

IMPLEMENTATION OF CARPATHIAN CONVENTION STANDARDS ON THE NORTHERN BUKOVINA TERRITORY

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KEYWORDS: Northern Bukovina, sustainable development, Carpathian Convention, system approach, biodiversity preservation, Ukrainian-Romanian cooperation.

ABSTRACT

The current paper contemplates the sustainable development of the implementation standards that are reflected in the territory of Northern Bukovina on the basis of the Carpathian Convention principles. In this region the conducted work concerned the implementation of ecological practices for forest, agricultural and water farms on the general watershed-ecosystem basis, and also the achievement of a balanced territorial and functional

organization in all sectors of environmental management with special care on the environmental standards for the applied pressures on the natural ecosystems. It is shown, that the result would have positive synergistic effect for a balanced development of the Carpathian region if the protective measures of nature had been carried out synchronously with the help of ecologists from Romania within the territory of Southern Bukovina.

REZUMAT: Aplicarea prevederilor Convenției Carpatice pe teritoriul Bucovinei de Nord.

Lucrarea reflectă situația aplicării standardelor de dezvoltare durabilă pe teritoriul Bucovinei de Nord, pe baza principiilor Convenției Carpatice. În această regiune se desfășoară o serie de activități care își propun aducerea la un numitor comun a regimurilor ecologice de funcționare a unităților forestiere, agricole și piscicole din cadrul sistemului ecologic al bazinului hidrografic unic, precum și realizarea unei organizări teritoriale și funcționale

echilibrate în toate sectoarele exploatarei naturii, în condițiile respectării normelor ecologice de reglementare a presiunii exercitate asupra ecosistemelor naturale. Se demonstrează faptul că rezultatele obținute ar fi contribuit în mod sinergetic la dezvoltarea echilibrată a Regiunii Carpatice, dacă măsurile de protecție a naturii s-ar fi aplicat sincron, împreună cu ecologii din România pe teritoriul Bucovinei de Sud.

RÉSUMÉ: La mise en application des Normes de la Convention des carpatés sur le territoire de la Bucovine du Nord.

On a éclairci l'état de la mise en application des standards du développement durable sur le territoire de la Bucovine du Nord qui s'appuie sur les principes de la convention des Carpatés. On travaille dans la région sur la coordination des régimes écologiques de l'exploitation forestière, agricole et aquacole sur une base commune comprenant l'écosystème et l'accumulation d'eau ainsi que les résultats de l'organisation territoriale équilibrée et fonctionnelle dans

tous les secteurs d'utilisation des ressources naturelles en respectant les normes écologiques de l'ajustement des charges sur les écosystèmes naturels. Nous prouvons que le résultat aurait un effet positif synergique dans le développement de la région des Carpatés, si les mesures de protection de la nature s'accomplissaient de manière synchrone avec les écologues roumains sur le territoire de la Bucovine du Nord.

INTRODUCTION

Obstacles for norms input and sustainable development standards of Northern Bukovina are a complex of environmental resource problems caused by the complexity of natural productive resources management—both accompanying threats and lack of appropriate resource providing the action programs. Natural threats for the populations' everyday activity and ecosystems become more active in the region: high flow regime of waters, soils changes and windbreaks in a forest stand, seismic influences (Solodky, 2003; Concept, 1997; The Basic Principles of Strategy, 2011). There are demanded effective actions for the stabilization of all environmental conditions, and for the improvement of the natural resources management. Due to overwhelming social, economic and ecological inconsistencies, we proposed to standardize principles of natural resources management, Northern Bukovina thus

MATERIAL AND METHODS

For the achievement of the Carpathian Convention objectives the basic principles of internal national and cross-border cooperation are defined by experts: a) principles of prevention and caution; b) the principle “the pollutant pays”; c) society participation and the involvement of the interested organizations; d) transboundary cooperation; e) the integrated planning of land and water resources management; f) program approach; g) ecosystem approach (Concept of Ecological Rationing, 1997). Strategy of the Carpathian convention in the territory of Northern Bukovina realize by following directions: integrated approach to land resources management; preservation and continuous use of biological and landscape variety; spatial planning; the continuous and integrated water resources

introduces standards of the balanced development on the basis of the principles of the Framework Convention regarding protection and a sustainable development of the Carpathians (further – the Carpathian Convention) (Furdychko, 2011; Solodky, 2009; Furdychko, 2009; Concept of Ecological Rationing, 1997; The National Plan, 2011). The Carpathian convention plays an outstanding role as the multilateral agreement between Romania, Poland, the Czech Republic, Slovakia, Serbia, Hungary and Ukraine, concerning concentration of joint efforts for preservation, renewal and rational use of natural resources of the Carpathian region of Europe.

Based on the Carpathian convention principles, theoretical bases and the action plans to realize its tasks concerning the introduction of norms and standards of a sustainable development of Northern Bukovina are stated.

and river basins management; constant agriculture and forestry; continuous tourism; an information estimation system about a condition of natural environment, monitoring and early prevention; society participation (Lavrov, 2006; The National Plan, 2011; Solodky, 2012).

According to the specified principles and directions, program and system approaches, a scientific problem is investigated by the algorithm: “principles (tasks) of the Carpathian convention” → “legislative-normatively regulatory base” → “directions of tasks realization of the Carpathian Convention” → “mechanisms of tasks realization” → “legislative, resource or organizational obstacles of tasks realization”.

RESULTS AND DISCUSSION

For a number of years (1969, 1998, 2008, 2010), as a result of an intensive precipitation in the Carpathian region, on the river basins of Dniester, Prut and Siret, there were recorded catastrophic water levels,

which led to underfloodings and floodings of the Lviv, Ivano-Frankivsk, Chernivtsi, Zakarpattia, Ternopil, Hmelntsky, Vinnytsia regions, and also Romania and Moldova (Figs. 1-3).



Figure 1: Schematic map of territories where catastrophic floods are shown (blue).



Figure 2: Shift of plastic type of 7.6 hectares (natural landmark Foshky Putyla region, Chernivtsi area, Ukraine, 2008).



Figure 3: Result of destructive action of a flood on the river Cheremosh (Yablunytsia village, Putyla region, Chernivtsi area, 2010).

For the environmental resource problems a solution of the balance development norms according to Carpathian Convention principles is the sustainable development of the mountain and foothill region on the Chernivtsi territory.

According to the complexity of task solution of legislative and normatively base implementation of the Carpathian Convention, there is a primary plan of actions: the Laws of Ukraine regarding ratification of the Carpathian Convention and the Protocol of biovariety to it, Resolutions of the Cabinet of Ministers about approval of the Carpathian Convention Implementation Strategy, and also Protocols of the Parties of the Carpathian Convention about continuous forest management and continuous tourism (Golubets, 2000; Framework Convention Strategy, 2007; Lavrov, 2006). It offers the chance to work productively over the directions to achieve the Carpathian

Convention principles: to improve an ecological situation in the region by controlling the subjects activity of legislation requirements about environment protection; in order to provide the balanced development of productive forces of the region, by taking into account ecological components, intersectoral harmonization of the plans of actions, achievement of the integrated development of mountain and premountain areas; to improve environmental protection by introduction of the ecological standards of anthropogenous loads regulation of ecosystems, decrease of economic influence on environmental risks development.

Developings of bases of the balanced environmental management on the basis of the Carpathian Convention principles realized behind the main directions: scientific and methodical principles, creation of transparent harmonization conditions of economic and ecological approaches,

resource and nature protection strategy. Social and economic features and prospects of the region development, and also actions for the realization of certain tasks are created in the comprehensive program "Bukovina Carpathians". Here, the specified solutions of the problems which hinder harmonizations of social, economic and ecological aspects of a sustainable development are concerned with the preservation of biological and landscape variety, optimization of the nature reserve fund, formation of an eco-network and transition to the watershed and landscape principles of environmental management, etc. The implementation to the provisions of the comprehensive program "Bukovina Carpathians" provides the chance to increase efficiency of environmental management, ecological safety and environmental protection at the expense of introductions towards new methods, technologies, norms of the effective and balanced management, modern forms of control, coordination and regulation of actions, attraction of investments, mechanisms of stimulation of transition to elements of a sustainable development; to introduce nature protection elements in system of silvicultural actions, protection and preservation of the forests, forest exploitation; to provide balanced use of water resources and progressive methods of engineering and biotic protection of waters, soils, coast of the rivers; to create conditions for an intensification of the recreational industry development, the international, "green" and extreme tourism.

Harmonization of departmental subprogrammes of some sectors of economy and environmental protection is carried out according to the principles of continuous environmental management by landscape and watershed principle within certain river basins. Important links of such systems of the coordinated cooperation is ensuring transparent and parity dialogue between the

parties of the society relations, including the region population, and also reliable feedback. Feedback is necessary for expeditious tracking of an objects' condition of application of administrative decisions, results of concrete measures and expeditious entering of necessary amendments into processes management, especially in case of emergency manifestations of cataclysms (Golubets, 2000; Framework Convention Strategy, 2007). The mechanism of tasks a realization of the Carpathian Convention takes root on the basis of the thematic plans of actions after the key, problem directions, which are in coordination between leading institutions. According to operating international, national and regional strategies, the developed subprogrammes and offers concerns providing intersectoral coordinated, standard, and their transparent realization on the principles of a sustainable development within certain landscape ecosystems of river basins. Regional programs of continuous usage of land, water, forest resources etc. and also volumes of resource and material requirements and institutional support of the planned actions are created on the basis of the coordinated plans of actions. The priority determined ecologization of environment usage management, development of structural elements of econetworks and biodiversity preservation regarding creation of national natural parks and objects of natural reserve fund, introduction of nature protective technologies, etc. (Golubets, 2000; Framework Convention Strategy, 2007; Furdychko, 2011; Solodky, 2009; Furdychko, 2009; Framework Convention, 2009; Solodky, 2010). The principles of the Ukrainian-Romanian cooperation in the sphere of implementation of the Carpathian convention in Bukovina Carpathians and Precarpathians are created with usage of the balanced development experience of Chernivtsi region (Fig. 4).

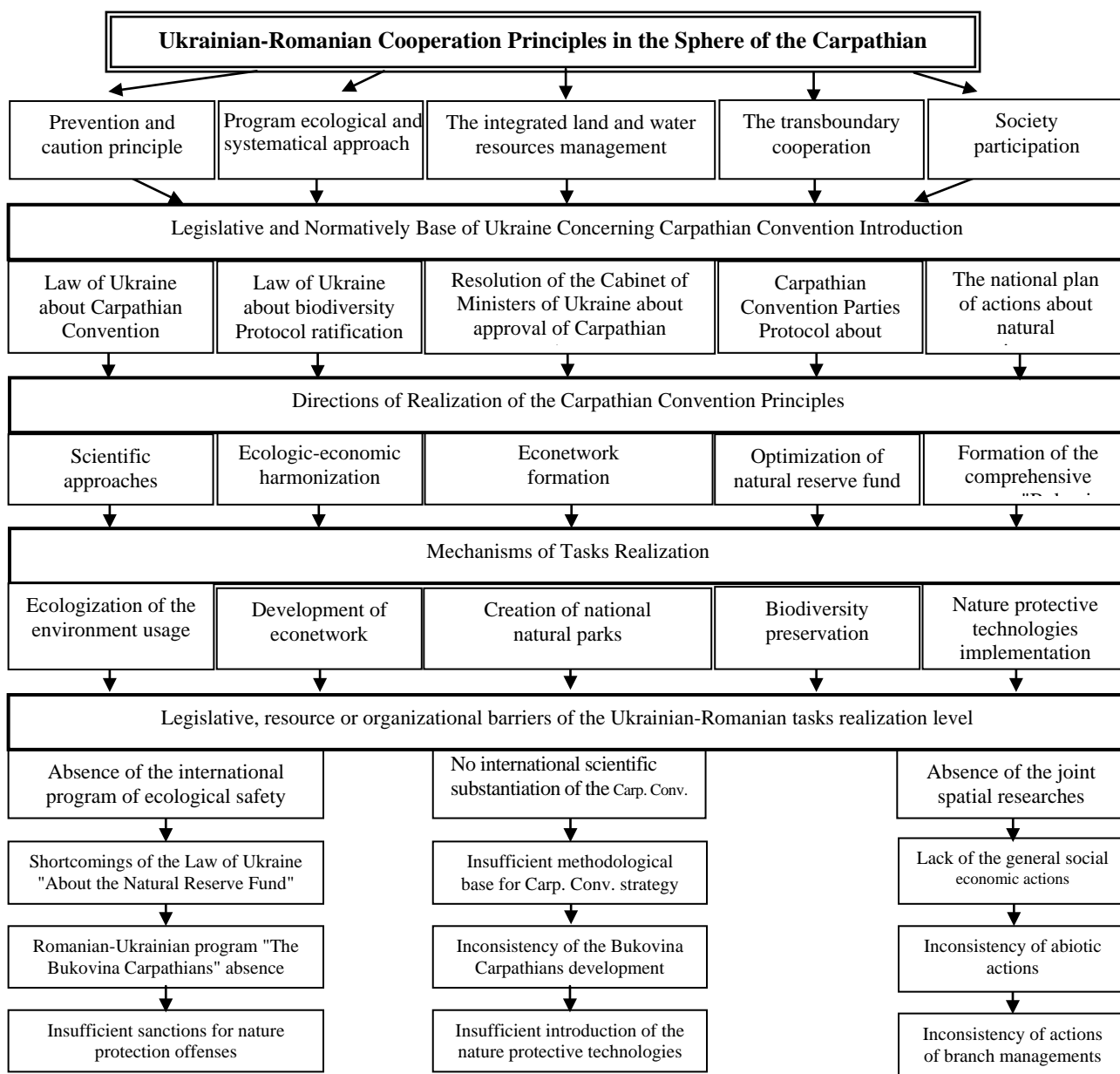


Figure 4: Realization Methodology of the Ukrainian-Romanian cooperation in the sphere of implementation of the Carpathian Convention: legislative regulatory base, resource and organizational support, the directions, mechanisms and barriers of the activity.

For the overcoming of legislative, resource and organizational barriers of the Carpathian Convention tasks realization, it is offered to adjust harmonization mechanisms of existing and perspective target subprogrammes of different aspiration and realization levels, having provided thus a combination of all forms of the state and society management and control. Offers on the approval of the International program of the Carpathians ecological safety are developed, and directed to the corresponding ideas of modifications made to Laws of Ukraine "About Nature and Reserve Fund", "About eco-network Formation". Within the general base of system approach and the coordinated institutional maintenance of implementation of the program an intersector coordination of departmental plan is carried out and the system of interactions at levels of preventive, planned, emergency and perspective actions are developed.

All actions related with the input of the balanced environmental management concerning realization of the Ukrainian-Romanian cooperation in the sphere of Carpathian Convention implementation should be carried out systematically, transparent with involvement of the interested subjects of the society relations.

CONCLUSIONS

The introduction of the balanced development standards of Northern Bukovina on the basis of the Carpathian Convention principles, creates the possibility to applicate a systems approach to the solution of the social, economic and ecological purposes in the region. At the same time tasks of reorientation of an economic complex from the resource dominant which have been created in the conditions of anthropocentrism, are realized on the principles of the biospheric that focused continuous on environmental management. As a result, in the region, work is conducted for endorsement of intersector ecological modes coordination of

For the solution of contradictions in the changing relations between subjects of environmental management, development of a national econetwork, development of territories and objects of nature and reserve fund, implementation of the general projects which are directed on creation of conditions of appropriate support of nature protection and other valuable economic objects and also the corresponding amendments to normatively legal documents at interstate level and the Carpathian Convention Secretariat are introduced. First of all it concerns the introduction towards the ecosystem approach in the forestry which is now one of the most important ways of preservation of the natural mountain and premountain ecosystems integrity, which are capable of carrying out a role of climate regulation and to resist catastrophic floods and shifts – which are a serious threat of ecological safety of the Carpathian region as forest ecosystems provide dynamic balance of environment.

For the development of bases of the international scientific justification of the Carpathian Convention implementation components on definite sites and territories of the Bukovina Carpathians it is necessary to define leading scientific institutions of Ukraine and Romania.

maintaining forest, agricultural and water farms at the general watershed and ecosystem base, and also the achievement of the balanced territorial and functional organization in all sectors of environmental management with observance of environmental standards of loads regulation of natural ecosystems. The result would have positive synergistic effects for a sustainable development of the Carpathian region, if conditions have been created for the performance of natures' actions of protection in harmony with ecologists of Romania, in the territory of the Southern Bukovina.

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