

## The Role of Ecological Insurance in Sustainable Development of the Republic of Kalmykia

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**Ecological insurance is an effective tool of state policy regulation, as it is shown in the article. Several problems set barriers for its effective development. The main problems are listed in the article. Development of regional ecological insurance system that is almost absent now is pressing task. Development of the system of ecological insurance of Kalmykia will promote sustainable development of economy of the region.**

**Key words:** Sustainable development, Insurance, ecological insurance, Insurer, insurance money, insured event, insurance loss.

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Sustainable development of regions is being paid much attention today in theory and practice of economics<sup>1</sup>. First of all it is caused by the fact that solving problems of separate regions will eventually lead to achievement of the main goal of each state — stable economic growth. Indeed, the tasks of economic and social development of each region should be set with regard to sustainable development<sup>2</sup>.

Negative ecological changes have exceeded external economic results and one may state that mankind is going through the stage of ecological crisis now. The essence of this crisis is contradictions between limitless capabilities of people and limited possibilities of ecosphere in provisioning resources for people's activity. That means that ecological and economic problems that appeared in the middle of XIX century haven't found a solution in current century and sharpen to the turn of millennium and lead to forming of the

new model of development of civilization as a whole<sup>3</sup>.

The year 2013 that the President of Russian Federation V.V. Putin declared the Year of Environment Protection showed pressing problems of the country development.

### Method

General theoretic cognition methods have been applied in the work. General trends of development of ecological insurance abroad have been revealed by comparative method. Directions of its development have been clarified. Using methods of information classification and processing we revealed problems that hamper effective application of ecological insurance in Kalmykia and proposed recommendations on its effective use. In general, such levels of scientific cognition are proposed to use as empirical and abstract, and theoretical. Fact base of scientific researches has been formed on empirical level, empirical generalizations have been formulated with regard to studied phenomena.

### Main body

In accordance with Ecological Doctrine of Russian Federation the following key tasks are defined to realize the aim of provisioning of

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sustainable nature management: non-exhaustible use of renewable and rational use of nonrenewable nature resources. To achieve this aim the following measures are necessary: deployment of complex nature management, its orientation on the aims of sustainable development of Russian Federation including ecologically grounded methods of land, water, forest, mineral and other resources use; reduction of the share of enterprises that exploit natural resources; development of knowledge-intensive nature saving high-tech productions; preserving diversity of used biological resources, their internal structure and self-regulation and self-reproduction ability; the most full use of mined resources, reducing waste of mining and processing to minimum; reducing damage of natural environment from exploration and mining of natural resources to minimum; and others<sup>4</sup>.

Three main types of industrial processes' impact on the state of environment are known<sup>5</sup>:

First type is related to constantly growing volumes of mineral resources mining to satisfy growing demand from production;

Second type — «encumbering of space» that means withdrawal of lands occupied by different types of agricultural and natural vegetation for construction sited of industrial enterprises, motor roads and railroads, urban development.

Third type is pollution of natural environment with different industrial, transport, agricultural, facilities and domestic waste.

Any type of anthropogenic effect affects nature, agriculture, production, health protection, economy. Not only pollution factors and necessity to deal with them affect economy but social priorities, cultural and historical traditions, public opinion and so on.

The Republic of Kalmykia is not an exception. It is the zone of high risk, zone of ecological disaster. Long-term anthropogenic load, deterioration of traditional basics of economy, unpractical land utilization have led to desertification. Besides, according to State Statistic Report #2-TP (air), actual mass of contaminants discharged in atmosphere in the territory of the Republic of Kalmykia was 35.133 thousand ton in 2011, including 2.210 thousand ton of stationary sources (6.1%), motor transport 32.915 thousand ton (93.7%), railway transport (diesel locomotives

in main lines)-8.291 ton (0.02%). One of ecological problems that will soon become pressing for Kalmykia is related to exploration and mining of oil and gas deposits in Caspian Sea shelf near Kalmykia shore. Oil spillage trend still remains and it may cause ecological and economical damage. It also affects sickness rate of population and growth of death-rate. In total these factors lead to ecological tension in the region. Money equivalent of damage equals several hundreds of thousands Rubles. Maybe this sum seems absurd comparing the other regions but not for conditions of the Republic of Kalmykia.

Analyzing the ratio of spending and income of the budget of the Republic one may see that it is greater than 1 Ruble of budget spending per 1 Ruble of income of consolidated budget of the Republic of Kalmykia. It means that budget resources are not enough for fulfillment of spending authority. One may also see that last years this coefficient has been growing, i.e. consolidated budget of the Republic of Kalmykia has been run surplus. This situation may be considered to be positive trend but the value of coefficient is the evidence that the share of unpaid transfer from federal budget in total budget income of the Republic is growing. This conclusion is proved by the fact that income of the Republic compensates budget spending for less than 40%<sup>6</sup>.

Despite the fact that funds for state ecological safety support are annually provided from state budget these amounts are not enough to compensate damage not only to life and health but to property of injured parties and the problem of compensating damage to the environment remains unsolved.

Search for new mechanism of protection from emergency pollution of environment is necessary for Kalmykia with its diverse climate conditions, unused natural resources, workforce reserves as factors that create real potential of dynamic social and economic development of the Republic.

In this situation ecological insurance may be one of effective tools of regulation of state policy aimed on reduction of ecological risks as well as reduction of state spending for ecological safety support.

Insurance in market economy at large is directly connected with specifics of fulfillment of

finance activity by economy subjects and authorities under conditions of increased possibility of unforeseen events in social and economic life of society.

D. Bland<sup>7</sup>, C. Pfeiffer<sup>8</sup>, Christopher Culp<sup>9</sup>, Emmett Vaughan, Therese Vaughan<sup>10</sup> and many others have studied insurance system in Europe.

Relying on foreign experience it is necessary to note that the system of ecological insurance is developing in the following directions<sup>11-13</sup>:

- a) Overall responsibility polices system that makes no difference between emergency pollution and gradual pollution;
- b) Overall responsibility insurance that covers only the damage from accidental (emergency) impact on environment;
- c) Ecological risks polices system that includes insurance from damage from gradual pollution of environment;
- e) system of insurance from unexpected, accidental, emergency pollution on the base of optional voluntary insurance agreement.

Research we have carried out earlier in this sphere allowed us to define this category. Ecological insurance is an aggregate of insurance types (liability insurance of enterprises engaged in nature management, property insurance of natural and juridical persons including natural objects insurance), aimed on development of insurance coverage in case of damaging environment, causing damage to natural, juridical persons and state as a result of environmental pollution<sup>14</sup>.

In this case we distinguish subjects of ecological insurance in accordance with Federal Law "On organization of insurance proceedings in Russian Federation"<sup>15</sup>:

1. Juridical persons that are organizations and enterprises which economy is hazardous for environment, state and territorial bodies that have ecologically dangerous or polluted natural objects under surveillance or on the territory.

Commercial enterprises being the subjects of ecological insurance almost fully ignore ecological factor trying to get the greater benefits of their activity and thus create risk situations;

2. Capable of functioning natural persons. In

this case we speak only about such form of insurance classification as voluntary. Mutual agreement of parties is necessary condition that means that terms are defined by insurance agreement. Insurance mediators – insurance brokers or insurance agents play special role.

Specifics of ecological insurance is partially the fact that amount at risk is comprised of the following components – cost of prevention of emergency pollution; the second component of amount at risk – losses arising from the impact of hazardous substances discharged into the environment, on recipients. Unlike the first type of losses they are directly manifested by third persons.

Positive effects of ecological insurance system introduction are obvious but in Russia this segment has not been widely spread due to the following main problems:

- a) white spots that still exist in legislation;
- b) high level of environmental pollution;
- c) using component approach in complex calculations;
- d) insufficient information coverage;
- e) flaws in ecological and economical state mechanisms;
- f) absence of universal criteria that defines ecological damage of property and natural persons, methodic of its calculation;
- g) definition of system of standards for calculation, uncertainty of loss type covered via insurance system, restrictions and limits of insurer responsibility;
- h) uncertainty of responsibility terms after insured event;
- i) other.

Using of ecological insurance is undoubtedly useful for Kalmykia to promote effective social and economic development, high living standards of population and environmental protection. But not only ecological insurance – insurance system at large is poorly developed in the Republic. In most cases insurance companies in Kalmykia are subsidiaries that carry out functions necessary only for compulsory insurance. The share of voluntary insurance is relatively low due to the following objective causes: low paying capacity of juridical and natural persons in Kalmykia, insufficient knowledge in the sphere of provided services, legislation flaws.

Development of regional system of ecological insurance is pressing problem for Kalmykia. Although it should be stressed that there are no large enterprises that discharge high volumes of pollution but necessity of introduction of ecological insurance mechanism still exists. So one may state that ecological insurance practice is almost absent in Kalmykia today while a number of factors among which the most important are low indicators of ecological safety of the region, a certain number of potentially hazardous objects and restricted real budget cause the necessity to form and develop the system of ecological insurance.

### CONCLUSION

Founding of regional insurance ecological fund is necessary for Kalmykia. Its functions will be related to territorial and departmental principle of selection of system members – potential insured parties, beneficiaries, to conducting insurance operations in all stages of life cycle of insured enterprise from technical and economic and ecological grounding of licenses for the kinds of activity of enterprises, assessment of environmental impact, state ecological expertise.

### Resume

Introduction of the institution of ecological insurance for Kalmykia will be oriented on lowering juridical persons' costs caused by the necessity to allow a claims of third persons regarding damage to the environment as well as acting as one of effective economic tool allowing forming financial reserves both for compensating caused damages and elimination of the results of emergency environmental pollution and for prevention of ecological accidents.

So, study of the system of ecological insurance, analysis of main factors and impact terms, grounding the mechanism of ecological insurance introduction in the region is pressing scientific problem and has significant theoretical and practical interest.

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