier concluded Agreement between the Government of the Russian Federation and the Government of Mongolia on protection and use of cross-border waters, as of February 11, 1995 does not fully reflect the modern international practice and current situation in use of cross-border water objects.

As appears from Art. 5 of the specified Agreement in cases of floods, dangerous ice phenomena or production accidents, bound to intensive pollution or cross-border waters overflowing, the Parties mutually inform each other, communicate continuously, coordinate and carry out actions for prevention and elimination of negative consequences of these phenomena.

However, such use of the law does not provide suitable protection for the State afflicted by damage. Lawsuit on the Gabchikovo-Nadyamorash water-engineering system confirms that. The International UN Court

of Justice made the decision on shared by Hungary and Slovakia common water resource in 1997, yet for 10 years the parties kept notifying the court on the course of its implementation [3].

Specifics of the regional intergovernmental relations developed on sharing and protection of cross-border water objects define the mechanism of their implementation. They are conservative and incline to commission work coordination on cross-border waters use and protection management on the basis of principles of keeping the relative interests of the parties and decision coordination on common water management problems [4].

According to the Convention on protection and use of cross-border water currents and the international lakes as of March 17, 1992, cross-border waters are understood as any surface and underground waters situated on borders between two and more states or as located on such borders. Therefore, any harmful effects on cross-border waters will entail destructive processes of many landscape clusters: woods, arable lands, steppes, settlement lands, etc.

In our opinion, the requirement about carrying out the EIA interstate procedure for implementation of the production projects "Construction of Hydroelectric Power Station of "Shuren" on the Main Bed of Selenga" and "Water Complex of the Orkhon River" is quite correct under condition of developing of pollution parameters comparative assessment for the Selenga and Lake Baikal on the international level, taking into account multi-cluster ecosystem and landscape synergetic approach.

According to the United Nations, from diseases, caused by pollution of water and sanitation, 4 400 children under age of five die across the world daily. Third of the planet population suffers from water shortage. Every sixth person has no access to water in a kilometer radius from the house. Half of the population in developing countries has no access to suitable sanitary conditions [5].

According to the Organization for Economic Cooperation and Development (OECD), by 2050 the global need for water resources will grow by 55%, due to water consumption growth, for industry needs by 400%; for electricity generation by 140%; for potable water by 130% [6].

Thus, inadmissibility of causing environment cross-border damage and occurrence of international legal responsibility of states for the caused damage, proceeding from biospheric thinking rejecting anthropocentric model of person-to-nature interaction, from our point of view, has to take a decisive place in minds of all mankind ensuring ecological safety and sustainable development of countries.

Novels of the Water Code of the Russian Federation as of June 3, 2006 N 74-FZ, demanded updating and regulatory legal base of the country. For this purpose were accepted Water Strategy of the Russian Federation for the period till 2020 [7], the Federal target program of Russian water management complex development for the period till 2020 [8], which allowed to determine the amount of nature protection actions financing. For example, selection of 241,5 billion rubles from funds of the federal budget for number of nature protection actions and 86,9 billion rubles from budgets of subjects of the Russian Federation is provided.

Earlier the ratio of financial participation volumes of federal and regional budgets was not fixed by statute, therefore obligations of subjects varied in the range from 10 to 30 percent. Now these ratios are defined by legible formula and make from 5 to 50 percent, taking into account budgetary security coefficient of the respective region.

Dynamics of nature protection assignment actions in the Republic of Tatarstan is presented in tab. 1

Table 1: Costs of environmental protection in the Republic of Tatarstan (mil.rur) [9]

Costs of environmental protection	2008.	2009.	2010.	2011.	2012.	2013.
Total	12072.3	12664.8	13622,0	14790.8	19422.1	21,980,3

Thereby, the role of regions increases in financial crucial decisions acceptance in the environmental protection sphere.

One of the remarkable phenomena in the modern water resources protection practice is ecological rehabilitation of water objects, which is understood as water object improvement by cleaning of ground deposits, sanitary cleaning of water protection zone, forest management actions on the coast.

The list of rivers, reservoirs and lakes needing such rehabilitation define regions self-contained within preparing the regional programs, joint financing from federal budget.

However, according to N.M. Mingazova rough and rigid intervention into lake ecosystem with not eco-friendly well-planned actions makes extremely negative impact, leading to destruction of existing lake ecosystem and creating completely new, semi-simulated ecosystem in its place[10].

RESULTS

Water objects are property of all citizens, free access to them of an acritical circle of people imposes particular requirements to water management infrastructure use.

Owing to the clause 2.st.67 of the Water Code of the Russian Federation owners of water objects are obliged to carry out measures to prevent flooding, overflowing, destruction of water objects coast, bogging and other negative impact on waters and elimination of its consequences. Measures for prevention of negative impact of waters on particular territories and objects, as well as eliminating its consequences concerning the water objects, which are in federal property, property of subjects of the Russian Federation, property of municipalities, are carried out by executive bodies of the government or local governments within their powers [11]. Thereby, the legislator emphasizes that providing safe conditions of accommodation for the population has to remain an exclusive state prerogative.

At the same time, negative impacts can not only be spontaneous, but also caused by human actions which change the water mode of water objects. Currently in the territory of the Republic of Tatarstan activity landslide scree processes on coast of the Volga Kama Reservoir is very considerable. Landslide-forming factors in the territory of the Republic are various. Serious changes in existence of coastal slopes resulted from periodic climatic anomalies – frequent droughts, or repeating spring and summer influencing the level of ground waters that intensified processes of abrasion on the large river coasts (Volga, Kama, Sviyaga, Vyatka). Emergence of new landslides and resuscitation aged, perhaps, increased with technogenic impact on slopes (constructing highways, production with use of various vibrating mechanisms, concentration of surface drain, dredging, use of territory for constructing houses, intensive plowing of lands). It is known that formation of a slope is intimately bound to basis of erosion (Fardeeva, etc., 2004, 2013; Kozhevnikova, etc., 2011; Usmanov, 2015)[12]. Thus the problem of coast protection against destruction has to be solved, first of all, taking into account requirements of society. So in the Federative Republic of Germany much attention is paid to preservation of water objects; that is bound, first of all, to obligatory creation of "coastal buffer zones" where any economic activity is limited [13]. In this regard, growth of social responsibility of the Russian citizens and especially Russian business makes good prospects of public-private partnership development concerning the water management sphere. The most perspective actions, first of all, should be taken on water management infrastructure of melioration, fishery, water transport, housing-and-municipal farms [14].

Meanwhile, the choice of interaction model with public and private sector arises in the field of rational use of natural resources, predetermined by institutional environment, a problem of budget limitation on various levels, low effectiveness of financial resource investment because of administrative experience shortage [15].

S. A. Bogolyubov believes that water relations with private-law methods introduction is not expected; this happens, in our opinion, not because of shortcomings of these methods, but due to law-making and law-enforcement system shortcomings, defects of organizational operating mechanism, absence of law-making culture in society, the atmosphere of steady performance of laws, legal nihilism which we need to fight with words and deeds [16].

In the complex process of making laws for subjects of the Russian Federation and other normative legal acts cannot contradict federal laws (Art. 76 of the Constitution of the Russian Federation) [17]. Similar situation is formulated in Art. 2 of the Water Code of the Russian Federation, the laws and other regulations of subjects of the Russian Federation governing the water relations cannot contradict the specified Code and federal laws adopted according to it [18].

Thereby, federal competence provides firm standards and collateral competence assumes creating additional resources realized through law-enforcement and law state security and imperious subjects.

A.F.Malyy fairly emphasizes that the regional legislator is capable to consider specific features of the territories development more fully and comprehensively, therefore actions in spheres of collateral maintaining have to be taken according to subject specifics: territorial and geographical, climatic, historical, national, economic etc. [19].

At the same time, in court practice there are situations when normative legal act of the territorial subject of the Russian Federation violates the rights and legitimate interests of citizen residents for the favorable environment. So, court, considering case on recognition invalid resolutions of the governor, specified that lack of obligatory state environmental assessment of regional level "The correction project for borders and the sizes of the water protection zones...", contradicts the all-legal criterion of determinancy, clarity and unambiguity of the precept of law for constitutional equality of all before the law and court (part 1 of Art. 19 of the Constitution of the Russian Federation) and for standards of the Federal law "On Environmental Assessment". Thus the court noted that the right of citizens for the favorable environment including the right for water and favorable aqueous environment is not bound to existence or absence of proofs of the environment harmful effect consequences on the applicant. If applicants do not have diseases caused by water objects condition reasonably specified by court, they can still testify that their rights are being violated [20].

Thus, it is rather apparent that on regional level the necessary full-fledged organizational legal mechanism of specified activity realization that will demand creative procedural and procedural registration of actions at exercise of the rights and duties of imperious subjects has to be created.

SUMMARY

- Application of the multi-cluster ordered space placement of ecogeosystems will allow to develop interstate parameters of pollution comparative assessment for implementation of the production projects of capital objects in the rivers placed on border beds.
- Growth of social responsibility of the Russian citizens and especially Russian business makes good prospects of public-private partnership development concerning the water management sphere.
- Creation of the additional legal resources realized by law-enforcement and right security state and imperious subjects when carrying out assessment of public authorities and local governments activity as well as to provide the legislation discharge cases of resignation for region officials in case of inadequate realization of their duties is necessary.

CONCLUSION

Thus, perspective and strategic path of progressive and innovative development of water use is expedient, as well as development of the interdisciplinary protection mechanism of water resources including statutory tools and actions, based on the multi-cluster space of ecogeosystem, which will answer fully to successful co-evolution of nature and person and the principle of basin management.

ACKNOWLEDGEMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University

REFERENCES

- [1] Oriu M. Fundamentals of public law / Tr. from Fr.; under the editorship of. E. Pashukanis and N. Chelyanova. - M.: 1929. P. 113.
- [2] Official site of the Russian newspaper URL:<http://rg.ru/2015/04/23/rosvodresursy.html/> (Reference date 13.07.2015).
- [3] Case Concerning the Gabčíkovo-Nagymaros Project (Hungary/ Slovakia)// I.C.J. Reports, 1997. P.7.
- [4] The agreement between the Government of the Russian Federation and the Government of the Republic of Kazakhstan as of 1992, the Agreement between the Government of the Russian Federation and the Government of Mongolia on protection and use of cross-border waters as of February 11, 1995//Union of Right Forces "Guarantor"
- [5] Official site of the United Nations (UN) URL:<http://www.un.org/ru/unforpeople/water1.shtml/> (Reference date 13.07.2015).
- [6] Official site of the Organization for Economic Cooperation and Development (OECD) URL:<http://www.oecd.org/env/resources/49006778.pdf/> (Reference date 13.07.2015).
- [7] Water strategy of the Russian Federation for the period till 2020. the order of the Government of the Russian Federation as of August 27, 2009 N 1235-p//SZ Russian Federation. 2009 y. N 36. Page. 4362.
- [8] Federal target program "Development of Water Management Complex of the Russian Federation in 2012 - 2020", the resolution of the Government of the Russian Federation as of April 19, 2012 N 350 "About the federal target program "Development of Water Management Complex of the Russian Federation in 2012 - 2020"//Union of Right Forces "Guarantor".
- [9] Site of Territorial Authority of Federal State Statistics Service in the Republic of Tatarstan http://tatstat.gks.ru/wps/wcm/connect/rosstat_ts/tatstat/resources/ (Reference date 13.07.2015).
- [10] Mingazova N. M. Ecological restoration of water objects as branch of an environmental engineering: mistakes and opportunities//Collection of works VI of the International congress "Clear Water", 2015, S. 107-112.
- [11] The Water Code of the Russian Federation as of June 3, 2006 N 74-FZ//SZ Russian Federation. 2006. N 23. Page. 2381.
- [12] Fardeeva M.B., M.V. Kozhevnikova Phytoindication of landslide processes / Actual environmental problems of the Republic of Tatarstan. – Kazan: 2004. – 226-227p.
- [13] Frederike Balzer and Dietrich Schulz, Federal Environment Agency, Germany. Riparian buffer strips / Presentation during the third meeting of the HELCOM Baltic Agricultural and Environmental Forum, Warsaw, Poland, 7-8 May 2012.
- [14] URL: http://voda.mnr.gov.ru/upload/iblock/2e3/0885_rosvodresurs.pdf/ (Reference date 13.07.2015).
- [15] Nigmatullina E.F. Mechanism of realization of public-private partnership in the ecological and land right//State and right bulletin. No. 18. 2014. - P. 17-25.
- [16] S. A. Bogolyubov. Law-making in the sphere of ecology / Under the editorship of S. A. Bogolyubova. M.: Eksmo, 2010. P. 413.
- [17] The constitution of the Russian Federation (it is accepted on national voting on December 12, 1993)//"The Russian newspaper". 1993 y. N 237.
- [18] The Water Code of the Russian Federation as of June 3, 2006 N 74-FZ//SZ Russian Federation. 2006 y. N 23. Page. 2381.
- [19] Malyy A.F. On the rights and freedoms of the person and citizen: problems of vertical differentiation of statutory competence: monograph/ A.F.Malyy, V. S. Tsvil. - Arkhangelsk:Sev. (Arkt.) fed.un-t, 2011. P.132.
- [20] Definition of the Supreme Court of the Russian Federation as of 2005 in the matter of No. 48-G05-18//Union of Right Forces "Guarantor".