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CARPATHIAN ECOLOGICAL NETWORK: INTERNATIONAL LEGAL BASIS AND UKRAINIAN EXPERIENCE

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Abstract. The article analyzes the importance of the Framework Convention on the Protection and Sustainable Development of the Carpathians of 2003 (Carpathian Convention). Carpathian Convention created favourable conditions for the conservation of landscapes and biological diversity of mountain ecosystems of the Carpathian region. Carpathian Convention is a framework instrument, in other words, it determines the general principles concerning the solution of environmental, social and economic problems of the region. The Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Framework Convention on the Protection and Sustainable Development of the Carpathians has been analyzed.

The advantages of international cooperation of the countries of the Carpathian region in achieving a common comprehensive result – conservation of biodiversity and improvement of social and economic level of the region and its inhabitants on the grounds of sustainable development have been defined. Carpathian Convention coordinates the economic needs with the social and environmental protection, promotes the conservation of the unique and authentic cultural and natural heritage of the Carpathian ecoregion for present and future generations.

Framework Convention on the Protection and Sustainable Development of the Carpathians provides the creation of the Carpathian ecological network as a type of ecological networks at the sub-regional level, which is a part of the Pan-European ecological network. Ukraine consistently follows the bilateral and multilateral agreements, concluded with neighboring countries, concerning the protection of the environment and is involved in the creation of cross-border elements of the national ecological network.

The peculiarities of the Carpathian network of protected areas have been considered. The Carpathian network of protected areas is a special form of international cooperation in environmental protection, which consists in determining by the Conference of the Parties to the Carpathian Convention the list of protected areas and in approving of regulations about them. The Conference of the Parties to the Carpathian Convention encourages the administrations of these protected areas to participate actively in international cooperation and exchange of experience in the field of the conservation of the unique biological and landscape diversity, and to reduce the negative impact on the environment of the region of the Ukrainian Carpathians.

The author proves that the Carpathian Convention, except the traditional approaches concerning the protection of separate areas and species, recognizes the necessity of a broader approach to the conservation of nature. Parties to the Carpathian Convention are obliged to improve the conservation and sustainable management on the areas that are outside of protected areas, with the help of the ecosystem approach. Such an ecosystem approach to the sustainable management is applied to the spatial planning, integrated water management, agriculture, forestry, transport, infrastructure, industry, energy, tourism and cultural heritage conservation. Herewith, the interests of environmental protection shall be taken into account during the development and implementation of the economic and social policies.

Keywords: Carpathian Convention, Carpathian ecological network, protected area, the Carpathian network of protected areas, sustainable development, national and ecological network.

1. INTRODUCTION

Carpathian ecological region is included by WWF in the list of the most outstanding natural regions of the world (WWF Global 200). The unique of mountain ecosystems of the Carpathians with rich forest flora, conservation of certain areas of virgin forests of the Transcarpathian region and endemic and vestigial species of animals and plants which are included in the Red and Green Book of Ukraine and are recognized to be specially protected areas of natural reserve fund of Ukraine incites to use modern forms of conservation of landscape and biological diversity, which allow sustainable use of natural resource opportunities of the region and increase of the social and economic status of its inhabitants. The combination of environmental protection activity with the development of tourism, agriculture and forestry, the improvement of transport infrastructure is the basis of the Framework Convention on the Protection and Sustainable Development of the Carpathians of 2003.

2. ANALYSIS AND DISCUSSION

The preamble to the Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention) reflects awareness of the fact that efforts to protect, maintain and sustainably manage the natural resources of the Carpathians cannot be achieved by one country alone and require regional cooperation, and of the added value of transboundary cooperation in achieving ecological coherence [11].

V.G. Butkevych, Ukrainian scholar of international environmental law issues, proves that the environmental problems require international cooperation, joint coordinated actions of countries and international organizations at all levels – global, regional, sub-regional and bilateral. Multilevel character of international legal protection of environment is connected with the variety of objects of legal protection, including multinational objects (some water resources, migratory animals) and mutual objects (international rivers and lakes, border natural systems) [2, p. 506].

Sub-regional level of international legal protection of environment is represented by a number of international instruments, which have launched a coordinated environmental protection activity of several states, located in a separate natural region. The most significant impact on the development of cross-border environmental protection cooperation in Europe has the Alpine, Danube, Black Sea and Carpathian conventions.

Cross-border cooperation of Ukraine in the Carpathian region was established by a number of international agreements, concluded between individual Carpathian countries and aimed at solving of regional environmental problems: Agreement on the conservation of forest biodiversity of the Eastern Carpathians between the Ministries of Environment of Poland, Slovak Republic and Ukraine; Agreement between the Governments of Poland, Slovak Republic and Ukraine on International Biosphere Reserve “Eastern Carpathians” (1992–2000); Agreement between the authorities of regional self-government of border regions of Ukraine, Poland, Hungary and Slovak Republic on the establishment of the Association “Carpathian Euro-region” and others [3, p. 11].

However, these multilateral intergovernmental agreements that define the terms of cooperation of the states of the Carpathian region in a separate field of environmental protection were not enough. It was necessary to build cooperation on the principles of sustainable development, that provided the coordination of economic and social strategies with a balanced environmental protection activity. Economic activity in such a big mountain ecological system could not be conducted in isolation, and

directly or indirectly influenced on the environment in neighboring countries. Therefore, there was an understanding of how important it was to combine the efforts of all parties to create a joint instrument on the protection and sustainable development of mountain regions [3, p. 10].

In 2001 Ukraine initiated the development and adoption of the Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention), signed by the Ministers of Environment of the Carpathian countries in Kyiv on 22nd May, 2003 during the 5th Pan-European Ministerial Conference on "Environment for Europe", held between Romania, Hungary, Czech Republic, Serbia, Montenegro, Slovak Republic and Ukraine, and on 25th November, 2003 it was signed by Poland either. This was a logical conclusion of the process that began in Kiev in 2001 during the First International Meeting of experts engaged in preparing the Carpathian Convention on "Cooperation dealing with the protection and ecologically balanced management of the Carpathians" [4, p. 3].

The experts draw attention that the process of development of the Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention) has been quick and well-coordinated [3, p. 8]. The existing international experience was favourable to it – the Convention on the protection and sustainable development of the Alps (Alpine Convention), signed in 1991 in the Austrian city of Salzburg by the countries of the Alpine region: Austria, France, Germany, Switzerland, Italy, Liechtenstein, Slovenia, Monaco and the European Union (entered into force in 1995) was taken as an example.

Since the initiation of the idea of the development of the Carpathian Convention and during the process of its implementation the Governments of Italy, Liechtenstein, Austria, as well as UNEP and the secretariat of the Alpine Convention had provided the significant financial, organizational, technical and information support. Thus, the Framework Convention on the Protection and Sustainable Development of the Carpathians was second sub-regional agreement on the protection of the mountain region in the world after the Alpine Convention.

Carpathian Convention is based on the principles, defined by the following international legal instruments: the Convention on Biodiversity, Pan-European Strategy on the Conservation of Biological and Landscape Diversity, the Program of sustainable development of mountain regions, the decisions of Krakow Conference held in 1998 "Green mountain range of Central and Eastern Europe", the Program of ecological network development in Central and Eastern Europe, Bern and Landscape Convention of the Council of Europe, Convention of UN European Economic Commission, the decisions of Danube-Carpathian summits and Carpathian Convention is coordinated with the initiatives consistent with WWF, IUCN, GEF/WB and other international environmental organizations.

The purpose of the Framework Convention on the Protection and Sustainable Development of the Carpathians as a multilateral agreement is to coordinate strategy with a focus of joint efforts for the conservation, restoration and rational use of natural resources of the Carpathian region. The Carpathian Convention, based on the concept of sustainable development, tries to create a reasonable balance between the needs of economic progress and social and environmental protection and to preserve national traditions, the protection of the unique and authentic cultural and natural heritage of the Carpathian eco-region for present and future generations.

Carpathian Convention is a framework instrument that outlines common policy and common priorities with regard to the solution of environmental, social and economic problems of the region. Each priority direction requires the development of a special protocol – separate instrument with regard to a separate scope of the Convention and determines the mechanism of solving of the problems and the future perspectives of international cooperation of the Parties in this field. The common means of achieving the objectives of the Convention at the internal level are the development and implementation of national strategies, plans or programs with regard to sustainable development of the Carpathian region in relevant sector or cross-sector plans, programs and policies.

In particular, the integral part of the Carpathian Convention is the development, adoption and implementation of the Convention Strategy and Local Action Plan – with measures aimed at application of the Law of Ukraine "On ratification of the Framework Convention on the Protection and

Sustainable Development of the Carpathians” at the local (regional) level. Ukraine, as the main initiator of the Convention, remains one of the most active country among the Carpathian countries in the preparation of its implementation. Ukraine had fulfilled all the necessary formal procedures so that this instrument came into force –signed the Convention (May 22, 2003), adopted the Law of Ukraine “On ratification of the Framework Convention on the Protection and Sustainable Development of the Carpathians” (№ 1672 of April 07, 2004), developed and adopted the Strategy of implementation of the Carpathian Convention. Moreover, the Ministry of Environmental Protection of Ukraine issued the Decree “On establishment of the Coordination Council on the implementation of the Carpathian Convention” (№ 535 of December 31, 2004), developed and approved the plan of operation of the Convention, including at the local (regional) levels, developed and submitted to the Secretariat of the Carpathian Convention, and by means of it – to six other countries – the draft of protocol on biological and landscape diversity to the Convention. As a result, on 19th June, 2008, the Parties to the Convention signed the Protocol on conservation and sustainable use of biological and landscape diversity to the Framework Convention on the Protection and Sustainable Development of the Carpathians [9]. The Protocol was ratified by the Law of Ukraine of September 04, 2009.

According to paragraph 5 of article 4 of the Carpathian Convention, which defines the legal grounds of conservation and sustainable use of biological and landscape diversity and provides that the Parties shall cooperate in developing an ecological network in the Carpathians, as a constituent part of the Pan-European Ecological Network, in establishing and supporting a Carpathian Network of protected areas, as well as enhance conservation and sustainable management in the areas outside of protected areas [11]. Taking into account the content of this article, there are two types of networks in the Carpathians – ecological and protected one, but the Convention doesn’t make a strict distinction between them.

The Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Framework Convention on the Protection and Sustainable Development of the Carpathians defines the following important terms which disclose the content of the studied categories – “Ecological network” means a system of areas which are ecologically and physically linked, consisting of core areas, corridors and buffer zones, and “Carpathian Network of protected areas” means a thematic network of cooperation among protected areas in the Carpathians. “Protected area” means a geographically defined area which is designated and managed to achieve specific conservation objectives [9].

Article 14 of the Protocol on Conservation and Sustainable Use of Biological and Landscape Diversity to the Framework Convention on the Protection and Sustainable Development of the Carpathians provides that the Parties shall support and facilitate cooperation under the Carpathian Network of protected areas established by the Conference of the Parties and encourage the protected area administrations to take part in the cooperation within this Network. The Conference of the Parties shall recognize the areas part of the Carpathian Network of protected Areas and adopt the terms of reference of the Network [9].

Taking into account the above mentioned we can propose the following definition. Carpathian network of protected areas is determined by the Conference of the Parties to the Carpathian Convention as a thematic network of geographically defined areas that are designed and organized to achieve specific conservation objectives with a formation of their catalog, as well as an approval of regulations about them and to encourage their administrations to participate in cross-border cooperation in order to achieve the environmental integrity of the Carpathian eco-region.

Carpathian network of protected areas was created in December of 2006 in order to implement the Framework Convention on the Protection and Sustainable Development of the Carpathians and made favourable conditions for international cooperation between these and neighboring areas, located outside of protected areas, compact group of mountains.

The idea of creation of the Pan-European Ecological Network which was made in 1995 at the 3rd Ministerial Conference “Environment for Europe” as the means of implementation of the Pan-European Biological and Landscape Diversity Strategy was supported by many international law

sources and the national legislation of most European countries. The Pan-European Ecological Network will contribute to achieving the main goals of the Strategy by ensuring that a full range of ecosystems, habitats, species and their genetic diversity, and landscapes of European importance are conserved; habitats are large enough to place species in a favourable conservation status; there are sufficient opportunities for the dispersal and migration of species; damaged elements of the key systems are restored and the systems are buffered from potential threats. [10]

The law of Ukraine "On State Program of national ecological network of Ukraine for 2000–2015" dated September 21, 2000 and the Law of Ukraine "On ecological network of Ukraine" dated June 24, 2004 are the legislative basis for the formation and conservation of the national ecological network of Ukraine [8]. Article 4 of the Law of Ukraine "On ecological network of Ukraine" provides a number of basic principles of formation, conservation and use of ecological network, among which the important place is taken by the principle of combination of national ecological network with the ecological networks of neighboring countries, that are the members of the Pan-European Ecological Network, all-round development of international cooperation in this field. This principle reflects the organizational peculiarities of the national ecological network concerning the mutual coordination of efforts of the countries of the European continent, aimed at achieving the objectives, provided by the Pan-European Biological and Landscape Diversity Strategy with regard to the formation of the Pan-European Ecological Network.

Program grounds of national ecological network correspond with the generally recognized principles of international law dealing with the implementation of national environmental policy, because Ukraine consistently follows bilateral and multilateral agreements with neighboring countries dealing with the protection of the environment and participates in the formation of cross-border elements of the national ecological network. In general, the 12 key areas of international and national levels, which represent mountain landscapes of the Eastern Carpathians, are the part of Trans-Carpathian ecological network of Ukraine [1, p. 47].

Thus, the formation of an ecological network in the Ukrainian Carpathians is based on the conception of building of a national ecological network in which the existing and projected natural reserve objects plays the leading role in the extraction of key areas. The protected areas are complementary in the determination of the location of elements of ecological network, including key areas and the data about the location of natural ecosystems, undisturbed by business activity, rare biotopes, areas and localities of rare species of flora and fauna, when the migration routes of animals play a determinant role in planning of the spatial structure of ecological network in the European conceptions of formation of ecological networks [6, p. 197]. The European experience proves that the formation of ecological networks can overcome the fragmentation of habitats by creation of buffer zones in order to protect natural areas and their connection with each other by creation of passages and corridors that allow species to colonize new areas and to move freely in a search of food or partner [5, p. 61].

The comprehensive approach to the regulation of relations in the Carpathian region on the basis of sustainable development is demonstrated in Article 8 of the Carpathian Convention, which provides the policies of sustainable transport and infrastructure planning and development, which take into account the specificities of the mountain environment, by taking into consideration the protection of sensitive areas, in particular biodiversity-rich areas, migration routes or areas of international importance, the protection of biodiversity and landscapes, and of areas of particular importance for tourism [11]. These terms include areas that are defined at international level (the territories from the list of the World Heritage, lands of the Ramsar Convention, Biosphere Reserves, etc.), as well as natural corridors of migration of natural species and areas that contain the diversity of species and habitats [5, p. 101]. All these areas are essential for the spatial planning of ecological network at the national and transboundary levels and are the constituents of the key areas (natural regions) and connecting areas (natural corridors) of ecological network.

In Ukraine the legal regime of objects and areas of natural reserve fund, which are the basis for the formation of the key areas of the national ecological network, is determined by the special legislation,

including the Law of Ukraine "On Nature Reserve Fund of Ukraine". Instead, the legal regime of other structural elements of the national ecological network (connecting, buffer and renewable areas) is a gap of the national legislation. In practice, this gap is filled in by the initiative and with the support of environmental organizations and international environmental funds.

In particular, in 2008-2010 Ukrainian charitable organization "InterEkoTsentr" and Dutch environmental consulting center "Altenburg & Wymenga Ecological Consultants" together with the Ministry of Environmental Protection of Ukraine and subordinated structures completed the project "Implementation of cross-border environmental connection in Ukrainian Carpathians". Two cross-border corridors that connect two national parks and one regional landscape park of Ukraine with three national parks of Poland and one Ukrainian national park with the national park of Romania were created [7, p. 427]. However, it is necessary to develop organizational and legal mechanism of formation of all its structural and cross-border elements in order to achieve the integration of the national ecological network of Ukraine within the Carpathian and Pan-European ecological networks.

On 25th May, 2004 the Ministry of Environment of Ukraine and UNDP signed the Memorandum on mutual understanding about cooperation in the field of sustainable development, environmental protection and energy-saving. The project motion "Conservation of the unique biodiversity and reduction of the negative impact on the environment of the region of the Ukrainian Carpathians" was developed and approved in order to implement GEF Memorandum. Realization of the objectives of the project will provide an integrated approach – namely, a combination of traditional means of management and management of protected areas with innovative and more efficient mechanisms in order to conserve the biodiversity on the areas of operational purpose [3, p. 27].

The Carpathian Convention, except the traditional approaches concerning the protection of separate areas and species, recognizes the necessity of a broader approach to the conservation of nature. Parties to the Carpathian Convention are obliged to improve the conservation and sustainable management on the areas that are outside of protected areas, with the help of the ecosystem approach. Such an ecosystem approach to the sustainable management is applied to the spatial planning, integrated water management, agriculture, forestry, transport, infrastructure, industry, energy, tourism and cultural heritage conservation. Herewith, economic and social policies shall be developed and implemented taking into account the interests of environmental protection.

3. CONCLUSIONS

Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention) is a powerful instrument of international legal regulation of relations in the sphere of protection and conservation of Carpathian nature. It laid the foundation for international cooperation of the countries of Carpathian region in the formation of Carpathian ecological network. Its progressive role consists in the provision of the opportunities for the conservation of the biodiversity using the agreed environmental policies of countries – Parties to the Convention on the principles of sustainable development within the whole unique mountain ecosystems of the Carpathians.

Unlike other European countries, Ukraine does not apply settlement principle of formation of ecological network, which provides the protection of the natural habitats of species. This principle requires special conservation regime not only for existing objects of natural reserve fund (key areas), but for the connecting and buffer areas, that allow to protect larger space of natural areas and to provide them with a higher degree of protection against the negative impact and to create better conditions for natural reproduction of flora and fauna in the region.

Carpathian network of protected areas is determined by the Conference of the Parties to the Carpathian Convention as a thematic network of geographically defined areas that are designed and organized to achieve specific conservation objectives with a formation of their catalog, as well as an approval of regulations about them and to encourage their administrations to participate in cross-border cooperation in order to achieve the environmental integrity of the Carpathian eco-region.

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У статті проаналізовано значення Рамкової конвенції про охорону та сталий розвиток Карпат 2003 року (Карпатської конвенції). Карпатська конвенція створила сприятливі передумови для збереження ландшафтів та біологічного різноманіття гірських екосистем Карпатського регіону. Карпатська конвенція є рамковим документом, тобто визначає загальні засади та пріоритети щодо вирішення екологічних, соціальних та економічних проблем регіону. Проведено аналіз Протоколу про збереження і стале використання біологічного та ландшафтного різноманіття до Рамкової конвенції про охорону та сталий розвиток Карпат.

Визначено переваги міжнародної співпраці країн карпатського регіону в досягненні загального комплексного результату – збереження біорізноманіття і підвищення соціально-економічного рівня регіону та його мешканців на засадах сталого розвитку. Карпатська конвенція узгоджує економічні

потреби із захистом соціального та навколишнього середовища, сприяє збереженню унікальної та автентичної культурної та природної спадщини карпатського екорегіону для теперішніх та майбутніх поколінь.

Рамкова конвенція про охорону та сталий розвиток Карпат передбачає формування Карпатської екологічної мережі як різновиду екологічної мережі на субрегіональному рівні, що своєю чергою входить до складу Всеєвропейської екологічної мережі. Україна послідовно дотримується двосторонніх та багатосторонніх угод із сусідніми державами щодо охорони довкілля та бере участь у формуванні транскордонних елементів національної екомережі.

Розглянуто особливості Карпатської мережі природоохоронних територій. Карпатська мережа природоохоронних територій є особливою формою міжнародної співпраці у сфері охорони довкілля, яка полягає у визначенні Конференцією Сторін Карпатської конвенції переліку природоохоронних територій та схвалення положень про них. Конференція Сторін Карпатської конвенції заохочує адміністрації цих природоохоронних територій брати активну участь у міжнародній співпраці та обмінюватися досвідом у сфері збереження унікального біологічного та ландшафтного різноманіття, а також зменшувати негативний вплив на навколишнє природне середовище регіону Українських Карпат.

Ключові слова: Карпатська Конвенція, Карпатська екологічна мережа, природоохоронна територія, Карпатська мережа природоохоронних територій, сталий розвиток, національна екомережа.