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Sustainable business as a tool for stabilizing of economic situation in zones of ecological risk

1. Theoretical aspects of economic stabilization in zones of ecological risk under conditions of transforming economy

When the economy is being transferred to the market relation there appear new elements of mechanism of organization and control of using the natural resources, based upon the knowledge of economic and other laws which express the main characteristics of social and economic processes. Only new economic and ecological approaches to the economic management can reduce the anthropogenic influence on the environmental and get rid of destructive influence of the zones of ecological risk. That is why the main aspect of the zones of ecological risk problem is the mobilization of reserves, usage of economic methods of control for raising of effectiveness of usage of all kinds of resources (material, labor, financial, scientific studies). At this time the main peculiarity is in reorienting of the investment policy with the usage of privileges of bank and credit systems and the budget system, that are addressed to the effective realization of steps dedicated to the lessening of the zones of ecological risk. The key economic factors that can help to pick out and to use effectively all kinds of resources in Ukraine must be as follows: benefits taxation; benefits crediting; privatization, renting; differential payments for usage and pollution of natural resources and services; formation of prices for ecologically pure products or ecologically pure conditions of production; system of ecological insurance; ecological auctioning; creation of a small and medium business; system of ecological deposits; system of economic benefits for attracting the foreign capital; juridical guarantees of economic and ecological relations; tenders; creation and usage of ecological funds.

All these appliances should be put into life through the system of agreements. The system of contracting relations between the business and the regional organs of control gives the last the possibility of influencing on the structure of development of the productive forces in the area, at the same time creating the most favorable conditions for the development of the priority and effective trends of business in this concrete area.

In the market economy the system of the concessional taxation will allow the commodity producers to forecast the results of business and guarantee the long-term investment projects. The aim is to economically stimulate the development of the productive forces, the production of ecologically pure products and to guarantee the standard level of life in the zones of ecological risk. A special attention in the system of general taxation should be given to the ecological taxes, which must be an additional capability of the effective usage of a financial mechanism when resolving ecological problems. Differentiation of tax rates for the using of all kinds of natural resources will stimulate their saving, complex processing of raw materials, utilization of waste and secondary raw materials, and exploiting and using of the alternative means.

The tax levers can be a mechanism to form the extra-budget funds of using the natural resources, based on two kinds of taxes: taxation on the natural resources and the taxation on the quality of environment. The taxation on the preservation of the quality of resources is of some interest under the conditions of relaxing of the zones of ecological risk: water, air, minerals and forests. The merits of the proposed system are that it moves the center that regulates the loading directly into the sphere of consumption and tightly binds the consumer and the producer in the frames of the ready money circulation.

So, the local soviets, on one hand, get the lever of influence on the investments in the field of preserving the nature, and on the other hand, the proper budget and money, that can be used for special financing of those measures.

The working out and introduction of ecological insurance in the zones of ecological risk throw out is of special interest. The insurance plays the important role when solving the problem of compensation for ecological damage. Ecological risk insurance should

take into account the measures providing compensation of damages and losses to the population, economic objects, natural resources that are the result of emergency situation. The responsibility insurance for ecological violations is also important.

Effectiveness of economic levers much depends on legal guarantees of economic and ecological relations within the society. The zones of ecological risk is of international nature and the question of lessening its consequences cannot be resolved when one uses only the standards of state and civil law. International consequences of the zones of ecological risk should be dealt with from the viewpoint of the responsibility within the frames of existing international law.

The monitoring of environment, if it is based on geographic information system, that must be created, will give the possibility to analyze (on the basis of reliable scientific data) the current status of usage of natural resources in the area; to work out, considering specific natural and climatic geographical features of the region, the system of ecological restrictions as to the territory and ecological systems, and also to work out the system of differentiation of the rates of tax privileges connected with (radioactive) pollution. The introduction of the above mentioned mechanism is effective if it is based on a new geographic information technology: geoinformation system should provide the automation of operational subject cartography with the elements of spatial analysis and zoning. The use of geoecological databases can be the basis of the regional geoecological monitoring aimed at the control and optimization of resource requirements for measures connected with consequences of the zones of ecological risk.

2. Ecological marketing as a tool for promotion of sustainable business in zones of ecological risk

Ecological marketing may be viewed as an effective tool for promotion of sustainable business. In this sense we suggest to examine theory of ecological marketing as a system of its five conceptions:

Ecological marketing I (*"ecologically pure" marketing*) – marketing of the traditional goods and services (classic marketing) designed and implemented taking into account existing environment quality standards and pollution norms as the key factors of external marketing environment. In this case the goal of marketing is defined as satisfaction of the common needs and demands by means of such an exchange that fits in maximum manner to the requirements of existing environmental legislation. As an example of such a marketing one can consider the marketing that satisfy requirements of the Business Charter for Sustainable Development, adopted by the International Chamber of Commerce at the 1991 World Industry Conference on Environmental Management. Its following principles have direct connection with ecological marketing I:

6. *Products and services.* To develop and provide products or services that have no undue environmental impact and are safe in their intended use, that are efficient in their consumption of energy and natural resources, and that can be recycled, reused, or disposed of safely.

10. *Precautionary approach.* To modify the manufacture, marketing of use of products or services or the conduct of activities, consistent with scientific and technical understanding, to prevent serious or irreversible environmental degradation.

Ecological marketing II (*marketing of ecological goods and services*) – specific kind of the classic marketing, caused by appearance of ecological needs and demands generated as a result of environment quality aggravation and the rise of public ecological consciousness. A core of this conception of marketing is formed by such the concepts as "ecological need", "ecological demand", "ecological goods", and "ecological services". This marketing conception differs significantly from the previous one: specific (ecological) goods and services appear here and producer must to orient primarily his producing and marketing activities on satisfaction of ecological needs and demands. It is clear, that ecological marketing II itself must to be "ecologically pure", i.e. it is supposed that ecological marketing II inherits all features of ecological marketing I. Extended notion of "ecological safety demand" is a very important point of this conception. It is highest ecological demand, which requires protection of the public vital ecological interests, in first turn protection of the human rights on pure, healthy and favorable for living environment. As an interesting aspect of ecological

marketing II, one can consider the study of the mechanisms forming ecological demands and its dependence from levels of socioeconomic development of the regions (states, macro-, mid- and micro-regions).

Ecological marketing III (*marketing of natural resources and conditions*) – corporative kind of ecological marketing which has to be designed and implemented on behalf of local governments and national governments, who are the juridical owners of natural resources located in their regions and states. As a commodity we define here natural resources and conditions, which may have real and potential commercial significance. We name this marketing “ecological” because all natural resources come to be material components of ecosystems of different spatial levels, and removal or breach them inevitably causes changes in ecosystems and environment. Local governments as the agents of ecological marketing III are interested in ecologically balanced and wise promotion of their natural resources to the consumers – mining companies, land users, tourist firms etc. The final goal of ecological marketing III consists in obtaining of corporative profit and using it for promotion of sustainable development of the region. As an interesting example of such marketing we suggest to consider marketing of ecological quotas (certificates) on emission of pollutants. The last used to be issued by regional or local governments for defined territories (so called the Bubble Policy) and they fix the level of possible (permitted) pollution for specific pollutant. Further, these quotas may be considered as a commodity or as specific “ecological resource” on regional markets of natural resources and conditions.

For instance, in US clean air legislation allows utilities to accumulate credits for keeping air-pollution emission within limits and to sell excess credits. In particular, this gives utilities an incentive to reduce emission of sulphur dioxide; a byproduct of fossil fuel burning that contributes to the formation of acid rain. In 1991, the Chicago Board of Trade voted to create a marketplace where utilities and speculators could buy and sell the right to pollute.

Ecological marketing IV (*marketing of environment protection and biodiversity preservation*) – non-commercial kind of marketing aimed at environment protection and biodiversity preservation as well as at rehabilitation of destroyed ecosystems or its components. The agents of this marketing are national, regional and local governments, public organizations, political parties and public movements. As a commodity in this case we define ecological objects (unique and valuable ecosystems, rare species of flora and fauna, ecologically vulnerable natural complexes and territories) that need protection, restoration and preservation. Potential sponsors and donors, who could fund the corresponding nature preservation programs and project, represent the marketplace here. Ecological marketing IV in organizational sense could be divided on local, regional, national and global. In some cases it can be profitable, for instance in the case, when restored or protected ecological object is in the interests of ecological tourism (national parks, nature reserves, unique natural complexes etc.). In that case all profits they usually use for rehabilitation activities and restoration of ecosystems suffering from tourists.

Ecological marketing V (*marketing of ecological knowledge and technologies*) – a kind of marketing of ideas (by Philip Kotler) related very close with marketing conceptions HIV, because it provides necessary ecological know-how for making marketing activities (in broad sense, including organization of scientific researches aimed at obtaining new ecological knowledge, invention of ecologically safe technologies, analysis and monitoring of ecological/environmental legislation, ecological expertise, audit and consulting). Agents of ecological marketing V are: research institutions, universities, firms specialized on elaboration of ecological know-how, individual (scientists, experts, inventors etc.). As a commodity in that case figures intellectual product – research programs, technologies, projects of nature preservation, ecological expertise and prognoses, curricula and teaching materials. The marketplace of ecological marketing V is forming by agents of ecological marketing HIV (businessmen, national and local governments, public organizations and movements, political parties, universities and individuals).

3. The case study: promotion of sustainable business in coastal region of Ukraine

3.1. Defining zones of ecological risk in coastal region of Ukraine

An inventory of biodiversity of the coastal region of Ukraine was made in course of the project initiated by Institute of Market Problems and Economic-Ecological Studies (Odessa, Ukraine). Solving this task, we met large difficulties. Unlike wetland species structure, which is studied rather well (detailed description of protecting species of flora and fauna in Ukrainian coastal zone was published and has got an international recognition), the geographic borders of the wetlands and delta-liman complexes (there are more than 60 such ecosystems were defined in Ukrainian coastal zone with total area approx. 600 thousand hectares) still are not define precisely and shown on the maps in a very fuzzy and uncertain manner.

Therefore we tried to collect and systematize by administrative units all available cartographic materials on wetlands of Ukrainian coastal zone, in first turn having the ecological risk status:

1. *Odessa oblast:*
 - 1.1. Lake of Kugurlui
 - 1.2. Lake of Kartal
 - 1.3. Kiliyski arm of Danube Delta
 - 1.4. Lake of Sasyk
 - 1.5. Lakes system of Shagany-Alibei-Burnas
 - 1.6. Dniestr-Turunchuk wetland area
 - 1.7. Northern coast of Dniestr Liman
 - 1.8. Western coast of Tiligulsky Liman
2. *Nikolaev oblast:*
 - 2.1. Eastern coast of Tiligulsky Liman
3. *Kherson oblast:*
 - 3.1. Lower Dniepr
 - 3.2. Tendrovski Bay
 - 3.3. Yagorlytski Bay
 - 3.4. Karkinitski Bay
 - 3.5. Dzharylgach Bay
 - 3.6. Eastern part of Sivash Lagoon
4. *Autonomous Republic of Crimea:*
 - 4.1. Central part of Sivash Lagoon
5. *Zaporozhie oblast:*
 - 5.1. Molochni Liman
 - 5.2. Obitochnaya Peninsula and Obitochni Bay
 - 5.3. Lower Berda River, Berdyansk Peninsula and Berdyanski Bay
6. *Donetsk oblast:*
 - 6.1. Belosarayskaya Peninsula and . Belosarayski Bay
 - 6.2. Krivaya Peninsula and Krivoy Bay

3.2. Existing legal base for sustainable business promotion in coastal region of Ukraine

The collected study of the completed and ongoing projects on problems of sustainable development in coastal region of Ukraine was made. For that purpose a set of international programs, projects, conventions and initiatives have been studied through the goals of our project:

- ICZM – Conception of Integrated Coastal Zone Management (in the parts of National Report of Ukraine prepared for GEF Black Sea Environmental Program, 1998).
- Biodiversity Convention, 1992 (in the parts of projects focused on coastal zone of Ukraine).
- Ramsar Convention, 1971 – Convention on wetlands protection (in the parts concerning the coastal areas of Ukraine).

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- Bucharest Convention, 1992 – Convention on protection of the Black Sea from pollution (in the parts of projects designed for coastal areas of Ukraine).
- GEP-BSEP, 1993 – Program on environmental management and protection of the Black Sea (in the parts of projects designed for Ukraine).

Besides these, a set of existing national, regional and local programs aimed at study of land use and environmental problems in coastal zone of Ukraine was searched to understand research priorities and achieved results in that region:

- State Program of Socio-Economic Development of Ukrainian Black Sea Region, 1995-1997.
- Regional programs on socio-economic development of Ukrainian coastal oblasts (Odessa, Nikolaev, Kherson) and Autonomous Republic of Crimea (ARC).
- Program of socio-economic development of Ukrainian Danube Space (southern part of Odessa oblast), 1999.
- Programs on development of resorts and recreational zones of Large Odessa, Southern Coast of Crimea and Azov Sea Coast of Ukraine.
- Municipal program of sustainable development of Odessa City up to 2010.
- Tacis Program "Lower Danube Lakes, Ukraine: Sustainable Restoration and Protection of Habitats and Ecosystems".
- Local governments' programs and plans of natural environment protection and biodiversity preservation in areas of the case studies.

Making the project, we have searched Ukrainian legal documents which regulate land use in coastal region at different administrative-territorial levels, including:

- national land legislation (Land Codex of Ukraine);
- national legislation on natural resources and environment protection;
- national self-government legislation;
- local environmental legislation in areas of the cases studies;
- legal documents regulating a process of regional/spatial planning at local level (Projects and Schemes of Regional Planning for Odessa oblast including Lower Danube area and Belgorod-Dnestrovskiy rayon, General Development Plans designed for Odessa City, coastal towns, settlements and villages).

3.3. Sustainable businesses defined for zones of ecological risk in coastal region of Ukraine

The following kinds of small and medium business were defined as sustainable ones for the zones of ecological risk in coastal region of Ukraine:

- organic farming with the emphasis on irrigated agriculture;
- organic aquaculture with the emphasis on cultivation of endemic estuarial species;
- ecological tourism;
- sport hunting and fishing;
- yachting, surfing and boating;
- recreational activity with emphasis on sea and climatic resorts;
- recreational infrastructure (hotels, motels, parking etc.);
- drinking water production and supply;
- public transportation in resort areas;
- traditional using of natural resources within existing estuarial ecosystems.

In order to test and identify the economic-ecological efficiency of these businesses, some pilot-projects have been arranged in Odessa region (oblast).

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