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The Transboundary Cooperation in the Protection of Mountain Heritage - the Carpathian Experience

Dağ Mirasının Korunmasında Sınır Ötesi İşbirliği - Karpat Deneyimi

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Abstract: *The mountain chain of the Carpathians is stretching out in the convex bow shape towards the north-east starting from surroundings of Vienna to the Iron Gate. The Carpathians host high geo- and biodiversity and are a homeland for nearly 20 million people who have the rich and diversified both material and spiritual culture. The first ideas being aimed at a protection of the Carpathians' nature are dated on the second half of the 19th century. Further efforts brought the foundation of the first European frontier park of the nature in the Pieniny Mountains (the Western Carpathians) in 1932. After the World War II the Carpathians belonged to the area of the Soviet bloc. During that time several new pretected areas were esablished, often on the both sides of the state boundaries, however the cross-border cooperation was limited. After political changes in 90' of the XX c., there were some possibilities of establishing the direct working co-operation among boards of frontier protected areas - such a general idea has been already used. The international cooperation in the field of the implementation of the principles of the sustainable development in the area of the Carpathians found the strong support in the Carpathian Convention. The analysis of the example of the Carpathians, the mountain chain that is laid on territories of many countries, lets draw conclusions that not only can be taken back to the Carpathian mountains but to other mountains too. They are included into presented article.*

Key words: *Carpathians, nature protection, international cooperation, protected areas.*

Özet: *Karpat Dağları Viyana yakınlarından kuzeydoğuya doğru başlayarak içbükey şekilde kıvrılarak Iron Gate yakınlarına kadar uzanır. Karpatlar yüksek ölçüde coğrafi ve biyolojik çeşitliliğe sahip olmanın yanısıra zengin bir somut ve soyut kültüre sahip, yaklaşık 20 milyon insana ev sahipliği yapmaktadır. Karpatlar'ın korunması fikri ilk olarak 19. yüzyılın ikinci yarısında ortaya atılmıştır. Daha sonraki çalışmalar 1932 yılında Pieniny Dağları'nda (Batı Karpatlar) Avrupa'nın ilk doğa parkının kurulmasını getirmiştir. İkinci Dünya Savaşı'ndan sonra Karpatlar Sovyet bloğunda kalmıştır. Bu zaman içinde ülke sınırlarının iki tarafında yeni koruma alanları ilan edilmiş ancak sınır ötesi işbirliği kısıtlı olmuştur. 1990 yılındaki siyasi değişimden sonra halen daha önce kullanılan ana fikre bağlı kalınarak öncü koruma alanlarının sınırları boyunca doğrudan sınır ötesi işbirliği kurma olanakları vardı. Karpatlarda sürdürülebilir kalkınma prensiplerine uygun uluslararası işbirliği kurulması Karpat Konferansı'nda güçlü bir şekilde desteklenmiştir. Karpatlar örneğindeki gibi analiz sonuçları sadece Karpat Dağları'nı değil çok sayıda ülkeye ait bölgelerin bulunduğu diğer dağ sıralarının da korunmasını sağlayacaktır. Makalede bunlar da ele alınmıştır.*
Anahtar sözcükler*: Karpat Dağları, doğa koruma, uluslararası işbirliği, korunan alanlar.*

1. The Carpathians in Europe

The mountain chain of the Carpathians is the sheer backbone of Central Europe. It is stretching out in a convex bow shape towards the north-east starting from the surroundings of Vienna to the gorge of Danube called the Iron Gate – located on the border of Romania and Serbia. The length of the Carpathian chain is about 1400 km, and its width changes from 120 for 300 km. According to Polish geographer Kondracki (Kondracki, 1978) the area of the Carpathians is c 209 000 square km, and they are slightly larger than the area of the Alps.

Some geographers are also ranking the Eastern Serbian Mountains among the Carpathians. Eastern Serbian Mountains are trailing to the west of the Iron Gate and constitute the geological pier between the Carpathians and the Balkans.

The Carpathians are young mountains that elevated in the Tertiary during the alpine orogenesis. Sedimentary rocks are the dominant component in their structure, especially a flysch as well as crystalline, metamorphic rocks, and volcanic rocks that can also be found. The Carpathians are mountains of average height. Few peaks are exceeding 2500 m a.s.l, however, the areas above the upper line of the forest cover scarcely about 5% of the area. Moreover, taking into consideration the European conditions, both the natural factors and historical condition played a major role in the area, and because of that large areas of high level of naturalness are still present in the Carpathians. It can be admitted with no doubt that these mountains constitute the important anchor of the biodiversity. The general number of species that belong to the group of vascular plants is being estimated at c 4000, and it constitutes c 30% of the European flora. Nearly 400 species and subspecies of plants are endemics.

A large population of predators is a characteristic trait of the Carpathian fauna. In the Carpathians there are c 8000 bears, 5000 wolves and 2500 lynxes (Anonymous, 2001). These mountains are also an important habitat of predatory birds, in particular Imperial eagle (Aquila heliaca), Golden eagle (Aquila chrysaetos), Lesser-spoted eagle (Aquila pomarina), Ural owl (Strix uralensis), Eagle owl (Bubo bubo) and many others. Without a doubt invertebrates are dominating in the list of the Carpathian fauna; they were registered in the number of c 35 000 species, however, yearly examinations bring new discoveries. Forests are the main habitat of biodiversity in the Carpathians; they cover over 50% of the area. Forests have the distinct vertical bio-climatic zonation. The foothill zone reaches up to c 600 m a.s.l. in the North and c 800 m a.s.l. in the southern region of the chain. It is the most changed zone by the economy of man, mainly allocated to cultivations. Above all, up to 1100 - 1300 m a.s.l. stretches out over the lower mountain forest zone. Especially beech and mixed beech-fir forests can be found there. Higher, coniferous forests (mainly spruce forests) occupies the upper mountain forest zone. Taking into consideration the local conditions, the climatic tree line runs at a height of 1400 - 1500 m a.s.l. in the North and 1600 - 1800 m a.s.l. in the South, however, its actual course was much lower in many places as a result of human activity. Above the upper tree line dwarf mountain pines or rhododendrons stretch over, which at the height of 1800 - 2100 m a.s.l. are supplanted by the alpine meadows (Podbielkowski, 2002).

In spite of the long-term use, Carpathian forests still have a high natural value. It is assessed, that c 300 000 hectares of forests still has a high percentage of naturalness, and 20 000 hectares of beech forests can be classified as primeval ones (Anonymous, 2007). Pastoral economy causes numerous forest clearings within forest zones that raises the biodiversity as well as give outstanding landscape advantages.

What's more, thanks to the high level of afforestation the Carpathians constitute a large reservoir and the water source for hundreds of millions of people who often live far from the mountains. Resources of surface waters in the Carpathians are annually estimated at c 50 cubic km .The majority (c 90%) of water is drifting away to the Black Sea, and the rest to the Baltic.

The Carpathians are also an area of life and work. On the one hand nearly 20mil. people living there have a rich and diversified materialistic culture as well as a spiritual one, and on the other hand it is a place of rest for dozens of millions of human beings. Men who live and run economical activity in the Carpathians exert the high pressure on the Carpathian nature. Problems which are connected with it, are diversified very much as well as it can be observed according to the population density, the degree of the industrialisation, the development of the transport network or the affluence of residents. However, general conflict can be seen everywhere between the local communities who want to improve their financial status fast, more often at the great expense of nature, and the common interest which is visible in the longer perspective. Four year cycle of electing the authorities, and relatively low ecological awareness are in favour of taking any short term activities that are estimated for quick profits. The regulations concerning the environmental protection, especially the ones which refer to nature and landscape, can often be seen as a curb on development, specific luxury and the whim. It causes the tolerance for disregarding or breaking them, additionally strengthened by the phenomenon of corruption.

2. The conservation of nature in the Carpathians before collapse of the Soviet bloc.

The first efforts being aimed at a protection of the Carpathians' nature are dated on the second half of the 19th century. Then, the mountains belonged to two countries: the Austro-Hungarian Monarchy and independent Romania (1878) which had only a part of the Eastern and Southern Carpathians. Within the borders of the Austro-Hungarian Monarchy the majority of the Carpathians belonged to the Kingdom of Hungary, but a considerable part to the Galicia autonomous province, which was actually an occupied part of the former Kingdom of Poland. Centuries of complicated political and economic history of this region caused that people of different nationalities, cultures and religions lived close to each other in the area of the Carpathians; they created real ethnic mosaic on some areas. Romanians, Hungarians, Poles, Russians, Czechs, Germans, Jews and Gypsies represented the most numerous nationalities in this area. Taking into consideration religion, members of the Orthodox church, Catholics (of the Latin rite and Greece), Protestants and Jews were all in the majority. In that time (before the World War I) two groups of people were particularly active in the field of promoting the idea of the conservation of nature; there were scientists - naturalists and mountain tourists. Far-sighted ideas concerning integrating the social development and protection of the legacy of Carpathians were already formulated in some rings of Carpathian tourist organisations.

It was expressed, for example in the ideology and the practical action of the Tatra Society in Galicia (established 1873). Four simply formulated purposes of Statute, which appointed the work, were passed there. As follows (Goetel, 1948):

- the conservation of mountainous nature;
- development of hill walking;
- supporting economy based on local resources;
- initiating researches concerning mountains.

At the end of the 19th century a split can be observed in the purpose of actions for mountain protection and tourism. As soon as the popularity of tourism started growing the quicker, a commercialisation aspiring for treating the nature as one of the goods began. It was clearly voiced by the leading activist of the Tatra Society, Prof. Pawlikowski, who in his prophetic essay "The Culture versus nature" (published in 1913) wrote:

“Some people, mved by the beauty of nature, wanted to share their impressions with other and started to facilitate access to it by building roads, trails and shelters. A docile public understood that nature must be beautiful, for the spirit of the epoch demanded it... Seriously, modern man needs some comfort, so shelters were replaced by hotels which the catering and alcoholic beverage busines eagerly supported. (....) So, the trails were equipped with railings and guide-posts, narrow paths were turned into roads and, eventually engineering skill achieved a miracle: in the manner of Herostratus, it violated mountains by building railways up to their summits” (Pawlikowski, 1913).

Searching for solving the dilemma: the protection or the development, Pawlikowski presented a conception of the harmonious join of the valuable hill walking, the conservation of nature as well as civilisation progress in the life of the local community. These ideas were ahead of three generations in the way of the present and generally accepted (however, in practice extremely rarely carried out) paradigm of the sustainable development.

After the World War I, there were some essential political changes on the area of the Carpathians. The Austro-Hungarian Monarchy stopped existing; borderlines underwent essential changes, and the mountains were included into the area of a few countries that were at the same time often brought into conflict. Demarcation in the Carpathians, as well as their protection became a problem of international character. In this field an agreement between Poland and the Czechoslovak

Republic became the first example of the positive cooperation (1925). Both countries agreed on the mutual and necessary cooperation in the conservation of nature on both sides of the Carpathian border, as well as for opening mountains for free tourist movement. Tourist organisations undertook the cooperation too. Created in 1924 the Association of Slav Tourist Organisations (the associations from Bulgaria, Czechoslovakia, Yugoslavia and Poland belonged to them) recognised the preservation of mountains as one of its important tasks. A similar situation was with UIAA (Union Internationale des Associations d'Alpinisme); The proposal to establish it was in 1930 in Zakopane (Tatra mountains) , and finally it was formed two years later in Chamonix, with a very active contribution of the Polish Tatra Society. Created in 1932 in Europe the first frontier park of nature in the Pieniny Mountains (the Western Carpathians) was a momentous event in the history of the conservation of nature (Dąbrowski, 2008). It allowed for preserving this little, but unusually beautiful and valuable under the natural account, mountain nest, which is incised with the spectacular gorge of the Dunajec River.

After World War II the Carpathians in one piece were in the area of the Soviet bloc. Consecutive border changes caused, that part of the Eastern Carpathians was in the Ukrainian Socialist Soviet Republic. Undoubted progress took place in the development of networks of protected areas. In individual countries numerous new national parks, landscape parks and nature reserves came into existence. Particularly, in the Tatra mountains, national parks were created on both sides of the Polish-Czechoslovak border, because of that, the highest mountain nest in the Carpathians, was in one piece under protection. Protected areas bordering with each other came into existence all along the border of Czechoslovakian-Hungarian and Czechoslovakian-Ukrainian too. From 1977 biosphere reserves started also coming into existence in the Carpathians.

In spite of the official declaration of "indissoluble friendship" of socialist countries, the cross-border cooperation was very much limited, especially on the regional and local rank. All common, active citizenship was subjected to a close political and ideological control. The foreign tourism in the Carpathians was also subjected to far-reaching restrictions; large areas remained completely closed off for tourist movements. The collectivisation of agriculture (except for Poland) brought about far-reaching changes of nature, the landscape and the social structure in the countryside. And what's more, the strenuous industrialisation brought urbanisation and pollution of waters, soil and air.

3. In democratic Europe

The situation in the Carpathians also changed when democratic transformations spread through central and eastern Europe in the 90's of the 20th century. New independent countries were formed: The Czech Republic, Slovakia and the Ukraine, therefore 99.7% of the area of the Carpathians was stated to belong to the territory of 6 countries - among them were also Poland, Romania and Hungary. Societies of these countries again achieved their independence which was also expressed in more authentic cross-border contacts. As a result, crossing border procedures were simplified and finally it led to stopping border checks between the five Carpathian countries which became members of the European Union.

There have been some possibilities of establishing the direct working co-operation among boards of frontier protected areas - such a general idea has already been used. Then, again the example of the Pieniny Mountains can be summoned here. There are two national parks - Polish and Slovak that in fact constitute the integrated system, both in terms of the protective politics and principles of opening to the public.

New protected areas were formed in the Carpathians. Using the IUCN categorisation, it can be said that 32 areas of the category II (national parks) and 48 areas of the category V (landscape parks) are located in the Carpathians now. Altogether they cover c 13% of the area of the mountains. Hundreds of nature reserves that have a very diversified size are completing this net. Moreover, the network of protected areas Nature 2000 has been developing in these areas since the moment of

accepting the five Carpathian countries in the European Union (2004-2007 years). This process is still not completed, though Nature 2000 areas are often neighbouring each other across the border, however, this fact isn't properly considered. It is hard to give the precise data concerning the total protected area in the Carpathians, because in individual countries a diversified typology of protected areas is applicable. In addition, their different categories are often duplicated, for example the same area at the same time is being classified as a nature reserve, a landscape park and area Nature 2000. It is possible to estimate, that c 20% of the Carpathians area is currently protected.

Particularly, biosphere reserves are a category of areas combining the biodiversity conservation and the practical application of principles of the sustainable development. There are currently 13 of them in the Carpathians, two of them has international appearance, approved officially by UNESCO:

1. The Tatra Biosphere Reserve has 123,500 ha, including the entire Tatra massif on the Polish and Slovak side.

2. The East Carpathians Biosphere Reserve. It is even larger because it has 213,000 ha in three countries - Poland, Slovakia and the Ukraine. Appointing this first in the world the trilateral biosphere reserve (1999) was crowning the long process which involved work of scientific circles, authorities and the local communities. However, from a perspective of time one can clearly see that without the possibility of easy crossing the national border between Ukraine and Poland and Slovakia, it is hard for performing social functions of the international biosphere reserve.

It is worthwhile adding, that also amongst the Carpathian World Heritage Sites (there are altogether 13 of them), two have a cross-border appearance: Caves of Aggtelek Karst and Slovak Karst (Hungary/Slovakia) and Primeval Beech Forests of the Carpathians (Slovakia/Ukraine).

Matters of the protection of the natural and cultural heritage also played an important role in the cross-border cooperation carried out in frames of so-called Euroregions. About twenty of them are located fully or partially in the Carpathians. These individuals display the diversified and changing activity in time, and it is conditioned by changes in the local government, the economic situation, and the policy of the European Union, etc. They nearly always emphasise the pro-environmental posture and approval of the principles of the sustainable development although particular projects about economic character often arouse grave doubts.

Freeing the community of Carpathian countries from the political and ideological 'tight clasp' which took place after the fall of the communism, it also resulted in a formation of many non-governmental organisations (NGO) acting for the environmental protection. Many of them established contacts with partners from other countries, which contributed to the creation of the whole network of international contacts. Many times it was stimulated by international organisations already existing (e.g. WWF) which shared their experience, and often granted financial help too. As a result of this cooperation was with hundreds of different cross-border projects, having local, regional character, and in some cases even Carpathian-wide.

The Carpathian EcoRegion Initiative was an example belonging to this last group which rose in 1999 at the WWF participation. The Carpathian EcoRegion Initiative is a coalition of NGOs and research institutes working towards a common vision for conservation and sustainable development of the Carpathians. Gathering and systematising the data from various countries was a major achievement of this organisation. It enabled to make the comprehensive look at the Carpathians, as a one complex system. This work was recapitulated in the report published in 2001, called "Condition of the Carpathians" which also contained the diagnosis of the most important problems and the vision of further actions. Preparing the Carpathian Convention, that is to say the act of the international law , concerning the international cooperation in the area of the Carpathians, it was one of the reported demands. This idea refers to the Alpine Convention already signed in 1991; it was moved and supported by a lot of other organisations and institutions, and it gained the political approval in 2001.

After two years of negotiations in which help of the UNEP played the crucial role, a convention was signed in Kiev in 2003 under the full name: The Framework Convention on the Protection and Sustainable Development of the Carpathians. Apart from the six Carpathian countries also Serbia acceded it, and in the area of action of the Convention Eastern Serbian Mountains were included. Incidentally, the area to which the Convention is applicable, is smaller from a geographical reach of the Carpathians, but political consideration and the economy played a main role in it. The convention has a frame character which means that its general decisions should be detailed and more specific. It is held by the means of protocols included to the Convention; so far there were three of them that signed. They concern the natural and landscape diversity, forestry and tourism. Undoubtedly the Carpathian Convention is creating firm bases up to the international cooperation in the implementation of the principles of the sustainable development in the area of the Carpathians, however, there is still a lot to be done so that the decisions of the convention can enter the general practice.

4. Conclusions

The analysis of the example of the Carpathians, the mountain chain that is laid on territories of many countries, lets draw conclusions that not only can be taken back to the Carpathian mountains but to other mountains too. That is:

- On the bases of scientific indications, the natural environment of mountains should be protected in the integrated way disregarding neither political borders or administrative ones;
- it should be aspired to merge the knowledge into synthetic presentations, to conduct comprehensive researches, spreading through regions distinguished under the natural, rather than administrative account;
- The effective cross-border co-operation in the field of protection and the rational management of mountains sources is possible, even if there are divergent interests in other fields of countries;
- Protection of the natural and cultural heritage of mountains that seems to be the common goal for countries can be an important factor not only in relieving tensions between countries but as well as building positive relations between them;
- Subjectivity of societies and social groups on both sides of the border are two equally important conditions that can led to the fruitful co-operation either on the local level as well as the regional one;
- The international co-operation should be visible also in facilitating contacts between inhabitants of individual countries, taking into consideration both the local communities and tourists;
- Circles/groups and organisations devoted to the hiking have the major part in the protection of the legacy of mountains, moreover, in the international aspect, too;
- Cross-border reserves of the biosphere should serve as model examples in the international cooperation with the focus on the implementation of the principles of the sustainable development;
- It is worthwhile aspiring to the institutionalisation of the international cooperation in the sustainable development of mountain areas in the light of the international law (taking into account: conventions and treaties).

It seems that it is possible to relate these conclusions particularly to the Dynaric Mountains and the Caucasus, divided, as well as the Carpathians, between a few countries and inhabited by nations speaking different languages, practising different religions, having different traditions and historical experience. At the same time in these mountains, then again as similarly as in the Carpathians, the phenomena threatening their natural and cultural heritage appear. Undoubtedly, international cooperation on all ranks is needed, starting from governments to local communes. They should apply to both the protection and the sustainable development of the Dynaric Mountains and the Caucasus. Collected experience in the Carpathians can seem to be fruitful and helpful in these activities.

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