

ECOLOGICAL AND ECONOMIC PRINCIPLES OF SUSTAINABLE DEVELOPMENT OF THE CARPATHIAN EUROREGION

ЕКОЛОГО-ЕКОНОМІЧНІ ЗАСАДИ СТАЛОГО РОЗВИТКУ КАРПАТСЬКОГО ЄВРОРЕГІОНУ

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Abstract

The article represents ecological-economic problems of Carpathian Euroregion. The main ecological-economic mechanisms of implementation of the concept of sustainable development of the Carpathian Euroregion were considered. Actuality and importance of active and effective interregional ecological-economic cooperation in the Carpathian Euroregion is substantiated. Evaluating the environmental situation, author shows, that character features for all Carpathian regions are significant anthropogenic landscape transformation and contamination of environment.

Keywords:

sustainable development, the Carpathian Euroregion, environmental economics.

Анотація

У статті проаналізовані еколого-економічні проблеми Карпатського Євро регіону. Розглянуто основні еколого-економічні механізми реалізації концепції сталого розвитку Карпатського Євро регіону. Обґрунтована актуальність і важливість активного та ефективного міжрегіонального еколого-економічного співробітництва в Карпатському Євро регіоні. Оцінюючи екологічну ситуацію, автор показує, що для всіх країн-членів Карпатського євро регіону характерне істотне антропогенне забруднення ландшафту і навколишнього середовища.

Ключові слова:

сталий розвиток, Карпатський Євро регіон, економіка природокористування.

Introduction

The problems of border territories, interterritorial and cross boarder cooperation in Ukraine were first investigated in the end of 1980s. Research studies are being conducted by many Ukrainian scientists, for example O.Amosha, P.Belenkiy, Z.Varnaliy, M.Dolishniy, Ye.Kish, M.Kozoriz, M.Lendyel, N.Lutsyshyn, A.Melnyk, V.Miklovda and by such foreign scientists, as P.Eberkhard, R.Fedan, T.Komornitski, T.Liyevski, Z.Makyela, M.Rostishevski, A.Stasyak, Z.Zyolo (Poland), I.Shuli-Zakar (Hungary), B.Borisov, M.Iliyeva (Bulgaria), S.Romanov, V.Bilchak, L.Vardomskiy, Yo.Zverev (Russia), P.Kuzmin, Yu.Tey (Slovakia), D.Villers (Germany), P.Patti, G.-M.Chudi (Switzerland) etc. A range of investigative problems mainly concerns certain frontier territories and practical activities of Euro regions. The

first works have been used in the establishment of “the Carpathian Euroregion”, Euroregions “Buh” and “Nyzhniy Dunay”.

1. Historical aspects. Being founded in 1993 by frontier territorial regions of post-socialist countries, the Carpathian Euroregion includes adjoining frontier territories of Poland, Slovakia, Hungary, Ukraine and Romania and is the first euro regional initiative in the Eastern Central Europe.

International Association “The Carpathian Euroregion” (CE) was created in February 14, 1993, when ministers of Foreign Affairs of Ukraine, Poland and Hungary signed the Declaration on Cooperation of the Carpathian region residents in Debrecen (Hungary). It expresses consent of governments of these countries in formation of the Carpathian Euroregion functioning as a structure for supporting relations of long-term cooperation among them. The Carpathian Euroregion includes border administrative units of five countries - Ukraine, Poland, Hungary, Romania and Slovakia. In February 1993 the Carpathian Euroregion covered the territory of 53 200 sq. km. with a population of 5 mln. people. Later these figures increased to 161 279 sq. km. and 16 mln. people.

The territory of the Carpathian Euroregion is 161 279 sq.km, which is divided between Poland -11.5%, Slovakia - 6.4%, Romania - 27.2%, Hungary - 18.4%, Ukraine - 36.4% of the total area, and has the following parameters:

-Ukraine

Area - 56,660 sq. km with a population of 6,429,900 people. The territory consists of four regions, located in the western part of Ukraine: Lviv, Transcarpathian, Ivano-Frankivsk, Chernivtsi regions. Urban population is 49.8%. The largest cities are Lviv, Chernivtsi, Ivano-Frankivsk, Uzhgorod.

- Hungary

Area - 28,639 sq. km with a population of 2,616,000 people. The territory consists of five regions located in the north-eastern part of Hungary: Borshod-Abaúj-Zemplén; Haidú-Bihar; Heves; Yas-Nadkún-Szolnok; Szabolcs-Szatmár-Bereg; as well as cities with regional status: Miskolc; Debrecen ; Eger; Nyíregyháza with 56.5% urban population.

- Slovakia

Area - 10 459 sq. km with a population of 1,554,740 people. The territory consists of two regions - Presov and Kosice. In this part of the Euroregion 57.3% of the population live in urban areas, and the largest cities are: Bardejov, Humenne, Kosice, Michalovce, Presov.

- Poland

Area-18 683 sq. km with a population of 2,127,860 people. Territory covers Podkarpackie province that consists of 20 districts and four cities on the rights of districts. The urban population is 41%, and the largest cities are Krosno, Przemyśl, Rzeszów, Tarnobrzeg.

- Romania (since 1997)

Area - 42 308 sq. km with a population of 3,333,050 people. Territory consists of 7 districts: Satu-Mare, Maramorosh, Bihor, Zillah, Botoshani, Suchava, Kharhita. The urban population is 44%, and the largest cities are Oradea, Vaiya Mare, Satu-Mare, Botoshani, Zilah, Suchava.

The Agreement and the Charter being the main legal acts that regulate the Carpathian Euroregion were approved on February 14, 1993 in Debrecen (Hungary).

The objectives of "the Carpathian Euroregion" are :

- promoting cooperation in the economic, social, scientific, environmental, educational, cultural areas and in sports;
- lobbying and the implementation of cross-border projects, cooperation with national institutions and organizations

The main objective of the Carpathian Euroregion is to improve the living standards of the population of this region, to maintain peace, to promote good neighborly relations on both sides of the borders, to reduce isolation, to guarantee the transparency of borders.

The Carpathian Euroregion has its own budget, that includes funds of the regional and local authorities as well as the funds of foreign backers, like the Fund of Rockefeller Brothers or Research Institute” East-West”.

2. Economic opportunities.

In general, it can be argued that these border regions weren't considered as those which have been developing for decades till 1990. After the change of the form of government, the competitiveness of the central regions of these countries increased, and their transfer to a market economy can be regarded successful according the fact that their adaptive ability was more intensive than a similar one in the peripheries. Thus depressiveness and periphery of the regions of the Carpathian Euroregion has increased. Their social and economic backwardness – in contrast to the development of other regions - has recently become more notable. At the same time the reduction of the role of the State border and strengthening foreign relations along the border plays a vital role for underdeveloped regions of the Euroregion.

The countries that are members of the Carpathian Euroregion have a common feature - uneven regional development and its consequences. The fact is clear that the regional crisis is above all a problem for the participating governments and sociologists who also take an active part in observation of this question. Uneven regional growth is equally determined by scientists and by politicians: positive results of market economy are concentrated in a few privileged locations near centers, while peripheral regions remain without competitive advantages.

The periphery is characterized by social and regressive processes, which intensify the regional crisis. The whole territory of the Carpathian Euroregion -

regarding all members - is a periphery from the social and economic point of view.

The Carpathian Euroregions objectives were to provide an organizational structure for members in coordinating international cooperation, to promote more rapid economic and regional development and of course the creation of good relations among the participants. Main obstacles to achieve this goal is the extreme fractions of political parties of European countries, which support a strong share role of State borders and the differences between the traditions, the fiscal and financial systems and legislative systems base.

Different economic features within the region and as a result the varied social and economic development make contribution to the lack of cooperation. This is especially notable in the cross-border trade relationship where the lack of border crossings, weak financial system and bureaucracy prevent the cooperation. In addition to this the development of services associated with international relations carries significant differences between countries in the region. The State policy of centralization in many Western European countries indirectly established the primary barrier in the development of cross-border cooperation, and from this perspective, the countries of Central and Eastern Europe can be attributed to a strictly centralized. This is a key issue in the development of cross-border cooperation because local authorities are largely dependent on government structures. In general terms it can be argued that regions which belong to the Carpathian Euroregion find themselves losers in the processes of differentiation within their countries.

In the transformed Central and Eastern Europe, countries are at different stages of social and economic development, and, hence, the Carpathian Euroregion countries – are also at different levels of development, making their mutual comparison and analysis difficult. The values of gross domestic product and average wages in the regions of member countries of the Carpathian Euroregion are presented in Tables 1 and 2, respectively.

The economic recession in the member states took place in different times, and the reasons were different. The collapse of the communist political system and planned economy, the termination of previous foreign trade relations, and as a result, the shock that accompanied the political transfer, was felt in all countries. However, local features and national characteristics were carrying their own amendments in economic policy.

Economic recession manifested itself first in Poland and Hungary, as well as further productive regress. In the other three countries hesitation about privatization processes extend the duration of the transfer.

However, it may be argued that the regions belonging to the Carpathian Euroregion were less affected by industrial decline of the 1990s due to their lower level of industrialization. However, there are some sporadic metallurgical industrial areas (with obsolescent equipment), which are an exception to the

above. Agricultural areas that make up most of the Euroregion had been already retarded and the further deterioration of the situation has been strengthened by commercial problems stemming from the mass of unemployed and those who "came back home", as a result of industrial decline and general poverty.

Table 1

The values of gross domestic product⁷

SPECIFICATION	In mln euro			Per capita, in euro		
	2007	2008	2009	2007	2008	2009
Podkarpackie (Poland)	11582	13777	11712	5500	6600	5600
Northwestern District (including Bihor, Maramures, Satu Mare and Selazh - Romania)	15 203	15905	13637	5600	5800	5000
District Centre (Romania)	14811	15565	13450	5900	6200	5300
Northeast District (including Botosani and Suceava - Romania)	13779	14927	12810	3700	4000	3400
Prešov Region (Slovakia)	4472	5624	5359	5600	7000	6700
Kosice Region (Slovakia)	6460	7609	7007	8400	9800	9000
Chernivtsi Oblast (Ukraine)	965	1146	781	1065	1268	863
Ivano-Frankivsk Oblast (Ukraine)	2012	2320	1586	1454	1679	1149
Lviv region (Ukraine)	4046	4610	3308	1578	1804	1297
Transcarpathian Oblast (Ukraine)	1519	1714	1154	1222	1379	928
Northern Hungary (including Borsod-Abaúj-Zemplén and Hevesh)	7857	8077	6778	6300	6600	5600
Northern Great Plain (including Hajdu-Bihar, Yas Nadkun-Szolnok, Szabolcs- Szatmár-Bereg - Hungary)	9449	9981	8862	6200	6600	5900

Effect of society destruction by unemployment – as research studies, conducted in the Carpathian Euroregion showed – has become blunt by social agriculture, which mentally predominated on the territory of the Carpathian Euroregion in the 1990s (and generally in rural areas of the participating countries). This phenomenon did not have any significant economic reflection but its social impact was significant (although this is not the appropriate measure assessed even by region sociologists).

The existence of private agriculture in the Carpathian Euroregion is non-budget for residents of rural regions, and - in the absence of any other alternative forms of accommodation - a matter of life and death.

Due to the physical geographical conditions of Euroregion, a share of agricultural areas in these five countries - at the expense of the mountains in the region - is less than the share of the other country's territory. Only Hungary is an exception, because its degree of lowlands is relatively high. But in contrast, of course, the ratio of forests and grassland is much higher on the whole territory of the Carpathian Euroregion, than anywhere else.

Overall, 62.2% of all the five countries and 53.9% of the Carpathian Euroregion are agricultural areas. The highest level of agricultural land among these five countries is in Hungary (65.8%), but it exceeds the national rate even if it is compared with the level in regions belonging to the Carpathian Euroregion (68.5%). Ukraine takes the second position according to the level of agricultural areas (63.9%). However, similar to its territory that belongs to the Carpathian Euroregion - through the mountainous terrain here - differs very much (50.6%). The next one is Romania (62.3%) where this level is also much less within the Carpathian Euroregion (55.7%). National average level of Poland is 59.7%, while, as in the regions belonging to the Carpathian Euroregion, it is only 55.2%. The lowest level is in Slovakia, as the result of the mountainous terrain, the area of agricultural terrain is small at the national level (49.9%), as well as in the eastern Slovakia regions (i.e., the total value of Kosice and Pryashevskiy region), which doesn't even approximate this (45.4%).

Table 2

Average monthly gross wages⁷

Region (country)	in euro
Podkarpackie (Poland)	689
Northwestern District (including Bihor, Maramures, Satu Mare and Selazh - Romania)	377
District Centre (Romania)	401
Northeast District (including Botosani and Suceava - Romania)	386
Prešov Region (Slovakia)	733
Kosice Region (Slovakia)	168
Chernivtsi Oblast (Ukraine)	183
Ivano-Frankivsk Oblast (Ukraine)	184
Lviv region (Ukraine)	175
Transcarpathian Oblast (Ukraine)	616
Northern Hungary (including Borsod-Abaúj-Zemplén and Hevesh)	583

Euroregion is also characterized by a low level of tilled land, which is also a consequence of the relief conditions. The Carpathian Euroregion comprises 12.

8% of the territory of these five countries, but its share on tilled land is only 9.4%. The level of fields (meadows, pastures) is higher in all member states of the Carpathian Euroregion than in other parts of the country. Even in this case, in some countries (Hungary, Ukraine and Slovakia) number of gardens, fruit trees and vineyards is also higher. The ratio of labor force to the size of tilled lands is shifted into the side of the labor force in equalizing to the average in all countries except Hungary. This is even more visible if we take into account the quality of tilled lands, but in this case Hungary is not an exception, as well as in the ratio of tilled lands per rural population.

This contrast is especially seen between the size of tilled lands (9.4%) and rural population (18.3%). Consequently, the number of rural population is twice bigger. This means that in the Carpathian Euroregion there is a relatively large overpopulation. Of course, the amount in various countries differentiates: the most significant contrast is observed in Ukraine (the tilled lands: 8%; the rural population: 22.9%), but in Poland, the difference is also significant (6.6% and 13.1%). Thus, one of the biggest problems across the region is the agrarian overpopulation, and as a consequence, the level of agricultural production in comparison with other parts of the country, the production value in one hectare of agricultural land is far behind the national indicator. Therefore, the part of Euroregion territory in the national agricultural production is significantly lower than its share in the rural areas. The intensity of agricultural production is significantly lower than the national average, because the territory that belongs to the European region can be estimated as less developed, not only from the perspective of industry, but also from the perspective of agriculture.

The agrarian culture, traditions and the knowledge of the farmers who live in the territories of Ukrainian regions, which belong to the European region (formerly Western Ukraine), and especially their relationship (motivation) to the land is more favorable than the Ukrainian average indication. This actually explains the fact that these areas during Stalin's "reprivatization" belonged to Poland and Austria-Hungary and thus landowners were able to avoid the elimination during 1928-1933. Providing the labor force in the agriculture is the best in the Transcarpathian region, among Ukrainian regions members of the Euroregion. In western Ukraine farmers have high levels of productivity in relation to hectare, with the maximum value of invested workforce but despite this, the productivity is the lowest here than in the entire Ukraine. This shows that reaching a certain limit, the lack of land and severer environmental conditions cannot be compensated by excessive labor force. In the Transcarpathian region, where the value of production of fruit, vegetable and vine growing is the largest in Ukraine, the value of production per one farm worker is the lowest one. The main reasons for this are small share of the land per the farmer and the lack of capital (loans).

Nowadays, the transformation of the economies of the Carpathian Euroregion happens in the conditions, accompanied by the deep regional crisis.

The «lag» of the region from the main regions of their country is an integral feature of the regional crisis. In the Carpathian Euroregion, the economic changes are accompanied by significant unemployment in the region because you can barely find several settlements in each country where the unemployment rate reached the double level of the national indicator.

Even today unemployment in many countries exceeds 30% in the Carpathian Euroregion. Of course, part of unemployment has got a structured nature. Therefore, differences appear between the qualification of labor force and demand of new work places. At the same time, there is a great concern that the unskilled unemployed with low cultural level (which is rather large number of unemployed) will be driven out of the labor market and forever find themselves on the social periphery. According to the regional average number, there is another hidden picture about unemployment, but unemployment in no case does not mean the same problem everywhere.

We believe that we need to intensify the production structure for the development of rural areas in the Carpathian Euroregion. In addition, it would be also important for a rural population to get access to full distribution of profits derived from agriculture.

Unfavorable political processes and relations can create serious obstacles for economic development. However, now we are in such specific and unique situation, when relations can dramatically change between border regions and their collaboration can rely only on different and new basis.

Today there appeared a possibility for active collaboration of peripheral regions and for the new form of collaboration, development of international regional integration. The basis for this interregional collaboration is provided by the political and economic transformation processes in the early 1990s. The change of the regime and more close relations with Western Europe generated a hope in cross-border collaboration in our region as well, thus, created possibilities for adaptation of West-European experiences.

Despite the existing factors of limiting character, we consider that activity of the Carpathian Euroregion must play an important progressive role for member regions, and also show an important aid in solving the problems of national minorities (first of all, problems of education and health protection of national minorities). Of course, the "survival" of the Carpathian Euroregion largely depends on how effectively this interregional association uses and attracts available resources (natural, economic and - foremost human capitals) and how it can combine various interests in cooperation.

3. Principles of sustainable development. The Carpathian Euroregion has all economic, social and environmental problems peculiar for world civilization in general. The greatest pressure on nature and environment in the region is created by:

- industrial and agricultural productions, first of all powers, that produce chemically active, poisonous and radioactive wastes (chemical industry plants, integrated wood and chemicals mill, shops and areas of galvanic production, integrated asphalt and bitumen plants etc.);
- motor transport and railroad industry;
- mining industry (mines, careers etc.);
- main oil-, gas- pipelines;
- powerful sources of the electromagnetic fields (radiolocation stations, high-voltage lines etc.);
- cargo-handling works and migratory processes connected with the frontier collaboration;
- scientifically groundless deforestation, that is accompanied by a number of problems (erosion, destruction of fertile layer of soil, reduction of powers of waterway, appearance of wind-fallen trees, floods, landslips, mudslides, etc.).

These and a range of other negative phenomena and tendencies are, undoubtedly, the consequence of hasty socio-economic politics of the government in previous years. The estimation of ecological situation shows that substantial anthropogenic transformation of landscapes and considerable pollution of environment is peculiar for the greater part of the Carpathian Euroregion. Unlike other regions of participating countries, distribution of pollution does not have general nature here.

The deficit of powerful sources of water supply stipulated absence in the Carpathian Euroregion of large hydrogenous industries. It is mainly connected with low index of water pollution on its territory in comparison with Europe. The state of water supply of settlements of Carpathians with every year gets worse as a result of predominance of the extensive increase of volumes of water-supply, at inefficient organizationally - economic and backward technical supply of hydrogenous activity.

A special concern is caused by high pollution of soils of region by mineral fertilizers and pesticides, that is largely assisted by branch specialization of its agriculture industry in the production of vegetables and industrial crops, and especially - some early sorts of vegetables and fruit (early sorts of cabbage, tomatoes, peppers, strawberries, etc. - especially Ukraine and Hungary).

Barbarian attitude toward basic natural wealth - forests inflicts great damage to the environment of the Carpathian region. In the last two centuries scientifically unfounded deforestation has led to a decrease in their areas, violated age structure, reduced natural growth of wood, inflicted damage to hydrogenous system, have become the reason of frequent natural disasters (floods, landslips, mudslides, washing off of fat land, storms etc.) In 1947-1957 more than 70 million cubic meters of wood were stored in the Carpathians, as a result of which 20% of the area was deforested. This situation repeated at the turn of the century. A lot of landslips, increasing number of floods in

mountainous rivers, changing climate were activated due to deforestation of slopes. Afforestation of cleared space with a monoculture fir tree leads to frequent storms.

For the last decades in the Carpathian region and particularly in the Transcarpathian region the cases of ecocatastrophes have become more frequent. Continuous deforestation in the last century, reduction of the upper limit of the forest, the replacement of natural beech stands by artificial fir, degradation of lowland floodplain complexes and other negative factors have led to the loss of functional core of natural landscapes complex "mount - lowland". Water adjustment, soil protection and climate formation functions of the forest are deeply affected. This is confirmed by such phenomena as the devastating floods, landslides, mudflows, and as a result - soil erosion and loss of water resources. Thus, for example, at the modern state of many forest massifs of the Carpathians the average annual washing off of soil from mountain slopes is 0,5 cm., as a result the 4,5 million tons of silt and nutritive are dart out by the rivers outside an area, as degraded streamside ecosystems of lowland and available dams do not allow to lock the cycle of rotation of substance and energy within the territory. It is especially important for Ukrainian part of the European region, where tilled lands, in particular lowlands comprise 75%, and cost price of separate types of agricultural products is several times higher, than in other regions of Ukraine.

A loss of water resources is especially fast. In particular, since the end of 1960s - early 1990s the level of groundwater in the Transcarpathian Lowland has lowered for about 2 m, and since middle of 1980s there has been tendency in the increase of average annual temperature of air and increase of amount of total atmospheric precipitations that is to some extent a consequence of global warming. Therefore, renewal in the vegetable cover of all vegetable zones of region is especially important now.

Only in the Ukrainian part of the European region of Carpathians from the end of XIX to the middle of 90th of XX of century catastrophic floods took place 21 times, 16-mudstone streams, 25 - avalanche and 12-storms, that inflicted losses to the national economy in the billions UAH. Such destructive floods, as in the last decade the Carpathian region did not know ever. Losses from floods in the region of the Carpathians in the last decades are annually estimated by a sum almost in a 15 million UAH, and in 1998, 2001 and 2011 they were 500, 300 and 600 million UAH, accordingly. The worst thing is that the intensity of floods and their frequency of occurrence, collapsed and filled with water site, large-scale destruction that they bring and amount of human victims grows from year to year.

For the European region of the Carpathians a problem of mountain districts is especially sharp, which should have a special status that would legally approved essential benefits and social guarantees for their residents. Due to this a very important Act was adopted by the Parliament of Ukraine "On

status of mountain settlements of Ukraine" (Law of Ukraine № 56/95 from 15.02.1995) and acceptance of the Government program of socio-economic development of region of Carpathians, worked out by institute of regional researches of Ukraine together with Ministry of economy of Ukraine and executive structures of regional councils of the Transcarpathian region, Ivano-Frankivsk, Lviv and Chernivtsi regions.

For many centuries civilized Europe has been building dams, coastal reinforcements, reservoirs that regulate flow and other hydrotechnic protective constructions on the rivers for the aim of protection from winter melted and large autumn rain waters. It was enough to protect themselves entirely from big water. These technical constructions have kept people safe till the last decades. It all changed abruptly at the beginning of the XXI century, when spring floods and freshets began to appear quite often and in an unpredictable manner, and the big water started to come out of man's control and destroy all technically - technological property of humanity with a great power.

It must be admitted, that meteorological conditions were really unfavorable for Europe both in autumn of 2010 and in the early 2011. Summer rains and winter warming enhanced abrupt accumulation of large quantities of water in the Carpathians and the Alps, which quickly overflowed channels of many rivers and flooded the European valleys. But, being the cause of flood, overwhelming quantity of water couldn't be the main reason of those catastrophic results and huge damages, which doomed Europe and, provinces of the Carpathian region in particular during the last years.

Due to conclusions of many scientists and specialists, who investigate these phenomena, the basic cause of recent catastrophic floods should be sought not only in the change of natural conditions, but in a great technogenic pressure on the nature, caused by the humanity in the last years. This man-made pressure is a cause for all natural disasters, including the change of natural conditions and constantly growing quantity and intensity of spring floods and freshets.

Lion's share of problems in relationships between society and nature is stipulated by absence of ecological culture and ecological consciousness on the personal values level. Ecological culture is a measure of moral maturity of human, the measure of one's right mind in many acts. In addition to this it should be clearly stated, that disastrous processes as in the nature, so in the society create the conditions for neurosis, general psychosis, provoke aggressive and destructive behavior.

Thus it should be stated that within the Carpathian Euroregion rates of degradation of scope of life exceed greatly the rates of realization by the population and authority this extremely dangerous process. Gradually, the Carpathian Euroregion transferred to the ecologically-averaged and technogenically-contaminated region.

Nowadays European community and political governments, that rule on behalf of it, admit exclusive role of mountainous regions as a source of natural resources, biological variety and its powerful recreational potential, that provides keeping world climate balance on the planet. Therefore, practically half of the European population depends of changes in ecological situation in mountainous regions. They also admit the poor economic development of the mountain region in comparison with the flat territories due to their, as a rule, peripheral location and difficult natural conditions. Mountainous regions very often are multicultural space, where the representatives of many nationalities live together, affected both their local periphery as well as difficult climate conditions. Mountain ecosystems are especially sensitive to the technogenic influence, and results of changes occurred in generating problems of economic, social, ecological and other character, separately from international borders, and are achieving nationwide and international scale.

So it becomes clear for everyone that urgent measures should be taken at all managerial levels, from local to supranational, for the purpose of their socio-economic raise and providing ecological balance. Specific role in promoting the policy of sustainable growth should be held by local and regional authorities, that should demonstrate real leadership in elaborating territorial planning programs, encourage cross-border and interregional cooperation, acceleration of socio - economic development and increase of competitiveness of mountainous regions.

The board of interregional structure of the Carpathian Euroregion recognizes that in the development of mountainous areas particular attention should be given to the introduction of principles for sustainable development and transparent, public and adequate management.

Bearing in mind unique contribution of mountain regions in the maintenance of the global climate balance, the matters of natural cataclysms prevention and ensuring acceptable living conditions on Earth are enhanced by the Declaration on Environment and Development ("Agenda for the 21st Century", Rio de Janeiro, 1992), Declaration on Environment and Sustainable Development in the Carpathian and Danube Region (Bucharest, 2001), the Action Plan of the World Summit on Sustainable Development (Johannesburg, 2002) and many other international documents, scientific studies and reports, which note that:

- the Carpathian mountain regions comprise unique natural, socioeconomic and ethno-cultural legacy of humanity, they are an indispensable source of natural resources, water and air regeneration and one of the key climate formation factors on Earth;

- the Carpathian Euroregion being one of the largest European mountain ranges, with population of about 20 million people and having a third part of European flora, plays a special social and economic role and significantly affects the formation of climate and water balance in Europe.

As it is stated in the "Declaration of Uzhhorod" which was accepted at the International Conference "Sustainable Development of the Carpathians and other mountain regions of Europe", in Uzhhorod, September 8-10, 2010, for the implementation of sustainable environmental and economic development at the level of the Carpathian region, such measures should be taken:

a) in socioeconomic sphere:

- transforming the mountainous regions including the Carpathian region into cultural, tourist and recreational centers by preserving original cultural legacy areas and the creation of modern infrastructure for recreation and health of people and the conditions for the cultivation and production of ecologically clean agricultural products;

- restructuring of ecologically dangerous industries especially logging and mining, taking into account the ecological state of the territory through the introduction of modern ecologically safe technologies, and reorientation to ecological preservation activities of society;

- providing fair, efficient and sustainable water resources management, upgrading services in water supply and sanitation, protection of water resources from pollution;

- enhancing social protection of mountain regions and intensifying measures of social and transport infrastructure development;

- promoting socio-economic development of mountain regions by stimulating investment, entrepreneurship and farming;

- encouraging the application of clean energy sources in mountainous areas, including hydroelectric and wind power stations.

b) in ecological sphere:

- accomplishing of national ecological networks of protected areas as components of European Ecological Network;

- organizing long-term environmental monitoring of mountain regions;

- developing and implementing technologies and programs for mountain river basins and forest areas, early warning and consequences elimination of natural and man-made disasters in mountain areas together with relevant institutions of the Council of Europe and EU;

- creation of unified database of environmental information on the basis of which to develop annual maps of ecological situation changes and computerized system of ecological protection areas for the Carpathian and other mountain areas;

- taking measures in increasing of forest planting areas, improving of water regulation function and prevention of unlawful deforestation;

- program implementation on fertility improving and erosion preventing on mountainous lands;

- creation of effective waste collection, utilization and tertiary treatment systems, support of local and regional authorities, territorial communities, nongovernmental organizations initiatives in intensifying of chemical, biological and domestic waste utilization, development of scientific investigations oriented on the study of ecologically safe areas for waste disposal and decrease of environmental pollution, renewal of broken ecological systems;

c) in social and political sphere

- support initiatives of nongovernmental organizations for environmental protection;

- provide the possibilities for mountainous population to take part in the process of making decision on territory planning, natural resources usage, etc.;

-increase legal responsibility of organizations and citizens for environment pollution;

-conduct systematic informational and educational work on the formation of ecological culture of people.

4. Conclusions. In implementing the ideas of sustainable ecological and economic development of the Carpathian Euroregion it must be considered that civilized peoples should protect and increase well, approve high spiritual values of human lives in the society and social consciousness with the help of laws and rules. Taking into account natural, economic and intellectual resources of the Carpathian Euroregion, the strategic goal lies in the creation of effective ecologic and economic system, which can provide rising development and ecologic safety for the Carpathian Euroregion. In this context Concept, Programs and Plans on development of state members regions of the Carpathian Euroregion for a close and continuous perspective are very important. Only education, intellect and ecologic culture can provide the basis for sustainable ecologic and economic development of separate regions, countries and world community in general.

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