The Environmental Situation in the Visegrad Region: Neglect and Insufficient Cooperation in the Face of Serious Environmental Threats

ŠÁRKA WAISOVÁ



Politics in Central Europe (ISSN: 1801-3422)

Vol. 14, No. 2

DOI: 10.2478/pce-2018-0009

Abstract: Only a few studies have covered environmental problems in Central Europe and analysed environmental governance in Central European countries and no study has considered environmental cooperation in this region. The goal of the article is to map and analyse the environmental situation in Central Europe, paying attention to Central Europeans' perceptions about the environment, key environmental problems and the policy tools these countries plan to use to face them. For this purpose, I concentrate mainly on the Visegrad Four (V4) countries, which represent the core of Central Europe. My findings suggest that the most active and successful environmental cooperation is taking place in an area that includes the V4 countries, their neighbours and other European countries. The EU offers the most important framework to support and develop this environmental cooperation. My assessment of the environmental situation in the V4 region shows that environmental cooperation among the V4 countries cannot be expected and would only have limited value. Because of their geopolitical situation and physical geography, Poland and Hungary in particular are linked to environmental issues that go beyond Central Europe and call for far wider environmental action. Dealing with environmental threats successfully and protecting the Central European environment efficiently cannot be tasks for the V4 group alone. Clearly we require a cooperative and cross-border Europe-wide approach.

Keywords: Central Europe, Visegrad Group, environmental cooperation, environmental threats

"Environmental problems need [an] integrated approach..." (the European Environmental Agency)

In the summer of 2002, southern Germany and parts of Austria, south-west Bohemia and southern Moravia received hardly any rain. Subsequently, Bavaria and parts of the Czech Republic were affected by one of the largest floods in the region in the last century. The flood destroyed farmland, roads and infrastructure and several human lives were lost. It also damaged several hydropower plants, power networks and chemical factories containing highly hazardous substances. But it was not only Bavaria and central Bohemia that were hit by the flood; other regions down the Danube and Elbe were also seriously affected. Moreover, the large area of Central Europe hit by the 2002 flood went on to suffer repeated droughts between 2002 and 2017 (Intersucho online n.d.). The driest regions were in Hungary, south Slovakia and south Moravia, but much of central Bohemia and central and eastern Poland was also left to cope with a lack of water. Water shortages reduce the capacity of affected land to retain water and in the medium term impede food production and the quality of farmland. Other consequences include erosion, vegetation changes and reduced crop quality as well as wider changes to the ecosystem and cumulative environmental stress. This stress harms not only flora and animal populations, but also the daily life of human communities.

In the case of Central Europe, the drought and rising average temperatures – together with factors including an increase in international trade – opened the door to invasive species from Africa, Asia and the Middle East that lack natural predators in the Central European region (Štátna ochrana přírody n.d.). As such, the region was – and continues to be – faced with environmental risks and threats. While for many years almost no policymakers and only a small number of scholars in Central Europe paid attention to this situation, since the 2002 flood, there has been a growing focus on these issues. There are, however, still very few studies of environmental problems in Central Europe; we lack analyses of environmental governance in Central European countries, and there is no study of environmental cooperation in the region. This article sets out to fill these gaps by charting and analysing the environmental situation in Central Europe. To this end, it addresses key environmental problems and threats in the region along with the policy tools, including regional cooperation, which Central European countries plan to deploy against them.

This study focuses on the Visegrad Four countries (the Czech Republic, Hungary, Poland and Slovakia; the V4), which constitute the core of Central Europe, and it only considers neighbouring countries to a limited extent. The structure of my analysis is as follows: I begin by evaluating the environmental

situation and environmental governance in each V4 country and then scrutinise environmental threats, environmental governance and cooperation across the V4 region. Drawing together the evidence, my conclusion shows that despite the experience of the 2002 flood, interest in environmental issues in the V4 countries is quite low and policymakers seldom mention environmental security in their strategic documents. As such, environmental cooperation remains quite poor among the V4 member countries and is generally encouraged and managed by the European Union.

Environmental security and environmental cooperation in Central Europe: An academic overview

The environment emerged as a political concern in the 1960s and interest in these matters developed rapidly during the 1970s (Waisová 2015). In the years since, however, this interest in environmental issues and their political and security consequences has not been evenly distributed: while in regions like Western Europe and North America, scholars and politicians have been concerned about these problems for decades, in other areas - including Central Europe – academic and political interest in the environment is relatively new. In the late 1970s, the political establishment in the Central European Communist countries took note of environmental and ecological issues after a rapid rise in air, land and water pollution in several industrial regions led to dissatisfaction among the local population that threatened the political regime. This also explains why in Czechoslovakia, Hungary and Poland, green issues were mainly the concern of anti-regime groups and many green parties in the V4 countries emerged from the dissident movement. Nevertheless it was not until the 1990s that ecological and environmental protection became political issues. For Bratislava, Budapest, Prague and Warsaw, a milestone for environmental awareness came in the negotiations around EU membership. Before the V4 countries could join the EU, they had to adopt the EU's green laws and revise their own environmental norms. These transformations have been described as the "Europeanization of environmental politics" (see, e.g., Braun 2014).

My goal in this section is not, however, to analyse political responses to these environmental problems and threats. I will return to that task in the parts below, but my initial aim is to describe how academic interest in environmental issues developed in Central Europe. In other words, I will investigate when academic forums became open to environmental research and who put issues like environmental security and environmental cooperation on the V4 countries' political agenda.

The first expert analysis of the environmental situation and challenges in Central Europe appeared during the 1970s. While analyses from the West had linked the environmental situation in Central Europe to the political regimes and politically driven economies of the Communist countries, scholars in those countries took a more cautious view. As such, these Czechoslovak, Hungarian and Polish scholars were silent about the environmental harm caused by Soviet economic decisions as well as environmental challenges such as rising pesticide use and air pollution and the links with regional and human security.

A turning point in the development of (apolitical) academic environmental research was the decline of the Communist regimes. As borders were opened, ideas and scholars began to travel and new thinking about the environmental situation in the V4 countries emerged. Environmental research in the V4 countries soon reached world level as Czech, Polish, Slovak and Hungarian environmental scholars published articles in leading academic journals and took part in international research teams. In the 1990s, this general environmental research continued, but more political issues such as sustainable development, green and circular economies and state responsibility for developing environmentally friendly policies were also stressed. Remarkably, during the 1990s, several environmental scholars entered politics in the V4 countries and some even occupied high-level political positions (in Czechoslovakia, we may point, for example, to Professor Bedřich Moldan and Jaroslav Vavroušek, while in Hungary, György Enyedi was active). These individuals were able to put environmental issues on the political agenda. New issues such as environmental security and threats, environmental governance and green tourism emerged in environmental research and politics (TRD n.d.). These developments were linked not only to open borders and the movement of scholars and ideas, but to the substantial support of international institutions like the World Bank and the Organisation for Economic Co-operation and Development (OECD) for research and development around environmental policies. Today environmental research in the V4 region is highly developed and scholars from these countries address matters ranging from local environmental problems and environmental education to global concerns such as climate change. There has also been an observable rise in the interest of public authorities in environmental research.

Environmental risks and threats in the V4 countries

The Visegrad Group countries share a number of environmental problems that threaten not only their national security but also the safety of citizens and the quality of life in these states. Some of the problems facing the Czech Republic, Hungary, Poland and Slovakia are the legacy of decades of Communist rule and exploitative Soviet policies (for example, mining and the use of low-quality coal and uranium mining for export to the Soviet Union; Turnock 2001a). Many other environmental problems emerged in the era of rapid economic development and weak environment policies after 1990.

The V4 countries have all taken quite a similar approach to the environment: after the fall of Communism, they restricted heavy industry and took initial steps to promote environmental education and environmentally friendly and sustainable planning. They also adopted their first national and international environmental protection documents. Nevertheless, the sharp economic growth of the post-Communist period and the efforts of these countries to enter Western markets produced new ecological stress. Today both the environment policies and responses of citizens in these Central European countries remain very weak. This is particularly clear when we consider the fate of green parties in these states. After the first post-Communist elections, these parties not only entered parliament but also joined coalition governments in several countries. However, in contrast to the situation in Western Europe, their electoral support rapidly declined and they lost relevance in the national political system (Frankland 2016).

As things stand, most politicians in the V4 states do not pay attention to environmental issues. These states are similar both in their tendency to ignore environmental matters and in the kinds of environmental problems they face. In the next section, I consider each of these countries in turn, focusing on its environmental situation and the threats it faces as well the tools being harnessed in response. I then turn to the V4 region and explore environmental threats and the roles of interdependence and regional environmental cooperation.

The Czech Republic

The Czech Republic has long been considered the biggest exporter of pollution in the V4 region. This is a result of the country's industrial history, political decisions made under Communism and last but not least, local physical and geographical conditions. At present, the country's main environmental challenges include air, water and land pollution (mostly affecting northern Moravia, Prague and northern Bohemia) and problematic land design including defective river regulation and large areas of land dedicated to monocultures. As we have seen, many of these problems are directly connected to the political decisions of the Communist political establishment. Under the Soviet Union's leadership, the Central European countries transformed their economic and agricultural systems based on new specialisations; Czechoslovakia was selected to mine uranium, limestone and coal and develop heavy industry and large-scale agriculture and forestry. The era was significant for its high rate of pesticide consumption. Despite some isolated improvements, the environmental situation is not much better today in many localities and regions; the countryside, in particular, has been damaged or changed irrevocably and the benefits of new environmental friendly projects are offset by rising traffic, rapid and poorly managed urbanisation and illegal landfills. The country is also being challenged by new environmental problems connected with climate change. These include torrential

rain and landslides, long-term droughts, the loss of arable land and the loss of biodiversity, particularly bird species (Kratina et al n.d.).

As regards changing Czech attitudes to environmental issues, the most decisive moment was the 2002 flood. The flood hit the most populated parts of the country and required the overhaul of environmental protection systems along with strategic threat management and urban planning. New mid-term and long--term strategic documents were adopted while older ones were updated (this included basic concepts of foreign and security policy). As a result, environmental issues entered the political debate and politicians began to talk about environmental threats and the need for a political response. Czech integrated rescue and water management systems were transformed and systematic research commenced on environmental threats and issues like climate change and environmental education. Other measures included an increase in the number of national parks and the introduction of small environmental incentives for individual citizens and local communities. All these transformative and environmentally friendly developments had the backing of the EU. After the Czech Republic became an EU member, it began developing environmental legislation based on the EU framework and received generous support for the restoration of damaged regions and development of new environmental projects (most notably sewage disposal plants). All these developments went hand in hand with changes in the values of Czech society. Opinion polls show that younger generations especially believe the environment is very important and address environmental issues in their everyday lives (CVVM 2017).

In sum, Czech environmental policy has seen a number of positive transformations in the last decade despite the presence of influential voices who deny or trivialise environmental changes and the role of conservation (former Czech president Václav Klaus is a good example). As a result, the environment now has a key place in public and political debates and environmental issues feature on local as well as nation-wide agenda.

Hungary

Like the other V4 countries, Hungary has had to cope with the negative environmental impact of the Communist era, however its situation is slightly different owing mainly to its physical geography. There are no hills and mountains in Hungary that might block wind and rain. At the same time, the country's average annual temperature is higher based on its low elevation, and its two biggest rivers (the Danube and the Tisza) have their sources outside Hungary and extend beyond it (94 percent of Hungary's water comes from neighbouring countries; EEA 2016). Over the last few decades, Hungary has faced repeated challenges caused by air and water pollution, the degradation of farmland and the loss of biodiversity. The state is also dealing with water shortages and declining water

quality. All this is to some degree connected with poor water management: Hungary has weak anti-flood measures and a deficient sewage system, and too few people (less than 74 percent of the population) have access to sewage disposal plants. In regions outside Budapest, damage to local water resources is common and some villages with no public water pipes have depended on water tanks for weeks or months on end over the last decade.

Since the beginning of the 1990s, many scholars (e.g. Varga – Fleischer 1993) have noted that a key issue for Hungary's environmental sustainability is the state of the Danube and surrounding areas. Agricultural activities, industrialisation and urbanisation are all concentrated around the Danube. As a result, the river area has sustained long-term environmental depletion and stress as well as major damage (erosion, chemical pollution and harm from increased traffic and noise). Over the last decade, it has become increasingly clear that one of the most important steps for protecting the Danube and the Tisza is linking water management with early warning systems and river design. Hungary continues to be tested by adverse weather events affecting its upper waterways. Moreover, although there have been significant improvements in the anti-flood system, wide areas around the Danube and the Tisza continue to be hit by annual floods. More than 50 percent of Hungarian territory remains flood-prone (OECD 2008: 72).

The challenge for Budapest, thus, lies not only in environmental and conservation issues but in a lack of environmental management. In 2010, the Ministry for the Environment and Water Resources was dissolved and its agenda was divided between the Ministry for Rural Development (a new department incorporating the Ministry for Agriculture and Ministry for the Environment) and the Ministry for the Interior. Water management and other water issues were assigned to the Ministry for the Interior based on the argument that water is a security issue (see OVF 2014). This institutional reorganisation was criticised by some who argued it would lead to environmental policies being driven by the economic interests of the agriculture and industrial lobby (The Green Minister 2014). The other hot topic in current Hungarian environmental policy is the lack of "environmental democracy". Though Budapest signed the Aarhus Convention and the Aarhus system is part of EU law, Hungarian national and local authorities have failed to release environmental information (Antal 2015; OECD 2008).

All in all, water resource problems are the most pressing environmental issue facing Hungary, with particular concerns about quality, quantity and management. A second issue for Budapest is the need to resolve the management of environmental policy and set priorities for the environmental agenda. In recent years, Hungarian governments seem to have used water issues for the purpose of national branding rather than to launch a real debate.¹

¹ In 2016, Hungary organised the World Water Summit (https://www.budapestwatersummit.hu/budapest-water-summit/news/) and in 2017, it coordinated the sixth Danube Forum (http://www.danube-forum-

Poland

Like the other post-Communist countries, Poland inherited the burden of centralised policies that were environmentally unfriendly. Due to its physical geography, the country has been severely affected by environmental pollution coming from neighbouring countries, particularly the so-called Black Triangle (the trans-border region between Czechoslovakia, East Germany and Poland) and the Baltic Sea. Warsaw has also been challenged by more recent environmental problems caused by the sharp economic growth of the 1990s along with the rise of sea and road traffic and the steel industry. The most serious environmental problems now facing the country include air pollution, the coal dependence of domestic industries, water scarcity and waste industry mismanagement (OECD 2015). Like other Central European countries, Poland has had to contend with the loss of land for agriculture. This is largely due to growing urbanisation and the building of new industrial parks and transport infrastructure. Across the EU, Poland has one of the lowest rates of renewable energy production.

As we have seen, Poland has also been dealing with challenges related to the state of the Baltic Sea. As the only Visegrad country with sea access, Poland has a very strong fishing industry and a large number of fish farms. These farms were built after the country joined the EU and had to accept EU fishing policy (FAO 2007). Today the Baltic Sea is one of the world's most polluted seas; its waters have been contaminated by heavy metals, oil and industrial waste, and industrial accidents, sea traffic and plastic waste disposal are all rising (EEA 2008). The Baltic coast is also burdened by the impact of increased sand mining, wind plant use and oil and gas mining along with the building of defence facilities (WWF 2010). One of the most serious environmental challenges relates to the construction of a nuclear power plant, which was approved in 2010. Slated for completion in 2024, this plant is supposed to decrease Polish dependency on the coal. However, the construction site will be on the Baltic sea coast and it remains unclear where the nuclear waste will be stored.

Though environmental legislation began to develop in Poland in the 1990s, the country's accession to the OECD and the EU was a milestone. Both organisations negotiated with Warsaw to develop environmentally friendly politics and accept new green laws that would reduce the fallout of rapid economic growth after Communism. The OECD and the EU have also provided Poland with various instruments and funds to make environmental management easier and more effective. Since 2007 Poland has participated in the EU's integrated maritime policy and since 2009 it has been part of the EU strategy on the Baltic Sea region. Nevertheless, Warsaw lags behind other EU members; its imple-

⁻budapest.eu/danube-forum-budapest/pages/20290-overview). The Hungarian government used both these events to improve the country's image and branding as an environmentally friendly and cooperative actor. Both events featured lavish displays for foreign participants.

mentation of new green norms remains slow, mainly because its environmental management has been so decentralised. The Green Party has never been part of a coalition government or even held a parliamentary seat in Poland (Frankland 2016). Some scholars (e.g. Turnock 2001a) have also linked this situation to the weakness of the country's environmental lobby.

In line with the pattern in other post-Communist societies in Central Europe. societal values have been transformed in Poland as interest in environmental sustainability has increased. Interestingly though the environmental situation is worse for Poles than it is for Czechs or Slovaks, Poles tend to report their situation is satisfactory (Polish Ministry of the Environment, cited in OECD 2015: 35). They also claim they are satisfied with the environmental information provided to them (Special Eurobarometer 416: 2014). Even when there has been rising interest in green issues and environmental policies among Poles, the country has maintained its own approach to certain issues; for example, Poles use twice as much water per capita as the citizens of other OECD countries but campaigns to reduce water use have not worked in Poland. Poles have also opposed moves to expand national parkland and build water and sewage infrastructure (OECD 2015). Moreover, since 2017 the government has actually allowed logging in the UNESCO-protected Białowieża forest. Municipal and state authorities have both failed to construct sewage systems and public pipelines, and nor have they developed systematic policy documents on the environment situation. References to environmental security are quite rare and always general and the situation is only changing very slowly (see, e.g., National Security Strategy of Poland - NSS 2007; NSS 2014).

In summary, Poland is only just beginning to develop a responsible environment policy and robust environmental management system. The key issues facing the country are the development of renewable resources and transformation of coal-based industry. Poland is also challenged by the spill-over effects of pollution from neighbouring countries. This is why environmental cooperation with neighbouring countries and other European states is such a vital goal.

Slovakia

Like the other V4 countries, Slovakia has had to contend with the environmental legacy of Communism. Even so, it must be said that the environmental degradation and damage linked to Communist policies in the country are not as serious as seen in Poland or the Czech Republic. Inside Czechoslovakia, heavy industry was concentrated in Bohemia and northern Moravia while Slovak territory tended to be used for agriculture and forestry. During the years of industrialisation, however, several chemical, aluminium and steel factories were also constructed in eastern and central Slovakia. Slovak land was also damaged by centrally controlled agriculture and forestry policies, which disrupted land

planning and biodiversity management. Fast-growing monocultures unable to withstand strong winds were planted in the mountain regions. At the same time, fields were collectivised, rivers and streams were artificially regulated and land retention capacity was damaged. Other environmental problems now affecting Slovakia are similar to those in the Czech Republic. They include high concentrations of nitrogen oxide, water shortages and long-term droughts, erosion, torrential rains and floods, increased traffic, a lack of environmental sustainability planning, the loss of forests, widespread pesticide use and poor waste management (Kopečný 2016; MŽP SR 2017). The areas facing the most serious problems are the Danube region and central and eastern Slovakia, particularly the regions bordering Hungary.

As in the other V4 countries, Slovakia has experienced a transformation of values, including environmental values, in the post-Communist period. Today Slovaks tend to emphasise green issues and widely accept the need for environmental responsibility. This is also reflected in the post-Communist era history of the green parties, which were quickly elected to Slovak parliament and became part of coalition governments. Public institutions support environmental education, environmental analysis and sustainability, and a number of environmentally friendly measures have been adopted. New conservation areas have also been established and new environmental conventions and international norms have been accepted (Štátna ochrana prírody online n.d.). Slovak environmental laws have been found to be the most rigorous among the OECD member countries (MŽP SR 2017). The country's authorities are, however, not always willing to enforce them. Bratislava has also been avoiding the debate about environmental security for some years, however - as in Poland - things are changing. When state authorities released a draft new national security strategy in 2017, a separate chapter on environmental threats and challenges was included.

Overall Slovakia has done much to improve its environmental situation since 1989, but economic development and increased urbanisation and traffic have produced several new problems. Today the most challenging issues facing the country are the management of monocultures in mountainous areas, the treatment of wind-induced damage in hilly regions and water quality management. Water management is sure to be one of the most serious problems across all Slovak regions, and solutions will require cooperation with all other V4 countries and Austria. Slovakia particularly needs to maintain good working relationships with Hungary and Austria: the Danube enters Bratislava from Austria, and almost all Slovak rivers extend through the country into Hungary.

Environmental cooperation among the V4 countries

The analysis above has introduced the environmental issues and problems in particular Visegrad countries. It is clear that the environmental problems fac-

ing Poland, Slovakia, Hungary and the Czech Republic are similar and many of them are to some degree connected. Without coordination and cooperative action, we cannot expect any significant successes. The Visegrad countries have a common Communist heritage of centralised and exploitative decision-making; these were regimes in which the emphasis was on heavy machinery, mining and intensive centralised agriculture. They also share new challenges including rapid urbanisation and rising traffic. For many years, environmental protection and interest in environmental changes and threats came very low on the priority list of the Central European political establishment. But this situation is changing. It must be stressed that this transformation is not connected to any visionary political agenda but rather to particular crises and catastrophes (floods, droughts, torrential rain and landslides) and external pressure (EU law and OECD environmental assessments). When the V4 countries joined the OECD, NATO and EU, they were required to release environmental reports and national environmental assessments including information about air, water and land pollution in particular regions (see Environmental Directorate OECD, http://www.oecd.org/ env/). OECD and EU membership established the basic framework for domestic environmental laws and policies and the communication of environmental issues to the public. Moreover, OECD and EU environmental policies are responsible for the growing interest in environmental security and the adoption of new documents, plans and measures to protect against future environmental threats. These developments also explain why - despite minor differences - visions of environmental security are quite similar across the V4 countries.

As we have seen, the initial environmental challenge for the Central European countries was dealing with the ecological burden of the Communist period. The environmental situation in post-Communist Central Europe attracted the attention of several international organisations. Czechoslovakia (and later the Czech Republic and Slovakia), Hungary and Poland received generous financial support from the Global Environmental Facility, the World Bank, the UN Development Programme (UNDP), the European Bank for Reconstruction and Development and last but not least from the EU under the PHARE framework. This funding was intended to reform environmental policies, develop or buy green technologies, launch revitalisation projects, close opencast mines and start renewable energy projects (Turnock 2001a; Turnock 2001b). Combined with their 2004 EU accession, the improved economic performance of the V4 countries brought a decline in international support for green projects. Today the basic framework for environmental issues in the V4 countries consists of domestic laws and policies along with EU policies and joint programmes, international agreements and systems and bilateral agreements. On this basis, we may understand environmental cooperation in Central Europe as a series of concentric circles: the first circle contains the Visegrad Group countries, their national environment issues, agenda, policies and bilateral agreements;

the second circle includes the V4 group and neighbouring countries while the third circle contains the V4 group and wider Europe.²

An analysis of the first circle shows that environmental issues have featured in Visegrad Group negotiations many times. As a result, green issues are mentioned in several declarations, and V4 environment ministers continue to meet regularly. At the same time, environment policies and nature conservation are not a V4 priority and there is no permanent cooperation around these issues. Green issues on the V4 environment agenda have included green economies; the restoration of environmentally damaged cross-border regions (e.g. the so-called Black Triangle of Upper Silesia, Region Novozámecko and Košice Region); water resource management including the management of regionally important river flows; development of anti-flood measures; the maintenance of bio-corridors and original animal migration routes (particularly in the Carpathian-Danube corridor) and the management of cross-border conservation areas.3 Unfortunately, however, within the V4 group, there is almost no scope for common environmental projects. The reasons for this are twofold: first, the environmental problems which need to be solved go beyond V4 borders and second, the V4 group's institutional and bureaucratic structure remains a barrier. The only framework for cooperation on green issues among the V4 countries is the International Visegrad Fund, which is limited both financially and organisationally. This fund only offers support to non-state actors such as universities and NGOs. As such, cooperative projects among V4 state institutions must look for assistance elsewhere.

The first instance of environment-related cooperation among actors from the V4 countries occurred in 1986, shortly after the Chernobyl nuclear power plant accident. For the citizens of Central Europe, this was a profound ecological awakening. The experience mobilised ecological activists: the first green organisations emerged and the first regional cooperation took place. Before 1990, responses to environmental issues had mainly been driven by state interest as well as the concern of the general population. The only groups highlighting green issues had been dissidents. There were, for example, well-known and regular meetings of Czech and Polish dissidents in Krkonoše where green issues were discussed. Wider interest in environmental issues, environmental protection and nature conservation arose after 1990. The first environmental NGOs and social movements appeared and the first green parties were established. Central Europe also saw its first region-wide protests against pollution and en-

² We could, of course, conceive of a fourth circle. This would include the V4 countries and all other actors in the global system. A global level assessment of the environmental situation of the V4 countries is, however, beyond the scope of this article.

³ After the V4 countries joined the EU, they had the chance to join NATURA 2000. This is a system of protected areas deemed to be of European importance under an EU resolution. The NATURA 2000 map (see https://www.eea.europa.eu/data-and-maps/figures/natura-2000-birds-and-habitat-directives-1) clearly shows that cross-border areas of the V4 region are environmentally rich and cannot be protected without significant cooperation.

vironmental hazards. Later cross-border environmental projects were created, including several cross-border conservation reserves (Turnock 2001a; Turnock 2001b). As Central European borders opened up, more cross-border and regional environmental projects and activities began to developed. International support played an important role in fostering this regional cooperation on green issues in the V4 area, with special grants from the World Bank and the EU. Today the most active green NGOs in the region come from the Czech Republic, Slovakia and Hungary. Their Polish counterparts have remained separate and shown a preference for non-V4 issues.

Environmental issues across Central Europe are not only a cause for cooperation. Recent years have seen a rise in the number of ecological and eco-political conflicts among the V4 countries (see Cabada on p. XX of this issue). Air pollution has been an ongoing source of tension among the Czech Republic, Slovakia and Poland with Prague largely ignoring recent pollution reduction measures. A new problem arose after Polish companies constructed large greenhouses with permanent lighting on the border between the Czech Republic and Poland. Though many Czech villages in mountain areas complained about the light pollution coming from the Polish side, Warsaw and local authorities ignored the problem (i.dnes.cz 2016). For years, the construction of a hydropower plant on the Gabčíkovo/Nagymaros border was another hot topic between Slovakia and Hungary. While Slovakia finished its part of this construction project, Budapest did not and unilaterally declared the area a nature reserve. Since 2017, criticisms of Hungary have intensified following its decision to build a nuclear power plant in Paks along with a large nuclear waste storage facility using Russian technology.

Returning to the three circles, we have seen that the second circle represents environmental cooperation among the V4 states and neighbouring countries and regions. This cooperation chiefly involves southern Poland, south-eastern Germany, Bavaria, the Czech Republic, Slovakia, northern and eastern Austria, part of Hungary, western Ukraine and the western regions of Romania. This second circle is not sponsored by the V4 but takes place under the auspices of the EU, NATO and the Organization for Security and Co-operation in Europe (OSCE). Its actions usually occur in response to a concrete environmental problem such as cross-border water mismanagement, the need for early warning anti-flood systems or an ecological accident. This extended regional cooperation has resulted in projects such as the International Commission for the Protection of the Odra River against Pollution (a network including the Czech Republic, Germany, the EU and Poland)⁴ and joint cross-border early warning system trainings.

The third circle of environmental cooperation contains the V4 countries and other European countries, that is, wider Europe. Key issues for this broader cooperation include water management and joint conservation of original animal

⁴ See MKOOpZ available at: http://www.mkoo.pl/index.php?lang =CZ.

migration routes through the Alps-Carpathians and Danube-Carpathians corridors. This environmental cooperation is based on EU policies and strategies such as Natura 2000, the EU Biodiversity Strategy, the Operational Programme for Infrastructure and Environment 2014–2020 (combining environmental protection, climate change adaptation and infrastructure construction) and the Cohesion Policy as well as specific environmental and development strategies. Here the EU Strategy for Danube Region should be highlighted especially. This strategy has given rise to two projects: Interrreg and Transgree, which include campaigns such as the Danube Habitat Corridor and DANUBEparksCONNECT-ED. As a result of this Danube strategy, the development of green infrastructure has also begun. Moreover, we have seen cooperation in maintaining original animal migratory routes, nature conservation in the Danube and Tisza areas and support for the coordination of anti-flood systems.

One interesting joint environmental project in Central Europe is the hybrid platform known as the Regional Environmental Centre for Central and Eastern Europe (REC). REC was established in 1990 with the support of the US, the EU and the Hungarian government. Today it is active in several Central, South and East European countries and provides support for research and projects on cross-border and local environmental issues. REC has received support from development agencies in Sweden, Canada, Austria and Finland as well as private donors who believe that environmental mismanagement and damage are threats to all parts of the world and not only the regions where they happen. The programme aims to develop environmentally-oriented projects and communication channels with the participation of citizens, local authorities, companies and politicians. REC's projects and activities have even reached Central Asia where it has developed the Environmental and Security Initiative (ENVSEC) in cooperation with NATO, the EU, the OSCE, the UNDP and national governments.

Conclusion

Environmental issues are by their very nature non-local. These problems extend beyond the territory of any country and affect wide regions or even become global. Additionally, the environmental situation is influenced by long-term trends and processes that may start locally but then turn regional or global. It follows that while some environmental problems may be resolved locally, most ecological issues extend across state borders and require coordination and cooperative action. In other words, these environmental issues do not respect political boundaries and call for a cooperative approach. These principles hold true for Central Europe and the V4 region. The Czech Republic, Hungary, Slo-

⁵ For more details about REC, available at see http://www.rec.org/.

⁶ For more details about ENVSEC, available at: http://www.envsec.org/index.php?lang=en.

vakia and Poland must solve very similar ecological problems and they share a number of environmental challenges, issues and needs. Nevertheless, though green issues have received some attention within the V4 cooperative framework, no V4 green projects have emerged. Environmental cooperation has instead been based on bilateral agreements on the one hand and broader regional programmes on the other.

In this context, the most active and successful environmental cooperation is occurring in the space I have called the third circle, an area which covers the V4 countries, their neighbours and other European countries (in short, wider Europe). The most important frameworks for supporting and developing this cooperative action have come from the EU and the OECD, which have offered several strategies and policies and support with these issues. My assessment of the situation in the V4 region shows that environmental cooperation among the V4 countries not only cannot be expected but it would have only limited value. To begin with, there is no real interest in developing deeper V4 environmental cooperation among the political representatives of the V4 countries. In addition, because of their geopolitical situation and physical geography, Poland and Hungary are involved in environmental issues that go beyond Central Europe and require much wider environmental action. If environmental threats are to be faced successfully and the Central European environment is to be protected efficiently, efforts cannot be limited to V4 group. What is needed is clearly a cooperative, cross-border Europe-wide approach. To expect increased environmental cooperation among the V4 countries would be a mistake.

References

Antal, A. (2015): Environmental and energy security in Hungary. Paper presented at the European Consortium for Political Research (ECPR) conference (environmental politics section), Montreal, August 2015.

Braun, M. (2014): Europeanization of Environmental Policy in the New Europe: Beyond Conditionality. Routledge.

Cabada, L. (2018). Visegrad Cooperation in the Context of Other Central European Cooperation Formats. *Politics in Central Europe* 14 (2). Doi: 10.2478/pce-2018-0014.

Centrum pro výzkum veřejného mínění (CVVM; Public Opinion Research Centre) (2016): Postoje k ochraně životního prostředí a jejímu financování, July, available at: https://cvvm.soc.cas.cz/cz/tiskove-zpravy/ostatni/ekologie/2061-postoje-k-ochrane-zivotniho-prostredi-a-jejimu-financovani-kveten-2016 (2 September 2017).

Centrum pro výzkum veřejného mínění (2017): Hodnocení stavu životního prostředí, May 2017, available at: https://cvvm.soc.cas.cz/cz/tiskove-zpravy/ostatni/ekologie/4365-hodnoceni-stavu-zivotniho-prostredi-kveten-2017 (2 September 2017).

- European Environmental Agency (EEA) (2008): The Baltic Sea, available at: https://www.eea. europa.eu/downloads/4446fa79cfd2963d4d67c0172cf9fd3e/1483956707/page141.html.pdf (12 September 2017).
- EEA (2016): Hungary, available at: https://www.eea.europa.eu/soer-2015/countries/hungary (12 September 2017).
- EEA (n.d.), Problems, available at: https://www.eea.europa.eu/publications/92-827-5122-8/page014.html (4 September 2017).
- Food and Agriculture Organization (FAO) (2007): FAO fishery country profile. Poland, available at: http://www.fao.org/fi/oldsite/FCP/en/Pol/profile.htm (6 September 2017).
- Frankland, E. G. (2016): Central and East European Green Parties, in van Haute, E. (ed.). *Green Parties in Europe*. London: Routledge, 59–91.
- i.dnes.cz (2016): Obří polský skleník u hranic už do noci zářit nebude. i.dnes.cz (12 September), available at: https://liberec.idnes.cz/skleniky-na-rajcata-zakryti-dph-/liberec-zpravy. aspx?c=A160912_152704_liberec-zpravy_jape (9 September 2017).
- Inglehart, R. (1997): Modernization and Postmodernization. Cultural, Economic and Political Change in 42 Societies. Princeton: Princeton University Press.
- Intersucho online (n.d.): Mapa sucha, available at: http://www.intersucho.cz/cz/ (2 September 2017)
- Kopečný, R. (2016): Tri najväčšie EKO-hriechy Slovenska. Tieto problémy ohrozujú aj nás. Aktualne.sk (20 April), available at: https://aktualne.atlas.sk/slovensko/spolocnost/tri-najvacsie-eko-hriechy-tieto-problemy-ohrozuju-aj-slovensko.html (15 September 2017).
- Kratina J. et al. (n.d.): Zpráva o životním prostředí České republiky 2015. Praha: Ministerstvo životního prostředí.
- Lidovky.cz (2010): Polsko vybralo místa pro jaderné elektrárny, Lidovky.cz (16 March), available at: https://byznys.lidovky.cz/polsko-vybralo-mista-pro-jaderne-elektrarny-chladit-je-mozna-bude-more-1me-/firmy-trhy.aspx?c=A100316_145917_firmy-trhy_nev (27 September 2017).
- MŽP SR (Ministry of Environment, Slovakia) (2017): Tri výzvy životného prostredia, available at: https://www.minzp.sk/files/iep/01_2017_tri-vyzvy_zivotneho_prostredia.pdf (14 September 2017).
- National Security Strategy of the Republic of Poland (NSS) (2014): Warsaw: National Security Bureau.
- NSS (2017): Warsaw: National Security Bureau.
- Organisation for Economic Co-operation and Development (OECD) (2008): OECD Environmental Performance Reviews: Hungary. OECD Publishing.
- OECD (2015): OECD Environmental Performance Reviews: Poland. OECD Publishing.
- OVF (General Directorate of Water Management) (2014): General Directorate of Water Management, available at: http://www.ovf.hu/en/vizugy-tortenet-en (27 September 2017).
- Special Eurobarometer 416 (2014): Attitudes of European citizens towards the environment, available at: http://ec.europa.eu/commfrontoffice/publicopinion/archives/ebs/ebs_416_en.pdf (2 September 2017).

- Správa o stave životného prostreadia Slovenskej republiky v roku 2015. Ministerstvo životního prostředí Slovenské republiky a Slovenská agentura životního prostředí, 2015, available at: http://enviroportal.sk/uploads/report/sprava-2015-final-ep.pdf (13 September 2017).
- Štátna ochrana přírody (n.d.): Invázne druhy online, available at: http://www.sopsr.sk/invazne--web/ (12 September 2017).
- Transdanubian Research Department (TRD) (n.d.): International Research Programs, available at: http://www.rkk.hu/en/dti/scientific_activities/international_research_programmes.html (14 April 2018).
- Turnock, D. (2001a): Environmental problems and policies in East Central Europe: A changing agenda. *GeoJournal* 54: 485–505.
- Turnock, D. (2001b): Cross-border conservation in East Central Europe: The Danube-Carpathian complex and the contribution of the World Wide Fund for Nature. *GeoJournal* 54: 655–681.
- Varga, J. Fleischer, T. (1993): The most important tasks of environmental protection in Hungary, available at: http://real.mtak.hu/8785/1/fleischer-vargha_most-important-tasks-of-environmental-protection-in-hungary_cariplo-01.pdf (2 September 2017).
- Waisová, Š. (2015). Environmental cooperation and conflict transformation. CEJISS 2: 92-116.
- World Wildlife Fund (WWF) (2010): The Future Trends in the Baltic Sea. WWF Baltic Ecoregion Programme 2010, available at: http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_future_trends_in_the_baltic_sea_2010_1.pdf (16 September 2017).

Šárka Waisová studied International Relations and International Territorial Studies at the Charles University in Prague/Czech Republic, Phillips-Universität in Marburg and Technical University of Dresden/Germany. She holds the PhD in Political Science and European Studies from the Palacky University in Olomouc/Czech Republic and habilitation (associate professor degree) in Political Science with the focus on Security studies from the Masaryk University in Brno/Czech Republic. She works as Associate Professor and quarantee of study programmes International Relations (M.A. and PhD. level) at the Department of Political Science and International Relations, University of West Bohemia in Pilsen/Czech Republic. In 2016-2018 she was an International Chair at the National University of Public Service in Budapest/Hungary, she realised also longer research stays in Taiwan, U.S. and Canada. In her research she is concerned with foreign policy, security, conflict resolution and knowledge diffusion. She is author or co-author of about one hundred scholar publications. Among the most recent we can mention books Environmental cooperation as a tool for conflict transformation and resolution (Lexington Books, 2017) or The role of Taiwanese civil society organizations in Cross-Strait relations (Routledge, 2018).

E-mail: sarka.waisova@mup.cz and waisova@kap.zcu.cz