

Providing financial support for nature conservation activities in regions

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Abstract. The current period of market transformations reveals the tightest interrelationship of rational nature management with environmental conservation and resolving the issue of funding this area. Proper funding is a crucial condition for resolving environmental issues. At present, Russia and its regions have a disjointed financial-economic nature management mechanism consisting of separate structural units. This mechanism comprises the following elements: drawing up ecological programs and forecasts, providing financial support for nature conservation activities, pricing the output of extractive industry sectors, and levying fees for a negative impact on the environment and the use of its natural resources. The low efficiency of this mechanism has been a precondition for taking measures aimed at activating the separate units of the existing financial mechanism for rational nature management and environmental conservation.

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Introduction

Attaining the ecological-economic sustainability of regions is crucial to preserving Russia's integrity and mitigating the likelihood of social, national, political, and demographic cataclysms occurring [1].

The stable and effective economic development of a region increasingly depends on its ecological well-being. Virtually any disturbance of ecological balance as a result of economic activity initially arises within the region [2]. Therefore, the issue of stabilizing the ecological situation is, primarily, of a regional nature.

The augmentation of the ecological crisis calls for reconsidering the goals of societal development and developing new models for conduct with regard to the environment. The need for changing human conduct has led to the emergence of the concept of an "ecological style" of thinking and environmentalizing the entire system of knowledge. In fact, environmental education has become a hot subject lately, as it has been set apart from the entire system of education and bringing-up. Successfully managing environmental risks and threats, as well as actualizing ecology-related opportunities, presupposes the availability of profound knowledge on the essence of modern environmental issues, possessing major economic-managerial methods for resolving them, as well as understanding the need for taking the environmental component into account in decision making. A number of authors [3] have noted directly that among the major factors in destabilizing the natural environment of the Russian Federation is the low level of environmental consciousness and culture, while environmental ignorance entails economic ignorance. Therefore, the crucial objective of ensuring the environmentally sustainable

development of regions is about preparing and engaging graduate professionals [4].

Nature conservation activities are carried out for the purposes of observing regulatory requirements as to the quality of the natural environment inclusive of prospective changes associated with the development of technology and production and demographic changes. Carrying out such activities requires considerable financial expenditure. Having said that, federal budget expenditure to fund environmental protection activities tends to shrink, while there are no essential changes in the size of regional and municipal budgets [5]. Nature management enterprises have to primarily rely on their own funds.

Based on that, conducting integrated studies into the issue of providing financial support for nature conservation activity is of high theoretical and practical significance, since the formation of a modern and efficient nature management system is crucial to the ecologically sustainable development of regions and the country as a whole.

Main part

The successful resolution of present-day ecological-economic issues and search for ways out of the severe nature management crisis cannot be possible without conducting integrated scientific studies into the evolution of anthropo-ecological relations and the genesis of the conceptual-worldview fundamentals of the process of nature management and a critical reconsideration of extremely unfavorable trends that have taken shape by the present time in the area of consumption of natural-resource goods as the natural corollaries of social-political and scientific views and convictions dominant at the present time [6].

An investigation into the budgetary-financial issues in the area of environmental conservation has revealed that scientific literature is missing a clear-cut definition for financial and economic nature management mechanisms – it covers just certain elements of these concepts, which is due to the fact that authors have different opinions on the place of the budget mechanism in the system of financial relations – above all, in the system of economic relations – in terms of rational natural resource use and environmental protection. In our view, the financial-economic mechanism is a link between society's economic basis and superstructure (рис. 1).

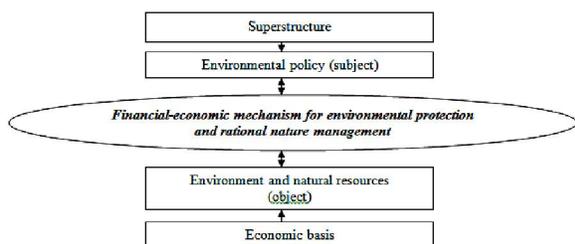


Figure 1. The position of the financial-economic mechanism for environmental protection in the economic system

The financial-economic nature management mechanism under a market economy is a specific mechanism for the interaction of the environment and anthropogenic activity and is of the nature of a regulated system predicated on forms, methods, and principles of economic action (Figure 2).

At the current stage of social-economic development, the central unit of the financial-economic nature management mechanism is the unified payment system for payments for the use of natural resources, a negative impact on the environment, and fines and compensatory payments to redress damage. Financial flows of payments are formed of two component parts of nature management (Figure 3).

The effective operation of the financial-economic mechanism for environmental protection and rational nature management presupposes the action of the governing entity upon the governed entity, the user of natural resources, with a view to attaining specific nature conservation objectives [7]. Note that the governing entity's impetuses are directed into the area of the actualization of economic interests and are affected in the following areas:

- the criteria with an orientation to which the subject evaluates the object;
- the subjects of the economic mechanism;
- the object [8].

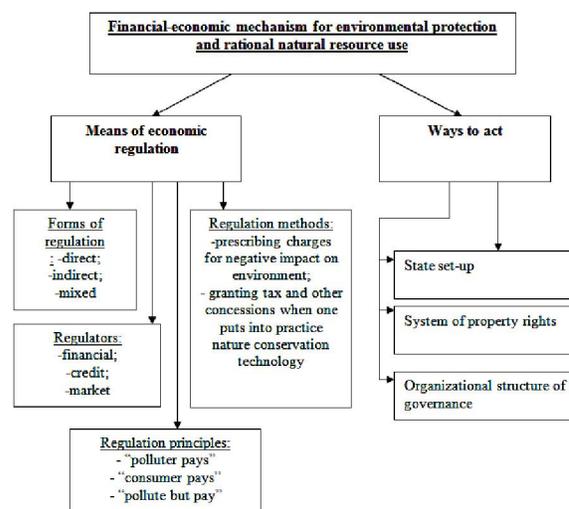


Figure 2. A financial-economic mechanism for environmental protection and rational natural resource use

Under a market economy, a special role in resolving the issue of environmental protection and rational natural resource management is played by the government and the government apparatus. Putting into practice a budget mechanism for environmental protection and rational natural resource use is one of the best ways for the government to actualize its policy of eco-balanced economic development.

Issues related to providing financial support for environmental protection and rational nature management through budget resources, as well as those related to forms of their manifestation, have been covered in national literature insufficiently. There is virtually no regard given to the study of the concepts of “budgetary mechanisms for environmental protection” and “financial mechanisms for environmental protection and rational nature management”. This can be attributed to lack of research in the area of budget mechanisms in financial science as a whole and the absence of a clear-cut interrelationship of financial relations and relations dealing with environmental protection and rational natural resource use.

Furthermore, it is the operation of a budget mechanism for environmental protection and rational nature management that makes it possible to use budget relations for the purposes of putting into practice the state's social-economic functions and objectives – in particular, preserving the quality of the natural environment [9]. The structure of this mechanism is illustrated in Figure 4.

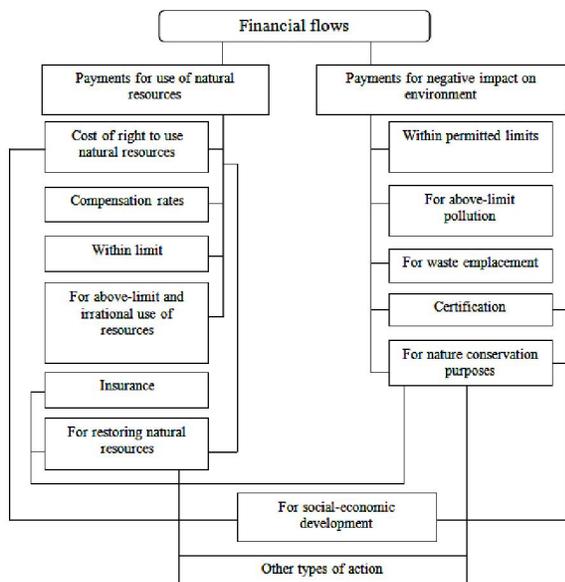


Figure 3. The formation of financial flows in nature management

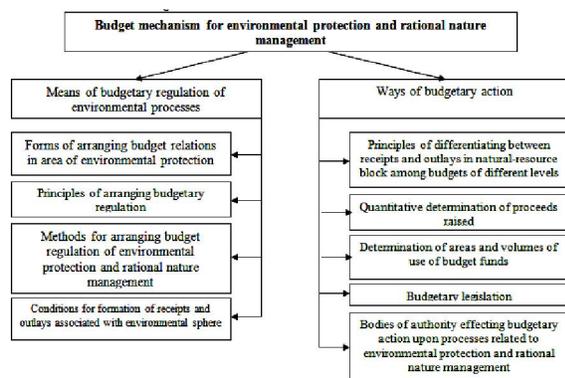


Figure 4. A diagram for the operation of the budget mechanism for environmental protection and rational nature management

On the whole, the condition of the natural environment governs the development of the nature management economy in the region. Thus, an analysis of data on executing Stavropol Krai’s consolidated budget with regard to nature conservation activity (Table 1) indicates that budget funds are expended on nature conservation activities only minimally. After resource payments get into the budget, they become one of its revenue items, get dissolved in the general amount, and can be expended for any purposes. Since nature conservation activity has never been a priority, it is normally funded based on the left-over principle, which definitely aggravates the environmental situation in the region.

Table 1. Stavropol Krai’s consolidated budget receipts and outlays associated with the use of natural resources, million rubles

Indicators	2008	2009	2010	2011	2012
Receipts					
- payments for use of natural resources and negative impact on natural environment – total	0.8	0.5	0.3	0.25	0.3
- regular payments for use of natural resources	0.4	0.2	0.1	0.05	0.1
- payments for use of natural resources	0.2	0.2	0.1	0.1	0.1
- payments for negative impact on natural environment	0.2	0.1	0.1	0.1	0.1
Outlays					
- environmental protection	0.3	0.2	0.2	0.2	0.1

The largest share in the total size of natural-resource payments for Stavropol Krai is accounted for by payments for a negative impact on the environment (in the past – fees for the emission and disposal of hazardous substances, waste emplacement). In 2011, enterprises paid 43.9 million rubles for a harmful impact on the environment, which is 1.5 times the 2007 figure. Out of this amount, 12.6 million rubles were paid for exceeding prescribed limits. In the overall volume of payment for allowed and above-the-limit emissions, 43.6% was accounted for by waste emplacement.

The insufficiency of financial support for nature conservation activities is the main reason behind the fact that enterprises are using morally outmoded equipment which needs repair or replacement and are lacking in treatment facilities, theirs with low output capacity. Hence the unsatisfactory condition of atmospheric air, water facilities, and land resources [10].

Specialists estimate that putting a complete end to the degradation of man’s living environment and getting the situation in the region to stabilize requires expending no less than 2.5 to 3% of GRP. According to the data provided in Table 2, these indicators are more than two times lower in Stavropol Krai [11].

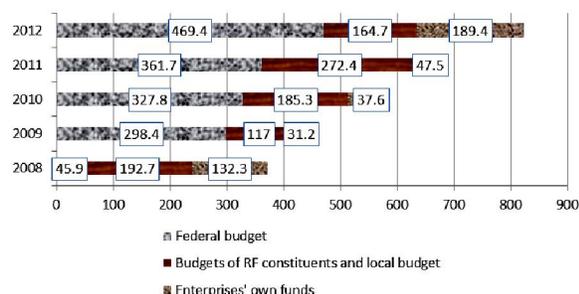
An analysis of the structure of nature conservation expenditure has revealed that over 70% of annual expenditure goes to maintaining the already achieved level of nature conservation activity in the region and less than 20% to future development, i.e. the technical upgrading of existing and construction of new nature conservation facilities and effecting activities aimed at restoring compromised natural resources.

Table 2. The share of nature conservation expenditure in GDP (in prices of corresponding years), %

Indicators	2008	2009	2010	2011	2012
Investment in fixed capital for environmental protection - used	370.9	446.6	628.1	681.6	823.5
Running (operational) expenditure on nature conservation, total	1290.4	1760.0	1658.1	1836.4	1777.0
cut of it:					
- on atmospheric air protection and climate change prevention	170.2	342.0	289.0	276.6	187.9
- on wastewater collection and treatment	975.8	1209.3	1265.8	1412.2	1408.6
- on waste management	117.3	170.3	78.9	131.9	153.5
Expenditure on extensive repair of major production funds for environmental protection	141.6	92.7	272.2	103.1	98.8
Volume of expenditure on environmental protection	1802.9	2299.3	2558.4	2621.1	2699.3
Volume of expenditure on environmental protection as percentage of GDP	0.6	0.8	0.8	0.7	...

Such a disproportion in the structure of environmental expenditure is caused by the high cost of collecting and treating hazardous substances, the low operating capacity of treatment facilities, and the insufficiently effective use of nature conservation equipment [12].

Providing financial support for nature conservation activity presupposes the study of sources through which environmental protection activities are funded (Figure 5).

**Figure 5.** The major sources of funding nature conservation activity

It follows from the data in Figure 5 that from 2009 to 2012 federal budget funds were a priority source (about 50%). In 2008, the territorial budget became the dominant source of funding, which was a result of the economic crisis and a display of budget federalism, which presupposes self-reliance in finding funds to fund decently made decisions and regional programs on the part of RF constituents. A decrease in the share of enterprises' own funds in 2009 is associated with the 2008 crisis and a decrease in organizations' revenue, through which investment was being effected [5].

In studying the national experience of the operation of nature conservation funds, we got an idea of the expediency and areas of streamlining the system of budget and out-of-budget financial support for the natural-resource block within the framework of the operation of regional and municipal environmental funds. Based on that currently the

Ministry of Natural Resources and Ecology of the Russian Federation is executing government policy in the area of rational nature management and natural resource protection, it seems possible to put together a single environmental protection fund that would unify funds for the reproduction of natural resources and budget environmental funds.

Currently, the most suitable for Russia is a two-unit form of managing financial flows, which includes government intervention in the redistribution of financial flows and managing out-of-budget funds through an independent establishment. This form is intended to ensure environmental protection and rational natural resource use. The principal scheme for the operation of such funds should include the following main blocks:

- government protection for the fund's activity;
- formation of its revenue;
- areas of expending the fund's monies.

The formation of funds' revenue can be effected through the following means:

- target funding from the budget;
- proceeds from entrepreneurial activity;
- voluntary contributions from institutions and citizens;

- various payments and levies, including fees for using natural resources and a negative impact on the environment.

As additional sources of the formation of the fund's revenue, we could use proceeds from nature conservation loan bonds as well as contributions to the fund from the amount of insurance premiums on environmental insurance transactions, which could also serve as a source of the formation of the fund's monies and an area for expending financial resources in the fund's insuring against the risk of damage inflicted on recipients by environmentally dangerous business entities, users of natural resources. Other additional sources of the formation of the fund's financial resources can include funds proceeding from the privatization of national economic facilities inclusive of the environmental component.

Conclusion

The study conducted has shown that the issue of providing financial support for the regional system of rational nature management, which makes it possible to provide nature conservation activity with necessary financial resources, is topical.

The formation of a sustainable system of funding nature conservation activity requires the creation of a harmonious financial-credit mechanism for regulating the nature conservation area, which is adapted to the present-day conditions of the market economy.

The operation of the budget mechanism for environmental protection and rational nature management is intended to boost the financial efficiency of nature conservation activities undertaken.

Streamlining the budget mechanism for environmental protection and rational nature management presupposes broadening the range of sources for funding nature conservation activities, among which it is customary to point up budget and out-of-budget sources.

Currently, Russia and Stavropol, in particular, are exhibiting a low level of the “ecological” component in the budget’s outlays part, while it is dominating in its receipts part based on nature conservation export. On the whole, the volume of state nature conservation funding remains low and tends to decrease, while the share of natural-resource payments in the budget’s revenue over the period under examination remains quite stable.

A crucial component of reorganizing the tax system, which helps ensure boosting the level of funding nature conservation activities, should become a gradual increase in the share of natural-resource payments and fees for a negative impact on the environment in the budget’s receipts part.

The volume of target budget funds allocated for nature conservation activities and rational natural resources use should be brought to at least 2-4% of GDP and GRP. This is due to the fact that the estimated economic damage from environmental infractions is, normally, 3 to 15% of GDP, and the share of funds needed to carry out nature conservation activities can be explained by the global experience of carrying out nature conservation programs.

The resumption of the activity of environmental funds should become a necessary element of putting into practice new approaches to funding environmental protection activities. Work in this area ought to be commenced without any disturbances in practically effective forms.

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