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Historical Experience of Environmental Cooperation in the Carpatho-Danubian Area



ABSTRACT

The area of the Carpathians and the Middle Danube today is a place of highly intensive environmental cooperation. Given the importance of the questions of governance path-dependence and critical reconsideration of past experiences, this article examines the historical antecedents of the present-day mechanisms in the region with the objective of putting together an area-wide outlook and evincing practical implications. The study is based on document review and desk research. The article presents synthetically the key developments in the cooperation history, offering a handy four-tiered periodization. It demonstrates that at each stage new aspects of the collaboration potential were worked upon. Finally, it argues that the much variegated joint undertakings over the past century have been significantly beneficial for the contemporary environmental governance resources.

KEYWORDS

Central and Eastern Europe, environmentalism, CMEA, international organisation

DOI 10.14232/belv.2023.1.6

<https://doi.org/10.14232/belv.2023.1.6>

Cikkre való hivatkozás / How to cite this article:

Daria Voyloshnikova (2023): Historical Experience of Environmental Cooperation in the Carpatho-Danubian Area. *Belvedere Meridionale* vol. 35. no. 1. pp 77–104.

ISSN 1419-0222 (print)

ISSN 2064-5929 (online, pdf)

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INTRODUCTION

The Carpathian mountainous country and the Danube basin are two intersecting geographic spaces, each of which at present extends across several state territories. In studies of cooperation the Danube and the Carpathians are traditionally examined separately (e.g. ZAVÁDSKY 1993; NIEWIADOMSKI 2004). However, there are multiple non-negligible reasons to trace region-wide environmental activity connections, namely: interrelations of the two spaces at the landscape level, commonality of ecological risks and problems, transregional economic processes and idea flows, belonging to the scope of some same institutions, coverage with the same policies. The example of the recently intensified collaboration between such formats as the EU Strategy for the Danube Region and the Carpathian Convention confirms that the necessity of a comprehensive approach has been realized by contemporary actors operating at scale. This article, in its turn, has the goal of addressing important features and trends of the environmental collaboration development across the area in the past, against the backdrop of numerous works concerned with the evolution of environmentalist ideas (e.g. MIHAJLOV 2009; BERGANDI – BLANDIN 2012; CERTOMÀ 2016).

Looking from a time distance, this study is interested in institutional forms of international cooperation and leaves aside the matters of internal nature protection undertakings in the countries of the area. The analysis draws on official documents as well as publications in press and a review of existing secondary literature. The following sections of the article, structured according to a custom periodization, discuss the evolution of transborder environmentalism in the area to offer an outlook on its present-day implications.

TOWARDS COOPERATION ORGANISATION

The efforts directed at preserving the environment are so intimately intertwined with other spheres of human activity and uses of nature, that an analytical disentanglement is sometimes challenging or cannot be complete. The origin of differences in the approaches to cooperation on nature protection for the Danube catchment area and the Carpathian foothills, on the one side, and the high mountains, on the other side, may be sought in their diverging roles in the region's economy. As far as the Danube for centuries presented a crucial (water)way for passenger and cargo transportation, the first attempt at instating a commission dedicated to the international regime over the river was stipulated in the Treaty of Paris of 1856. Thus, the body tasked with improving the navigability steered anthropogenic change to the riverbed, while the share of uses of the watercourse beyond navigation kept increasing. In 1921, in addition to the European Commission of the Danube with powers over the river's maritime part, for the navigable fluvial part (from Ulm to Brăila) and international tributaries the permanent International Danube

Commission was established (Convention... 1921) to last less than two decades. Moreover, the Paris Convention of 1923 provided for the creation of the Permanent Technical Hydraulic System Commission of the Danube. The latter recognised in 1926 the need to invite forestry experts to tackle the questions of deforestation and afforestation in the basin. Altering the river management practice (to the detriment of European economies), the Versailles System still failed to deprive the Danube of its economic and political significance (PERNOT 1933. 574.).

In the montane dimension, the incipient internationalisation similarly was taking the shape of specialised functional bodies. However, unlike the Danube which was deemed a strategic shared resource by multiple polities, the Carpathians saw the appearance of smaller organisational forms having interest in their nature. Such were societies of tourism enthusiasts and mountain lovers that had nature protection among their goals: i.e. the Polish Tatra Society (founded in 1873), the Hungarian Carpathian Association (1873) with its many territorial sections, including the Transylvanian Carpathian Association (1880), the joint Club of Czecho-Slovak Tourists (1918), and the Traveller's Inn society (1920) transformed into the Touring Club of Romania (1926). There was extant as well such format of head-to-head intellectual exchange as the International Conference of Societies of Mountain Tourism. Created in 1924, the Association of Slavic Tourist Organisations (the societies from Bulgaria, Czechoslovakia, Yugoslavia and Poland belonged to them) proclaimed the preservation of mountains one of its important tasks. At its meetings (e.g. Ljubljana in 1928, Sofia in 1929, Prague in 1930) the role of the Association as a primary agent in the propaganda of nature protection ideas was underscored, and the respective agenda consumed a "lion's share" of discussions (in particular, the problem of natural park creation), which found reflection in the respective resolutions (B.R. 1929. 93.).

For the first time a framework for a comprehensive territorial cooperation in a part of the Carpathians appeared in May 1924 with the signing of the Cracow Protocol (for the protection of the Tatra Mountains) between Poland and Czechoslovakia (represented by Walery Goetel and Vaclav Roubik, respectively) (SZCZOCARZ 1998. 15.). The protocol contained a recommendation to create national parks in adjacent border areas (Article II (b): SOCIÉTÉ... 1924). In 1925, while a Polish-Czechoslovak commission was formed to cooperate on fighting bark beetle in the Tatras forests, the bilateral conference in Zakopane served to discuss the bases for national parks' organization in the Tatras, the Babia Góra, the Chornohora, and the Pieniny Mountains (SZCZOCARZ 1998. 15.). Thereafter, bilateral scientific exchanges followed and, at the next stage, the preparatory work on the Czechoslovak side was reflected by the scientific conference of 1929 in Cracow, gathering the representatives of the hosting country, Czechoslovakia, and Romania. They developed a detailed programme of work on park establishment, and the idea was extended to borderland nature reserves in the then Romanian Gorgany Mountains as well as to a trinational park project in the Chivchina Massif (GOETEL 1930. 150.).

Besides, the delegations discussed Polish-Czechoslovak cooperation in fighting poaching in the Carpathians and possible organisation of a standing trilateral coordinating commission for the protection of the nature in the three countries (W.MIL. 1930. 182–183.). The organ was supposed to steer scientific cooperation (especially in border areas) of natural parks and reserves, to work on plans for park organization and administration and to call periodic meetings of scientists interested in nature protection problems (Uchwały... 1930. 116.). For the envisioned commission it was deemed advantageous to leverage the success of Polish naturalists and to collaborate with

the newly founded International Office of Documentation and Coordination for the Protection of Nature (Uchwały... 1930. 116.). The establishment of the latter was approved in 1928 during the proceedings of the International Union of Biological Sciences (IUBS) in Brussels, whereby the Polish delegation through Michał Siedlcecki, developing the idea of Paul Sarasin, had put forward a suggestion of a commission for nature protection. In December 1934, a constituent general assembly officially formed the International Office for the Protection of Nature (BÜTTIKOFER 1946. 54.). After the first borderland park was inaugurated in the Polish Pieniny on the last day of August of 1930 (GOETEL 1930. 150.), the Slovak-Polish collaboration could be finally showcased at an IUBS session (KULCZYŃSKA – SZAFER 1930. 91.). Yet, the first European transboundary natural park was proclaimed only in 1932, following the opening of the Slovak Natural Reserve (SZCZOCARZ 1998. 15.). The positive effects of the parks were not only environmental, but consisted also in the alleviation of border dispute tensions between the neighbouring countries.

Based on the cooperation rules agreed upon in the outcome of a bilateral meeting in 1932, further interaction was left to the level of park directorates and scientific commissions (SZCZOCARZ 1998. 16.). So in 1934 a meeting was held to discuss scientific exploration and management of the park area. Importantly, the creation of parks was conceived as a way to attract a foreign tourist flow (GOETEL 1930. 135.). At the time, it was a generally shared objective to pursue the development of the Tatras with nature protection in view (GRÓSZ 1934). And one can identify in this the influence of the conservationist ideological current spread among nature management professionals (BERGANDI – BLANDIN 2012. 111.). However, it was the bilateral agreement on fishing and fish protection in border waters (1928) that influenced the whole Czechoslovak fishery legislation (GOETEL 1930. 134.), whereas the agreement on the Pieniny road (1931) curbed the disturbance of the area by motorized transport. Besides, at an international congress in Nové Zámky in 1928 representatives of Czechoslovakia, Poland and Romania became members of the organizational committee of the International Hunting Council, its key goal being to fight poaching in border areas (Ustanowienie... 1929. 92.).

Thus before World War I “two groups of people were particularly active in the field of promoting the idea of the conservation of nature”: “naturalists and mountain tourists” (DĄBROWSKI 2013. 29.). For those, apart from common sources of inspiration, such as the first natural park of Yellowstone (1872), a few venues of socialisation existed inside and outside of the region. They included the specialized Forestry School in Nancy, tangent contact with the International association of forest research stations, international thematic meeting occasions, whereas the institutionalisation supporters were “motivated by the wish to take part in a larger re-imagination of Europe” (ROEDER 2020. 29.). In particular, the idea of the Union internationale des associations d’alpinisme, an international organisation of alpine clubs “owed to the cultural, political and geographical legacies of the Habsburg Empire” (ROEDER 2020. 17.), was proposed in Zakopane in 1930 and became reality two years later in Chamonix, with a major contribution of the Polish Tatra Society (DĄBROWSKI 2013. 30.). The Carpathian Association operated in 1922–1931 to facilitate the collaboration of geologists across the region (SZCZOCARZ 1998. 15.). Joint visits of the mountains also gathered international participants. In 1928 for the members of the scientific community the International Phytogeographic Excursion was organised in Czechoslovakia and Poland (RÜBEL 1930), and the next one took place in 1931 in Romania (RÜBEL 1933). During their visits of the Pieniny and the Tatras the representatives of the Polish Geological Society

with the participation of Czechoslovak geologists supported the finalisation of the binational park projects in front of the both national authorities; similarly, a meeting of alpine societies (including those from Czechoslovakia, Bulgaria, Yugoslavia) and an international hydrology congress were held in the Polish Carpathians (GOETEL 1930. 135.).

The Carpathians protection problem therefore acquired an international character due to “the determination to preserve environmental ideas continuity, notwithstanding the state border change” (DĄBROWSKI 2013. 29.). The practical problems that the cooperating parties had to deal with varied. For instance, the very border demarcation between Poland and Czechoslovakia in the Tatras was perceived to cause environmental damage: the International Commission for Delimitation was involved to address the issues of slope degradation in several areas (due to new road creation for border slab installation) and of poaching and recreation infrastructure excesses on the Czechoslovak side, all requiring international coordination (Niszczenie... 1925. 104–105.). Some notorious cases included predatory logging practice in the Podhale area (GOETEL 1930. 133.) and the conflict over the project of a cable car to the Gerlach Peak put forward by the Carpathian Association and condemned by others (GOETEL 1930. 150.); the very solutions to nature protection problems were subject to criticism (DOMANIEWSKI 1925).

COOPERATION ORCHESTRATION MECHANISMS

After World War II, the cooperation format had to be adapted to the new global and continental realities. In 1948 the Danube Commission was founded to remain till present the guardian of the river navigation status, with a general interest in the related environmental issues. Then, in the 1950s a series of bilateral agreements on the Danube’s resources management were concluded among the countries of the region. The Joint Danube Fishery Commission (see BEKIASHEV – SEREBRIAKOV 1981. 352–366) created under the Convention on fishing in the Danube waters (signed by Bulgaria, Romania, the USSR and Yugoslavia) found within its mandate such environmental goals as scientific river ecosystem exploration, amelioration of natural fish breeding conditions, and water contamination prevention (*Convention...* 1958). Simultaneously, in 1958 collaborative efforts were directed at the problem of the fish pool regeneration.

In 1959 the Secretariat of the Danube Commission started to gather materials for assessing water quality and devising protection measures for it, while the Moscow Conference of 1960 was convened to advance waste water treatment cooperation in the member states of the Council of Mutual Economic Assistance (CMEA) (NAGIBINA 1962. 37.). The following year, after the preparatory works in 1956–1961, an innovative hydrologic resource usage scheme for the Socialist Danubian countries was presented. According to the final report, it was meant to allow complex multi-purpose use of the river from Děčín to the Black Sea, including biological resource protection. A special work group was commanded in 1961 to elaborate basic provisions for water cleanliness protection in border rivers. In cooperation with the Commission CMEA looked into addressing pollution from navigation. And 1962 saw open the first international Conference of the heads of water management agencies of the CMEA members. This created the necessary conditions for the orchestration of pollution sources individuation and differentiated standard adoption for permissible water pollution levels across the basin. In 1963 CMEA adopted unified

methods for water cleanliness protection, and the discussion of a convention for preventing pollution of waters of international significance became part of the agenda (KUZNETSOV 1975. 21.). A new stage in the usage of the river's potential arrived in the late 1960s and the early 1970s when attention was turned to the influence of hydroelectric power plants on the environment and its components (KUZNETSOV 1975. 15.). As a result, Bulgaria, for example, was tasked with acting on a national program (until 1990) to clean the Danube basin waters. In 1965 representatives of twenty countries partook in an East-West conference cruising the Danube.

The activities of the Carpathian Association were resumed in 1956, as it added the Balkans to its organisational scope (SZCZOCARZ 1998. 15.). In the meantime, noticeable "progress took place in the development of networks of protected areas" (DĄBROWSKI 2013. 30.). The idea of creating a chain of national parks in the Czechoslovak-Polish borderland remained germinal until 1948 when the Tatras National Park was created in Czechoslovakia, followed by the consolidation of the Tatra Mountains, the Pieniny Mountains and the Babia Góra Parks in Poland in 1954 (WIĘCKOWSKI 2004. 76–77.). Czechoslovakia mirrored the protected areas with the Krkonoše (1963) and Pieniny (1967) National Parks and the Upper Orava Landscape Park (1979). Additionally, national parks were created on the both sides of the Czechoslovak-Hungarian and Czechoslovak-Soviet borders (DĄBROWSKI 2013. 30.), along with the growth of the Polish-Czechoslovak network. In 1966, given that conservation experts aspired to move on from simply sharing knowledge (BOREYKO 1996. 246–247.), at the initiative of Czechoslovakia the idea of a trilateral international border area reserve in the Bieszczady became the object of Slovak-Ukrainian consultations in Uzhgorod (RUŽIČKA 1975. 64.). Coordination between national park administrations was at the same time an ice-breaker for formal cross-border cooperation (TURNOCK 2001. 17.). Thus, in 1955 and 1956 Czechoslovak representatives were invited at the meetings of the Polish Pieniny Park Council and discussed difficulties on their side, border opening in Červený Kláštor, and dam construction on the Dunajec (DĄBROWSKI 2008. 159.). The last project was becoming ever more realistic, supported by flood protection concerns (DĄBROWSKI 2008. 160.), and the works near Niedzica actually started in 1975.

The post-war industrialization in the Socialist countries progressed at accelerated pace. Thus, between 1950 and 1972 the industrial production in CMEA member states increased by eight times (as compared to the triplication in the developed capitalist countries) so that their cumulative share in the global industrial production exceed that of the USA (GORIZONTOV 1975. 40.). This had two particularly noteworthy consequences. First, as far as the countries adhered to the extensive model of resource use for the sake of speedier growth, anthropogenic pressure on the environment augmented unprecedentedly, which entailed by the 1960s an unfolding of a common realization of the associated threats. Therefore, in the decades to follow, the CMEA members were "certainly aware of the environmental challenge" (GRIEVES 1978. 327.). Second, the collision of development ambitions with resource limitations in the Central and Eastern European Socialist countries enacted an economic logic of basic efficiency seeking in solution elaboration. Strategy of cooperation for the environment had to be part of the plan and considered within economic discussions. Already in 1969, apart from setting goals for the United Nations (UN) Conference on Human Environment, Secretary-General U Thant, emphasising the interrelation of environmental problems with social malaises, mentioned the successes of the Socialist Bloc: the endeavours of international significance on the Danube, formal ambient

air quality standards in Czechoslovakia, Poland, Romania and the USSR, and the control of salinization in the Danube plain in Hungary (UNITED... 1969).

The first comprehensive international format of inter-state environmental collaboration was operated by CMEA. The Executive Committee and the directly reporting to it Committee for Scientific and Technical Cooperation orchestrated the realization of a comprehensive programme of scientific and technical cooperation among the CMEA countries. In 1971 the latter signed a cooperation agreement which added to the programme a new complex problem: elaborating measures for nature protection. It was supposed to serve the harmonization of the most important groups of areas of cooperation in 1971-1975. Coordination centres for carrying out all organizational work for domestic research tasks were designated across the USSR, Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Romania, and Yugoslavia that joined the agreement in 1973. The agenda included six distinct problems underlying a transnational “scientific research complex”, eulogically referred to as “an unprecedented phenomenon in international scientific and technical collaboration” (GORIZONTOV 1975. 52.). In 1972 a standing agency of the Committee was created: the Council for the Protection and Improvement of the Environment, in its turn, would have councils of representatives for each problem steering coordination centres for respective directions of cooperation (covering economic and social aspects of nature use, environment assessment, protection and improvement, safe waste recycling etc.); the so-called head organizations were responsible for the level of themes, the collaborating ones – for tasks.

Having in view a better organization and higher efficiency of the joint efforts of the member states and Yugoslavia, the Executive Committee approved in 1974 the General Detailed Cooperation Programme on the protection and improvement of the environment and the related rational natural resource use through 1980 (the last regular prolongation encompassed 2010). Based on the preliminary research outcomes, it provided for collaboration on more than 160 topics grouped into thematic directions (from ecosystem protection to urban planning). Although “the aspects of central planning and coordination would appear to make CMEA a strong vehicle for dealing with environmental problems” (GRIEVES 1978. 327.), designing an effective system of exchanges was a long road to walk. The large number of organizations involved and the voluntary nature of participation accounted for challenges in inter-agency communication and required defining exact cooperation rules and forms. There were cases of participating organizations failing to respect their obligations (e.g. *Otchet...* 1973). Suggestion came for choosing problems of preference for countries and dividing labour accordingly (*Prilozheniye...* 1976a). In parallel to substantive activities, the scholars in charge had to devise methodologies for organizational and coordinational workflow on problems (e.g. *Prilozheniye...* 1976b). The system was bureaucratized so as to allow the geographically distributed community to work on granular tasks, whereas the forecasting and planning pipeline know-how was based on the supply of up-to-date scientific information.

The orchestration and implementation of the programme involved resources of national Academies of Sciences. There was hence a heavy focus on coordinated fundamental and applied environmental research, supported by the CMEA research programme through 2000; and it was in the Scientific Committee on Problems of the Environment (SCOPE) that the Council found its global interlocutor. Conducted by hundreds of specialized organizations, studies dealt with such matters as legal aspects of nature protection, the relationship between the environment and lifestyle, water purification and closed-cycle water use technology development, or waste

management. Joint research was also based on collectively elaborated methodologies. Thematic international symposia, seminars, and conferences (e.g. on the Carpathian flora gene pool protection in Smolenice in 1988) were regular events. Moreover, the originally developed shared information system underpinning the scientific and technological cooperation programme could benefit from computerization (KIZMAN 1988), so the International Centre for Scientific and Technical Information in Moscow processed data on a minicomputer also for CMEA environmental activity. Thus the cooperating parties could leverage the data and information technology advancement for enhancing their modelling and forecasting capabilities (e.g. NOVÁKY 1988). On the other hand, the data harmonisation problem was familiar to them as well (BASSA 1993. 62.).

The piratical dimension regarded, among other aspects, environmental protection, especially in border areas: fighting pollution of air, rivers, lakes and conserving plants and animals. For instance, the ecological exploration of the Danube with the goal of preventing radioactive contamination required in 1978 a joint expedition of Bulgaria, Czechoslovakia, Hungary, Romania and the USSR, that found no anomalies neither measured value increase (MOROZOV 1983. 5.). Among geographic spots to which the programme attracted attention were the Tisza and the Danube as border rivers, the Polish-Czechoslovak border area in the Carpathians as a traditional location of international tourism and recreation economy as well as the adjacent zones of industry concentration with the centres in Bielsko-Biała and Žilina, and a number of model land plots.

It is relying on the latter that a theory of rational natural resource use was being developed under Problem III concerning the protection of ecosystems (biogeocenoses) and the landscape (*Prilozheniye...* 1972). The so-called model areas presented laboratories and testing grounds for innovative environmental management in the CMEA countries. In the Ostrava region one of such territories was used by an international team in 1975 to verify in practice a new methodology of economic and non-economic human environmental impact assessment. The model area around Tata in Hungary (521 km²) could serve another illustration for the Carpatho-Danubian space. Its development started in the early 1970s with the mapping of ecological threat sources leading to the conclusion that the only solution could be a complex area strategy (GARANCZY 1979. 152.). The Tata area was approved in 1974 at a CMEA meeting to be launched in 1977, as plans were drafted for air quality and complex environmental protection (GARANCZY 1979. 153.). Those were followed by a water management plan and the first regional waters protection plan relying on a network of automated water monitors as well as activities in systematic soil melioration and recultivation and fostering of environmental education (GARANCZY 1979. 154–155.). In the 1980s a centre was set up in Tata to better coordinate the work underway and to realize joint Hungarian and Czechoslovak environmental plans for the border areas (Komárom... 1982. 6.). Importantly, the first organization of its kind in the country, the Komárom County Environmental and Nature Protection Coordination Association was inaugurated in Tatabánya to support the new approach of carrying out of interdisciplinary, coordinated nature protection activities with the aim of eliminating problems' causes instead of "treating symptoms" (Elsőként... 1982. 3.).

The above-mentioned Problem III had its coordination centre in Bratislava. Thus, using their status of the responsible party and pledging international friendship consolidation, Slovak scientists offered to return to discussing the trinational protected territory project ("Kremenets") as part of the scientific and technical cooperation under Theme 5 (covering the development of methods for reserve choosing, studying and protection), having obtained beforehand a response

from the Soviet Ministry of Agriculture that recommended recognising the area as an “international protected territory in the frames of CMEA” (RUŽIČKA 1975. 66.). At the same time, as its Theme 1 the problem comprised the development of a general theory of biogeocenology grounded in the exploration of different ecosystems (*Prilozheniye...* 1972). In particular, Bulgaria did not only study macrophytic vegetation on the banks of the Danube (*Protokol...* 1975. 18.), but also produced an account of change in species composition resulting from human activity (to facilitate measures elaboration for Danube wetlands protection) as well as assessed the status of the river’s water in unaltered or least altered spots (*Protokol...* 1975. 19.). Natural and modified ecosystem analysis was performed over the course of the Síkfőkút Project (BOGYAY 1977. 90–91.) initiated in the Carpathian basin in 1972 as a comprehensive forestry study. It implied an investigation of the country’s only complex forest ecosystem with the ultimate goal of providing forecasts for landscape management (optimization of environmental components at a site for the sake of organic matter production increase) (NAGY 1979).

Bilateral cooperation among the CMEA countries of the area was administered by mixed commissions. In the 1950s-60s agreements on border water management bound the region’s states. While the development of a convention on water and air protection against pollution was touched upon within the Council (RUMMEL-BULSKA 1984. 95.), the first in the world agreement on air protection from pollution was concluded between Poland and Czechoslovakia in 1974. Relatively novel were as well the Czechoslovak-Hungarian covenant on water source and soil protection and the Czechoslovak-Bulgarian agreement on wastewater treatment. Hungarian-Yugoslav cooperation on the water quality studies on the Drava and Mura helped to advance joint water quality protection (Magyar... 1979. 179.). In 1988 Poland and the Slovak Socialist Republic signed an agreement on border area nature protection cooperation (SZCZOCARZ 1998. 16.). Further bilateral and multilateral efforts can be exemplified by the land recultivation research programme that among the industrial zone cases had Roamnian Pitești and Rovinari and held an international seminar in Gyöngyös in 1982 (with Hungarian, Czechoslovak, Polish, Bulgarian representatives present).

Industrial environmental innovation was embodied in Haldex, founded in 1959 as a Polish-Hungarian joint stock company and supplying the technology of coal preparation plants for mining wastes. In 1981 it opened a joint Hungarian-Czechoslovak enterprise in Ostrava. In 1977 the CMEA members agreed to set up a joint company for coordinating international efforts in developing, introducing and using advanced water monitoring and treatment equipment, Intervodoochistka. Intergazoochistka was set up as a joint company for air-polluting emission capturing technology.

The range of matters to be addressed under the umbrella of nature protection went beyond the perimeter of CMEA, especially given the need for ensuring long-term resource and energy provisioning (FRISS 1977. 39.). The General Programme had a regional character, but its focus on the European part of the world could “serve as a basis for the necessary expansion of cooperation between European and other countries” (ŠINDELÁŘOVÁ 1983. 485.). Síkfőkút was one of the sites for biosphere studies also within the UNESCO international scientific programme “Man and the Biosphere” (MaB; 1971) (NAGY 1979). The principles underlying MaB were similar to that of model areas in that ecosystem change was closely observed (Komárom... 1982. 5.). However the scope of the former was narrower, and the CMEA coordinating centres aimed

at creating conditions for allowing for full continuity between the two programmes in each state (ŠINDELÁŘOVÁ 1983. 485.). The content of the programmes of the UN's new agency UNEP to a significant extent corresponded to the programme of CMEA and, moreover, CMEA regularly shared activity reports on its progress with UNEP (UNEP 1978. 30.). The UNESCO International Hydrological Programme (IHP) launched in 1975 served for hydrologists' exchanges also on the Danube environmental topics, while WHO, UNEP, and IAEA coordinated ecological measurement of the radioecological status in Czechoslovakia, Hungary, Bulgaria, Romania, and Yugoslavia in the frames of preliminary studies for pollution control management. The International Institute of Systems Analysis (IIASA) was established in 1972 with the mission of seeking ways to resolve the most pressing environmental problems (GORIZONTOV 1975. 53.) using computer-aided system analysis methods. Unsurprisingly, the Danube basin was selected as the first case study for the IIASA project on developing a decision support system for large international river management. In 1975 the Institute hosted a workshop on the Vistula and Tisza river basins land use and ecological problems maps, which reflected the readiness of CMEA countries to share such key data with their capitalist counterparts. Joint work on regional ecological maps further exemplifies the processes of data opening (e.g. NEFEDOVA et.al. 1992).

International community expected "significant improvements in cooperative problem solving and negotiated policy making" to be possible and "crucial for coping with worsening transboundary environmental problems" (LINNERTHOOTH 1988. 3.). In that climate, the Declaration concerning the cooperation on water management of the River Danube and especially water pollution control issues, bridging the navigation and ecology dimensions, was adopted in Bucharest in 1985 by the eight riparian countries. Notwithstanding the substantial asymmetry in negotiation positions between the upstream and downstream countries (LINNERTHOOTH 1988. 14.), a common approach to water resources continued to develop, including systematic monitoring of water quality. Therefore the UNDP/WHO European Regional Bureau prepared in 1986 a project proposal identifying goals for water quality protection of the Danube (e.g. working out a common regional strategy towards pollution control, promoting the transfer and exchange of technology in water quality control activities) (SALEWICZ 1991. 59.). Based on the water quality examinations performed by the five Socialist Danubian countries in the 1970s, that regional project was undertaken in 1987. Thereafter, an international water data monitoring programme was set up allowing for yearly sharing of comparable data starting from 1988 (MURPHY – BAKONYI 1997. 5.). The Nineteenth International Phytogeographic Excursion of 1989 took place in Poland, and, similarly to the Fifth Excursion, its itinerary passed in the Carpathians (WÓJCICKI 1990. 56.).

All in all, within the Socialist Bloc international environmental cooperative work regarding the Carpathian and Danubian area, including cross-border matters, was active (LESZCZYCKI 1965), yet challenging (especially as to nature protection) like throughout the whole XXth century (BIHUN et.al. 2008. 6.). As far as the collaboration relied on virtual communities of experts and did not aim at territory integration, in the Carpathians the cross-border format of cooperation "was very much limited" (DĄBROWSKI 2013. 30.). The Danube nature protection problems served as a bridge between the Second and the First World.

ENVIRONMENTALISM AND FURTHER INSTITUTIONALISATION

In the waning years of the “popular democracy” period, non-governmental forces and new intergovernmental actors stepped onto the regional environmental scene. Starting from the 1980s civil society organizations were turning more and more numerous in the region, and Western support, as described by PERSANYI (1993) at the example of Hungary, was reaching the then nascent environmentalist movements as well, even if the pre-1989 national ecological activism had developed in a relative isolation from the West (for Czechia see JEHLIČKA – SMITH 2007. 201.). Environmentalism having played its role in dismantling socialist state orders (JEHLIČKA – SMITH 2007. 188.), the countries were being integrated in the “world civic politics” of Western democracies (BREITMEIER – RITTBERGER 1997. 11.), whereby affiliates of international non-governmental organisations, along with proliferating regional and national NGOs focused on rural development and nature conservation (WERNERS – MATCZAK – FLACHNER 2010).

The theme of ecology was one of the threads in the transition facilitation involving a variety of organizations, from the World Bank to NATO. A case in point, following the retreat of Socialism “NATO officials realized even better the importance of keeping scientific and environmental research going because of the need to foster friendly relations with former Eastern Bloc countries” (TURCHETTI 2019. 10.). The Central European Initiative founded in Budapest in 1989 became a regional intergovernmental forum for supporting Euro-integration and sustainable development. Among its objectives it listed contribution to the building of a sustainable economy (in supporting the European Bank for Reconstruction and Development operation), addressing the climate change in the region, nature and biodiversity conservation. Importantly, it is based on the principle of consensual governance. Thus, after the acceleration of the post-socialist transformation processes in the 1990s, the cooperation followed the trend toward institutionalisation (DOLZBŁASZ 2011. 158.; LEWKOWICZ 2011).

The first national “aggregator” NGOs started to appear: for instance, the International Carpathian Bridge that operated in the 1990s formed a pool of public organisations interested in ecology (TURNOCK 2001. 18.). This was a period when independent local projects in economic or environmental cooperation across the region started to receive grants from environmental and charitable foundations (TURNOCK 2001. 18.) and brought together local actors from NGOs, business, academia, and government (WERNERS – MATCZAK – FLACHNER 2010). By the same token, channels were created for single bilateral initiative realization: smaller-scale activities can be illustrated by the transfer of the Polish education programme “The White Stork” to Slovakia and Ukraine (GLIŃSKI – KOZIAREK 2007. 208.).

The strategic planning in the meantime was shifting to extra-regional multilateral organisations and then was translated in thematic efforts packaged into projects with scopes subject to funding. The socio-political transformation in the region and its opening to a wider range of external stakeholders coincided with a new stage of global environmental policy tuning. This presented an opportunity for the elaboration of comprehensive strategic conceptualisations of environmental agendas. The trend found reflection, in particular, in the European Community Environment Action Programme for 1993–2000: it stipulated the adoption of a global, proactive approach having to do with different actors and activities affecting natural resources or the environment; the latter had to be integrated as a transversal topic in other policy areas (EUROPEAN

COMMISSION 1992). In the international arena, the Vienna Summit of the Council of Europe (CoE) strengthened the thematic projects argument, as it called for supporting transfrontier cooperation between non-adjacent regions (*Vienna Declaration* 1993. 2.).

At the same time, one of the most obvious motivations for transboundary collaboration was the concern that leaving important resources or routes at the discretion of one country could lead to an undesirable situation. In this vein, after proposal submission in 1990, the Bieszczady transboundary reserve concept was implemented – and the first trilateral biosphere reserve in the world was inaugurated in the region in 1991 – as part of UNESCO’s MaB Programme. The resultant East Carpathians Biosphere Reserve (ECBR) with the total area of 2132 km² “encompasses six neighbouring protected areas in Poland, the Slovak Republic and Ukraine” (NIEWIADOMSKI 2004. 169.) and counts four distinct vegetation types. However, “no joint management plan for the ECBR as an integral, multi-national unit” existed to back up the initiative, so the reserve “had little impact on actual cooperation across borders” (BIHUN et.al. 2008. 12.). Coordinated scientific activities included mapping of the ECBR different bioecological zones, compiling of inventories of flora and fauna, studying effects of pollutants (in Poland and Slovakia). In order to support the reserve the Foundation for the Eastern Carpathians Biodiversity Conservation (ECBC) was established by the World Bank as part of the Biodiversity Conservation project of the Global Environment Facility (GEF) coordinated by UNEP with the co-financing from the MacArthur Foundation, WWF and other entities. It was registered in 1995 in the stable legal and banking environment of Geneva with the objective “to encourage, organise, conduct and promote activities serving to protect the overall biodiversity of the Eastern Carpathians Mountains zone” (NIEWIADOMSKI 2002. 138.). WWF lent support in “the design and legal establishment” of the Foundation (NIEWIADOMSKI 2004. 169.).

In parallel, the collaboration of UNESCO IHP Danube National Committees continued on a number of projects. UNDP, UNEP, GEF together with other donors supported the realization of the Environmental Programme for the Danube River Basin (EPDRB) initiated in 1991 with the aim of preparing an environmental Danube convention. Additionally, the Cousteau Foundation, IUCN, the Regional Environmental Centre (REC), and WWF “indicated their strong interest” in the programme (ZAVÁDSKY 1993. 38.). Thus a wealth of global expertise was involved in projects preparation. In 1992 the Task Force driving the initiative agreed a three-year Work Plan, and, in the outcome, delivered the Strategic Action Plan (SAP) for 1996–2000 suggesting infrastructure improvements and pollution containment. The plan was endorsed in the Ministerial Danube Environmental Declaration of 1994 in Bucharest. Five months before that, the Danube River Protection Convention signed in Sofia (entered into force in 1998) had incorporated the Bucharest Declaration of 1985 (via Article 19). The document exhibited the parties’ intention to achieve policy harmonization and to improve ecological conditions, avoiding damage to the watercourse and protecting ecosystems based on a preventive approach (*Convention...* 1994). In accordance with it, the cooperation architecture was strengthened with the International Commission for the Protection of the Danube River (ICPDR) having an environment-focused mandate and fifteen contracting parties (since 2008). The Danube case (1991–2007) was the first International Waters regional programme financed by GEF (Enter the Black Sea 2007. 24.).

In 1996 the Commission launched its Transnational Monitoring Network for the Danube that had been designed in 1993 by the appointed by the European Commission (EC) WTV Consortium in collaboration with an EPDRB Task Force sub-group. In 1997-1999 GEF funded the

Danube Pollution Reduction Programme (DPRP) investing in eutrophication cause elimination and capacity building; the activities were subsequently continued in the frames of the Danube Regional Project (2002–2007) that supported local information gathering and knowledge-sharing mechanisms. The revised SAP, DPRP, and the Five Years Nutrient Reduction Programme were the basis for formulating the ICPDR Joint Action Programme for 2001–2005 (ecosystem restoration, wetland conservation, waste treatment etc.) which received financing from the Partnership Investment Fund led by the World Bank (GERLAK 2004).

Regardless of its basin-wide scale, EPDRB was only one component of a much broader scheme. The Carpatho-Danubian area hence experienced an approach complementing the thematic compartmentalisation. The first meeting of the “Environment for Europe” (EfE) process took place in Czechoslovakia in 1991, bringing up the question of the Environmental Action Programme for Central and Eastern Europe (EAP). It was agreed upon at the following ministerial conference in Swiss Lucerne in 1993 and put forward human health as the primary concern, productivity loss and deterioration of ecosystems being also in the spotlight (*Environmental...* 1993. II-1.). Apart from pointing to priority areas for focusing financial resources, it sketched steps for building institutional capacity and economic incentives for environmental sustainability. Such approach was advocated, specifically, by IIASA. The regional perspective on environmental protection in the form of an action plan was envisioned as an “Ecological Marshall Plan” designating distinct areas of cooperation on common and transboundary problems (ALCAMO 1992. 12–14.). Besides, NATO’s most effective contribution before the enlargement (apart from producing massive debris in 1999) consisted in expertise exchange facilitation through its scientific programme, such as the inclusion of regional environmental topics in the agendas of a series of advanced research workshops (on strategic approach to air and water quality, data sharing and decision support systems, mountain nature etc.) (e.g. SZARO – BYTNEROWICZ – OSZLÁNYI 2002).

Instrumental in making national environmental action planning regular coordinated work, EAP had two organs: the Task Force (TF) responsible for the policy and institutional aspects and the Project Preparation Committee (PPC) focused on the investment aspect (NORDBECK 2011. 44–45.). TF was co-chaired by EC and a participating country (on a rotating basis), while the secretariat function was covered by OECD’s Environment Directorate (NORDBECK 2011. 44.). The programme implementation was supported by the REC, established in Budapest in 1990 at the United States’ initiative (UNITED... 1994. 318.) as part of the diplomatic effort of using the environment theme “in pursuing a wide range of political, economic, and security goals” (WADLEY 2003. 572.). The Center then received the status of observer in many regional fora. Moreover, to supplement EAP, in 1994 it issued a report on the strategic environmental problems in the region. In the framework of EAP TF activities the operational St. Petersburg Guidelines on Environmental Funds in the Transition to a Market Economy were developed in 1995, and the REC assumed the role of the secretariat of the Network of CEE Environmental Funds (REC 2003. 43.). Envisaging foreign investment (KLAVERNS – ZAMPARUTTI 1995; REC 1994) and market-based environmental policy instruments (e.g. the REC EcoLinks project), EAP provided not only for institution restructuring, but also economic development.

The ambition of the undertakings and high number of different-level actors’ initiatives moved the question of necessary investments and grants to the forefront. Project realization in each country depended on multiple sources of external financing (e.g. from the EU, Sweden,

and the USA in Poland) and the emphasis was put on such transnational priorities as water quality and air pollution (MILLARD 1998. 149.). International organization and non-regional government funding (e.g. Denmark, the United States, Japan) was a factor conditioning the increasingly outward orientation of regional cooperation. It must be noted, however, that beyond the narrow project outlook, the percentage of NGOs per country having direct foreign sources of support was not high, and such money rarely constituted an important share of an organization's total budget (as evinced for Poland by GUMKOWSKA – HERBST – RADECKI 2008. 73-74.). An example of a regional funding institution was the Trust for Civil Society in Central and Eastern Europe (CEE Trust) that in 2001-2012 had environmental protection on the list of its priorities for the area of its operation (Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia). It was a coalition of private foundations (e.g. the Ford Foundation, Open Society Institute) and the U.S. German Marshall Fund, financing NGOs, non-profit organisations, educational institutions, and individuals. Its goal was to create "sustainable groups" promoting civil society and the "public good", including cross-border and regional activities, as well as to cement the neoliberal order. A CEE Trust board member Heike Mackerron explained the challenge: "It wasn't clear that all countries would continue on the path towards democracy and a market economy" (MILNER 2012).

It was much more than for EPDRB that the European Community PHARE and TACIS (in the case of Ukraine) financing was essential in the environmental domain. The PHARE Cross-Border Cooperation funding was the major instrument for the pre-accession countries within the region (DOLZBLASZ 2011. 159.), and the PHARE Regional Environment Programme also permitted to extend eastwards the European CORINE land cover project concerned with standardizing environmental data. In 1998–2000 the EU supported projects on water quality enhancement and capabilities strengthening in the Danube basin. National strategies for the European Union accession preparation included strategies for mountain area development. Concomitantly, the EU called for more participatory policy-making, which in some cases tipped internal political balances (WERNERS – MATCZAK – FLACHNER 2010). The EU Water Framework Directive of 2000 that became the programmatic basis for ICPDR, required public participation in the river basin management planning. Consequently, the Danube River Basin Strategy for Public Participation was prepared for 2003–2009.

All but unimportant was the launch by WWF of several work streams in the area, especially the Danube-Carpathian Programme (DCP). The format implied the collaboration of the organization's country offices and fostering of local actor networks and alliances. The respective conservation plans were conceived on the grounds of the ecoregional approach. Thus, the Carpathian Ecoregion Initiative (established as CEI; CERI since 2004) introduced in 1999 within DCP was based on the "Global 200" ecoregions study. It constituted an informal network of more than 50 different local organizations from seven countries, focused on conservation and sustainable economy, and importantly, had also governmental participants. The Daphne Center for Applied Ecology in Slovakia hosted the Secretariat. Daphne and the WWF DCP Office, along with the Austrian Distelverein and the Czech Veronica, became important contributors to the creation of a trilateral Ramsar Site for the Morava-Dyje floodplains conservation and restoration, in line with the Memorandum of Understanding signed in 2001 by the Ramsar Convention authorities of Austria, the Czech Republic and Slovakia in the Židlochovice Castle (RIVERNET 2001).

CEI became also an active element of the shift to community-based conservation approach, which took place in the 2000s (MEESSEN et.al. 2015), as in the first five years the Initiative “set up 17 thematic working groups, carried out studies and inventories on natural resources, published the Carpathian List of Endangered Species, <...> identified 30 Priority Areas for Biodiversity Conservation, developed a vision for future protected areas in the Carpathians, funded field projects, organised training” (NIEWIADOMSKI 2004. 170–171.). It was thereby captured in the process of transition from nature conservation to virtually holistic sustainability which was seen as “a more active approach” taking “into account not only ecological interactions but also economic and sociocultural aspects” (MEESSEN et.al. 2015).

In terms of institution building, another document adopted in Bucharest was crucial. In 2001 CEI drafted the “Status of the Carpathians” and in the Romanian capital the Carpathian-Danube Summit “Green Light for Europe” focused on nature protection and sustainable development. There, 14 states signed the Declaration on Environment and Sustainable Development in the Carpathian-Danube region, underlining their intention to use, in particular, EU funding. The summit confirmed the shared need for agreed conservation programmes in priority areas: based on the focal species areas approach, a set of priority Biodiversity Important Areas was identified comprising areas of habitats, plants, large carnivores and other mammals, amphibians and reptiles, and birds (TURNOCK 2001. 20.). Moreover, Ukraine put forward its proposal to conclude a convention for the region. During the intergovernmental consultations organised by UNEP in 2002 in Bolzano a framework document modelled upon the Alpine Convention of 1991 was recommended. Then, the United Nations Framework Convention on the Protection and Sustainable Development of the Carpathians was signed in 2003 at the fifth EfE Ministerial conference in Kiev. The temporary Secretariat was opened within the UNEP office in Vienna.

Besides, a Danube basin ecological convention draft was developed by Hungary. And two important CoE initiatives remained uncompleted as well: its Parliamentary Assembly could not recommend to adopt the draft ecological charter of mountain regions (the principles were approved of in 1976) in 1995 and the draft European charter of the Danube basin in 1997. And already in June 2001 Austria, Romania, EC and the Stability Pact brought up an initiative for “giving a new political impetus to the strengthening and development of multilateral relations among Danubian countries, without creating new institutions” (MINISTRY... n.d.). Consequently, the Danube Cooperation Process was formally established in 2002, the participants being thirteen countries of the Danube basin, including six Carpathian countries, EC, and the Regional Cooperation Council. The process was aligned with the Euro-Atlantic integration agenda and included the promotion of democratic values.

NEW SPATIALISATION

There was an array of remarkable tendencies that the spatial dimension of regional cooperation exhibited across the area at the turn of the century. The developments were rooted in the changing configurations of mediatory mechanisms: simultaneous appearance of new actors in different parts of the region, delineation of new activity boundaries, unification of spatial forms of cooperation, new functional transnational connections between organizations.

The Carpatho-Danubian area became part of a global change in the approaches to cooperation, the so-called New Regionalism that took off in the late 1980s (for a terms discussion see PERKMANN 2003. 153.). The Convention on transfrontier cooperation between territorial authorities was signed in 1980 in Madrid to usher in a spurt in cross-border cooperation (CBC), defined by PERKMANN (2003. 155.) as activities between subnational public authorities aimed at solving practical problems and able to generate a cross-border region. Since then, country borders in Europe turned to be seen as sources of cooperation opportunities between authorities and citizens, the benefits counting improved governance through common economic management and the economies of scale as well as higher territorial cohesion (KIEFER 2014. 71.). The Central and Eastern European countries showed enthusiasm for the CoE borderland cooperation initiative through which historical and geographical areas could be transformed from objects into subjects “capable of articulating the transnational interests” (HETTNE – SÖDERBAUM 2000. 461.). Thus, premises for technocratic space redivision came into existence.

This was accompanied by changes in the legal landscape. The grounds for inter-regional collaboration in scientific exploration and on-site interventions was expanded with a number of bilateral agreements explicitly covering protection of nature and the environment: e.g. documents concluded between Ukraine and Hungary on environmental matters (1992) and transboundary water management (1993), on cross-border cooperation between Slovakia and Poland (1994), Ukraine (2000), and Hungary (2001). Besides, in preparing to the EU accession countries had to undergo territorial administrative reforms allowing them to meet the standard of the nomenclature of territorial units for statistics (NUTS). The “Green Carpathians” development programme was an early example of transfrontier subnational cooperation efforts: Polish, Slovakian and Ukrainian regions worked together to pursue economic development of their marginalised areas and to mitigate ecology concerns.

Under the CoE auspices, stable collaboration formats gradually would take the shape of Euroregions. For example, the Carpathian Euroregion was established in 1993 for implementing PHARE and CREDO measures. Comprising border regions of Hungary, Poland, Slovakia, Ukraine, and Romania, the Euroregion stretches across 161 km², from the High Tatras in the North-Western Carpathians to the Ciucului Mountains in the south-east. The first euroregional initiatives between Poland, Slovakia, and the Czech Republic date back to the second half of the 1990s, and right from the outset municipalities were able to co-operate on the administration of European funds with national ministries (BÖHM 2014. 45.). Some Euroregions later were used as a basis for the EU’s European Groupings of Territorial Cooperation (EGTC) endowed with legal personhood. Both Euroregions and EGTCs may be members of the Association of European Border Regions, have environmental matters on their agenda and can process funding allocated. However, after the EU enlargement some of the local authorities started to “argue that the Euroregions are now redundant, especially given the lack of formal power” (PARKIN 2013. 56.). Moreover, BENČ et.al. (2015. 22) concluded that the participating regions of the Carpathian Euroregion “shifted their focus more to the various CBC and transnational initiatives” of the EU, so that the institution struggled to survive, being “only driven by its inertia”.

At the same time, scattered geographical distribution of coordinating organizations of various environmental cooperation directions averted spatial centralisation of orchestration processes and combined with tactical uses of ambiguity leading to spatial flexibility of actor

assemblages. For instance, for the activities under the Carpathian Convention it became quite important that “[i]n the Carpathians, the precise area covered by the Convention is still unclear” (FALL – EGERER 2004. 99.). Thus, the document “defined the geographical scope of the region”, but did not unambiguously define the boundaries, as far as “historical, geographical or economic criteria were not the guiding criteria” (PARUCH 2016. 3.), unlike the political will. (Noteworthy, the absence of an agreement on the area of the Convention and on where the Permanent Secretariat should be located were indicated as impediments to the implementation of the document’s objectives in Ukraine (WEISS – STREIFENEDER 2011. 38.)) Spatial imbalances were addressed by the EU Carpathian Project led by UNEP in 2005-2008, which involved participants from all the Convention member states. Financed under INTERREG IIIB CADSES (Central Adriatic Danubian South-Eastern European Space), it was aimed at setting a transnational framework for the application of EU spatial development policies throughout the region, enhancing sustainable development, building on the region’s potential, while safeguarding its natural and cultural heritage (BORSA et.al. 2009. 162.). The activities within project included: gathering and harmonisation of spatial data and maps, implementing pilot activities as well as publishing a handbook for local authorities and development actors, the Carpathian Environment Outlook, VASICA (Visions And Strategies in the Carpathian Area), and the Atlas of the Carpathian Macroregion.

Several streams of cooperation came to rely on wide networked organizational connections. Carpathian countries were among the first international members of the global Long-term Ecosystem Research (LTER) collaboration started in 1993 in the USA. Its Central/Eastern Europe regional sub-network of research sites was a keystone for the growth of a Europe-wide scientific network in the 2000s. The Conference “The Green Backbone of Central and Eastern Europe” held in 1998 in Cracow concluded with the region countries’ approving of the idea of the Pan-European Ecological Network (PEEN) as the means to implement the EFe Pan-European Biological and Landscape Diversity Strategy for 1996-2016. The Carpathian Ecoregion Initiative was envisioned initially as part of PEEN with, to put in WWF-biased way, biodiversity lying at its core (TURNOCK 2001. 20.). Additionally, networks bound together territorial units with new legal statuses. In particular, the European network of special areas of conservation (SACs), known as the Natura 2000 network of Sites of Community Interest and Special Protected Areas, started developing in the region after the accession of Carpathian countries to the EU had triggered the implementation of the Habitats Directive (DĄBROWSKI 2013. 31.). The selection of sites took place at the level of the nine biogeographical regions.

IMPLICATIONS FOR THE PRESENT-DAY COOPERATION

The contemporary picture of environmental cooperation in the area can be thought of as the product of a superposition of several historical strata. The diverse developments that have led to the formation of such picture (summarised in Table 1) definitely make the Carpatho-Danubian area stand out among environmental history loci worldwide. One then cannot refrain from raising the question of special advantages for the present-day regional governance that stem from the above-sketched past experiences. It is deemed convenient to examine the problem in terms of the governance resources framing (STOKER 2019).

Stage	Period	Key Actors	Characteristic Features
<i>Early cooperation organisation</i>	1870s-1930s	Associations of mountain tourists and scientists; Danube Commissions	Nature study and protection; expert commissions; specific problems and local-scale action
<i>Cooperation orchestration mechanisms</i>	1940s-1980s	CMEA; the Danube Commission	Systemic study of the environment and measure elaboration; international scientific-administrative complex; selected measure implementation
<i>Further institutionalisation</i>	1990s	EU, UN, CoE, ICPDR, NGOs	Large-scale study and action programmes; extra-regional partners and funding; specialised institutions
<i>New spatialisation</i>	2000s	EU, ICPDR, the Carpathian Convention, NGOs	New regionalisations; focused institutions; further network development

Table 1: Stages of environmental cooperation development in the Carpatho-Danubian area

Such resource conceptualisation is based on the understanding of contemporary governance contexts as complex adaptive systems (STOKER 2019. 95.) and consequently relies on the studies of complexity, public policy, and governance. Employing the three resource domains of the framework is helpful in grouping the regional cooperation substrate features in the following way. First, in what regards possibilities for local variation and commitment to experimentation, there is a good foundation consolidated. A repertory of approaches to choose from is provided by the combination of national schools of environmental thought and practice with ideas of extra-regional origin as well as the application of different policies to the same sites over the course of the years. There is a century-long tradition of international efforts being driven by bottom-up initiative and personal enthusiasm. It was also supplemented by NGO mushrooming and the EU's commitment to increasing public awareness and involvement. That has left the current multi-level governance format with diverse and cooperation-ready subnational-level actors.

Second, the conditions for fostering partnership have their own specificity. The post-war decades yielded a well-grounded regional approach to the area now shared by both EU and non-EU member countries. More recently, the activity of WWF was aligned with its holistic blueprint for the area, and the intensity of interconnections resulted in the moulding of DCP into a totally new multi-country organizational form, WWF Central and Eastern Europe. Since the logic of New Regionalism retains a prevalent role today, the manifold opportunities for collaboration stimulate variability among ad hoc consortia. In the Carpatho-Danubian area there are

22 EGTCs and 19 Euroregions which “have promoted cross-border cooperation in everything from trade to culture” (PARKIN 2013. 56.). Partnerships have been developed not only within the region, but also with non-regional actors, and, arguably, “[e]xternal influences proved central to environmental policy” (MILLARD 1998. 149.).

Moreover, the normative landscape offers room for flexibility in the activities portfolio and partnerships through licensing deliberate spatial ambiguity (WALSH et.al. 2012. 3.). For example, the “purposefully-vague spatial definition” (FALL – EGERER 2004. 98.) of the area under the Carpathian Convention falls well under such fuzzy boundary type. As far as it can be assumed that “[t]he boundary encapsulates the identity of the community” (COHEN 1985. 12.), boundary fuzziness potentially spells inconsistent visions of the region across the actor spectrum, absence of a “compelling” regional identity, and the ensuing higher risk of volatile participation. Leaving substantial room for the play with inclusion and exclusion, it renders the region “politically-challenged” (LATOURE 2005. 20.) in the sense that – to bring further probably not the most innovative idea of the political discourse-constructing role of maps, characterized as “profoundly political objects” (FALL – EGERER 2004. 100.) – the looser the definition, the freer one can navigate and the more the whole institutional architecture is power- rather than rules-reliant.

Technocratic competence has been one of the clear strong points of the regional cooperation mechanisms. It is in part due to the long-standing transboundary scientific ties. They reached a qualitatively new stage during the CMEA systematic research collaboration which was mostly theory-development-oriented. Besides, the General Detailed Cooperation Programme was an important governance milestone for the area, also because it incorporated both academic and applied projects in one planning perspective. In the subsequent decades the research grew closer to the needs of practical environmentalism and policy. For example, the integrative approach theory paved the way for the first Danube River Basin Management Plan of 2009 for ICPDR to coordinate. The competence accumulated acquired a spill-over character, so that the REC proposed “to share its experiences with other regions in transition that could benefit from international multi-stakeholder co-operation assistance” (REC 2005).

Coordinated research has been no less essential in the region also from the point of view of legitimacy and trust building. It should be taken into consideration that “co-production of knowledge can be especially important in <...> governance settings where objectives, targets, and goals often must be negotiated among actors who lack the power to enforce their views on each other” (ARMITAGE et.al. 2015. 361). Common values and understandings among the actors in a considerable measure have been forged by the global environmental discourse, with the mediation of multi-lateral institutions. The regional conditions have permitted the number of actors to increase, and many of them, collocated geographically, are indeed “heterogeneous in terms of their interests, values and notions of justice” (PAAVOLA 2005. 143.). Yet, cross-border projects contributed not only to region-building in social, economic, infrastructural and tourist spheres, but also to creating a network of actors sharing interests and values (DOLZBLASZ 2011. 158.). In that way transborder regions have been the “soft spaces” to hold together geographically close pieces of territories from different jurisdictions, enhancing integration and territorial cohesion (KIEFER 2014. 71.). Finally, the potential for showing quick and substantial results takes root in the operational capacity of hundreds of diverse organisations available for being involved in collaboration, though counterbalanced with serious coordination challenges (ARMITAGE et.al. 2015. 356).

Third, the learning and adaptive capacity in governance mechanisms has been explicitly worked on over the past century. The shifting over time cooperation focus has proved the existence of an openness to exploring a variety of issues. However, the experience of coordinating institutions also setting restrictions, together with listing priorities, is not unfamiliar to the region. Decision-making processes are underpinned by defined procedures, converging administrative practice, a number of international fora, and area-wide data analysis capabilities. The tedious work on the standardization of data collecting and processing methods has been covering domain after domain, improving data quality and compatibility and increasing survey result comparability. Thus this has made possible structured overviews of complex problems and solutions, coupled with an enhanced forecasting capability. Yet, there has been a certain “overcrowding” of the political agenda due to multiple simultaneous negotiation processes (BREITMEIER – RITTBERGER 1997. 9.) resulting in overlapping solution maps.

As far as the actor composition is concerned, since the start of the political transition in the region the EU has customarily supported “flexible strategic alliances” between local political, administrative and business elites (O’DOWD 2001. 72.). In other geographic contexts, the resourcefulness of the EU model of regionalisation was described as a tendency “to encourage a shift <...> through diplomacy and foreign policy, elite interaction, policy advice, political summits and EU-sponsored seminars” (GRUGEL 2004. 612.). This entails acceptability of cooperation format substitution with better-tailored solutions and new territorial configurations. For example, with the adoption of the EU Strategy for the Danube Region the DCP initiative lost its “particularity” (MINISTRY... n.d.). Besides, states have been put in the conditions of constant agenda harmonisation with supra- and sub-entities in the governability landscape, making them progressively become even less homogenous actors (HAMMAN 2014. 56.). On the financial side, the external investment and grant influx has made possible larger-scale environmental collaboration development and better programme continuity preservation.

CONCLUSIONS

In the XXth century the area of the Danube and the Carpathians was often a testing ground for a most advanced international nature protection practice. Together with the environmental thought, the cooperation system evolved from a set of institutions with narrow scopes and mandates, such as strategic agreements on the Danube or mountain tourism societies, into wider-reaching organisations and then a transregional environmental policy agglomerate. Throughout the process, conditions were created for a convergence of governance mechanisms for the two spaces. More recently, the actors in the area had to take an adaptive position. Regional cooperation in the post-socialist times has served to catch up with an alternative form of environmentalism and has supported the processes of Europeanisation.

Within the Socialist Bloc the efforts under the joint programme covered predominantly the scientific sphere and exchange of experience. With the UN guidance, they allowed to develop new approaches to ecology, in parallel to a similar work done, for instance, in the European Community. A conceptual shift in the 1970s extended the frames of the problem from nature protection to more efficient management and transformation of the environment. With years,

the role of international organizations in orchestrating environmental protection in the region was turning ever more pronounced. In the 1990s the cooperation machinery, thriving on international interest and support, became more visible, because of the involvement of many high-profile institutions. Environmental study and planning coordination at the international level reached a much higher degree.

A solid fundament has been laid for a systemic complexity of the regional ecological governance. At the same time, networked policy coordination strategies and flexibility in terms of actor inclusion and exclusion have added room for manoeuvre in difficult contexts. The contemporary stage of the environmental cooperation among the eight countries is simultaneously a continuation of the long-standing tradition of ecology-related collaboration and scientific exchanges in the region as well as an element of the transformative processes in the new and aspiring EU member states.

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