

Climate Change and Security in South-Eastern Europe: Strengthening Joint Co-operation in the Shar/Šara Mountains and Korab Massif Area

Alina Viehoff and Beatrice Mosello

In cross-regional contexts, tackling the security implications of climate change can be an entry point to fostering broader co-operation, building trust and good neighbourly relations. A project implemented by the OSCE and adelphi in the Shar/Šara Mountains and Korab Massif area in South-Eastern Europe shows how this can be achieved through a participatory and inclusive process. Involving local authorities, civil society and regional organizations, the project develops and implements joint pilot measures that address the threats of climate change and illegal human activities to the rich biodiversity and livelihoods of people living in the area.

To illustrate how climate-related security risks play out in a specific context, and what actions can be taken to address them, the following section presents a case study focusing on the Shar/Šara Mountains and the Korab Massif area in South-Eastern Europe. It is largely based on the work of the Organization for Security and Co-operation in Europe (OSCE) in the region, in partnership with the Berlin-based think-tank adelphi, under the project ‘Strengthening responses to security risks from climate change in South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia’.¹

The Shar/Šara Mountains and Korab Massif area is a biodiversity hotspot with great natural value. It comprises four protected areas: Korab-Koritnik, Mavrovo, Shar Mountain, and Sharri/Šara. Covering more than 240,000 ha, it is one of the largest protected areas in Europe (UNEP, 2010). Natural resources provide important income opportunities and are thus vital for rural livelihoods and the well-being of local communities (Bogner et al., 2021; Keçi & Krog, 2014). However, the region is also highly vulnerable to the impacts of climate change (Alfthan et al., 2015). South-Eastern Europe is in fact anticipated to undergo significant warming, potentially reaching double the

¹ For more information on the project, see: <https://www.osce.org/node/521965>.

global average (IPCC, 2021a). In addition, there is a likelihood of heightened aridity, increased fire weather conditions, and more frequent droughts by mid-century. The decline in snow cover is also likely to continue and snow-melt is expected to intensify in winter. In combination with more intense rainfall, this will lead to an increased risk of river flooding (IPCC, 2021b; Alfthan et al., 2015). In turn, the pressures caused by the climatic and environmental changes could accelerate regional biodiversity and habitat loss in the region (Vasilijević et al., 2018; IPCC, 2022).

Climate-related security risks in the area

The impacts of climate change, together with unsustainable and illegal human activities, are threatening the rich biodiversity and key economic sectors of the Shar/Šara Mountains and Korab Massif area – posing significant risks to livelihood security of local communities and aggravating challenges that the area is already facing in a number of ways.

Firstly, forests play a crucial role in the livelihoods of local communities, especially in rural mountain areas. Firewood is utilized as fuel and for heating in the area, while timber is used in construction and trade. Forests also serve as a reservoir of biodiversity and provide essential ecosystem services (Bjegović, 2021; EuroNatur, 2020; Keçi and Krog, 2014). However, deforestation and illegal logging, occurring in all four protected areas, are endangering these vital ecosystems (Bogner et al., 2021; Bjegović, 2021; KOSID, 2020). These activities are largely perpetrated by organized criminal groups and networks, but the rural population is also turning to unsustainable deforestation practices due to increasingly difficult socio-economic conditions (Bjegović, 2021; KOSID, 2020; Stefanovski et al., 2021). These issues exacerbate the negative impacts of climate change on biodiversity and thus on livelihood security (Rüttinger et al., 2021). Forest fires aggravate the situation. Many of the fires are human-caused (KOSID 2020), but higher temperatures and more frequent droughts due to climate change also increase their likelihood. This leads to the destruction of carbon sinks and sets free huge amounts of CO₂, in turn exacerbating global warming (UNEP, 2022).

Secondly, the local population of the four protected areas relies on extensive agriculture and livestock farming as a main source of income. However, rural out-migration and the associated abandonment of traditional land use prac-

tices, is challenging the agricultural sector (Bogner et al., 2021; Keçi and Krog, 2014). The decline of traditional farming has resulted in the overgrowth of pastures, thus leading to a transformation of habitats and loss of biodiversity (Bogner et al., 2021). In some areas, unsustainable grazing management and the intensive commercial collection of wild plants is putting further pressure on ecosystems (van Ackern et al., 2022). The impacts of climate change compound these challenges: rising temperatures and less rainfall affect the health of crops and livestock (Lacetera, 2019), in turn exacerbating livelihood and food insecurities in the area. Women are particularly vulnerable to these impacts due to pre-existing economic disadvantages and their low participation in relevant decision-making processes (Rüttinger et al., 2021).

Joint co-operation and action on climate and security

Understanding the dynamics between climate change and security in the Shar/Šara Mountains and Korab Massif area is key to design policies and programmes that address and mitigate them. As the risks are shared across the region, tackling them in a comprehensive and sustainable manner requires enhanced co-operation between the protected areas. Co-operation is also essential to secure the well-being and livelihoods of communities in the protected areas, as well as to strengthen their resilience in times of a changing climate. Beyond this, co-operation on climate change and security issues can offer opportunities to build more trustful and neighbourly relationships in the region as a whole (van Ackern et al., 2023).

In this context, the OSCE and adelphi have been working since 2020 in the region to enhance the understanding of how climate-related security risks play out, foster co-operation among regional stakeholders to jointly address the risks and increase awareness and capacities for an integrated approach on climate change and security. In the Shar/Šara Mountains and Korab Massif area, the project has worked with local authorities, civil society and regional organizations to assess climate-related security risks and develop and implement joint climate adaptation measures.

Initiating joint co-operation to tackle climate-related security risks

The Shar/Šara Mountains and Korab Massif area was identified as a hotspot for joint action to tackle climate-related security risks based on an in-depth assessment of the security implications of climate change in South-Eastern Europe (Rüttinger et al., 2021) and extensive stakeholder consultations in the region. Through a participatory process involving representatives of relevant ministries, respective park management authorities, municipalities, and local Civil Society Organizations (CSOs), as well as experts from the region, international partners, and the OSCE field operations, the project produced a joint co-operation strategy on climate change and security for the Shar/Šara Mountains and Korab Massif area.²

The strategy consists of three key elements. Firstly, it identifies co-operation priorities, which include issues such as illegal logging and hunting, fire management, local livelihoods and cultural heritage. Secondly, it highlights opportunities to improve overall collaboration between the four protected areas. Finally, it provides an implementation plan featuring eight initial joint project concepts, involving stakeholders across the different protected areas and in synergy with other local, regional and international initiatives (Mosello et al., 2023). The strategy and the implementation plan have served as the starting point for the development and realization of concrete pilot activities.

Implementing pilot projects for joint risk reduction measures

As of January 2024, two of the eight project concepts outlined in the co-operation strategy are being implemented.

The first pilot project, led by the OSCE and adelphi, aims to support and improve the co-operation among local stakeholders in the four protected areas on the prevention of illegal logging, and strengthen enforcement capacities. As part of this effort, local researchers are establishing a baseline on illegal logging occurrences and are analysing the legal gaps that need to be addressed to combat illegal logging. The resulting study and possibilities for joint action on addressing illegal logging will be discussed with a diverse group of stakeholders working on illegal logging in the area, including park authorities, enforcement agencies, NGOs and CSOs. The goal of this dialogue is to establish a cross regional working group to develop a protocol of

² The full strategy can be accessed here: <https://www.osce.org/oceea/545791>.

co-operation that will serve as the basis for joint patrolling across the four protected areas.

In response to the threats of forest fires, the OSCE, in partnership with the Global Fire Monitoring Center (GFMC), and Regional Fire Monitoring Center for South-Eastern Europe and South Caucasus (RFMC), has launched the pilot initiative ‘Fire Resilient Protected Areas: Shar/Šara Mountains and Korab Massif Area’. The pilot seeks to strengthen local capacities and foster co-operation in tackling wildfire risks in the four protected areas. The project team organized several trainings for park management authorities and the civil emergency response units of the municipalities on early warning, fire preparedness and response (OSCE, 2023). In addition, firefighting equipment and hand tools such as forest air blowers, backpack pumps, fire brooms, and protective clothing for firefighters are procured for use by the park management authorities (OSCE, 2023b).

In addition to the pilot projects in the protected areas, the consultative process has resulted in a dialogue on the links between climate change, air pollution and health in South-Eastern Europe – another key climate-related security challenge requiring urgent action (Rüttinger et al., 2021). In this context, the OSCE convened regional representatives of municipalities, CSOs, and academia to discuss the impacts of climate change and air pollution on health, and to explore local solutions and project ideas (OSCE, 2023c). Based on the discussion and to identify best practices, small demonstration activities, such as public awareness raising or youth engagement, are carried out in municipalities across the region.

The work of the OSCE and its partners in the Shar/Šara Mountains and Korab Massif area is a good illustration of the importance of taking immediate action to address the security implications of climate change. Yet, it also shows that addressing shared challenges can be used as an entry point to foster broader co-operation, building trust and good neighbourly relations in the region. To this end, the project demonstrates the need for a truly participatory approach – one that brings all relevant and affected stakeholders on board: ministries, local municipalities, NGOs, CSOs, regional and international partners, as well as the research and private sectors. It also emphasizes the importance of the process being inclusive and responding to the specific vulnerabilities and needs of all groups, including women, and youth.

References

- Alfthan, Björn, Krilasevic, Elmedina, Venturini, Sara, Bajrovic, Samir, Jurek, Matthias, Schoolmeester, Tina, Sandei, Pier Carlo, Egerer, Harald and Kurvits, Tiina. *Outlook on climate change adaptation in the Western Balkan mountains*. Vienna, Arendal, Sarajevo: United Nations Environment Programme; GRID-Arendal; Environmental Innovations Association, 2015.
- Bjegović, Jasmina Kostelac. *Study on Illegal Logging and Timber Trade Flows. Legal and administrative aspects, implementation and enforcement*. Luxembourg: European Union, 2021.
- Bogner, Daniel; Stavrevska-Panajotova, Anela, and Gjorgievski, Gjorgji . *Management Plan for National Park Shar mountains. GEF/UNEP project: Achieving Biodiversity Conservation through Creation and Effective Management of Protected Areas and Mainstreaming Biodiversity into Land Use Planning*. Belgrade: IUCN Regional Office for Eastern Europe and Central Asia (ECARO), 2021.
- EuroNatur. *Nature conservation along the Balkan Green Belt: Analyzing threats, developing solutions and building capacities in the Sharr/Šar Planina/Korab-Koritnik region*. Final Report. Radolfzell: EuroNatur, 2020.
- Intergovernmental Panel on Climate Change (IPCC). *Chapter 10: Linking Global to Regional Climate Change*. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, United Kingdom: Cambridge University Press, 2021a.
- Intergovernmental Panel on Climate Change (IPCC). *WGI AR6 Fact sheet - Europe*. IPCC, 2021b.
- Keçi, Erjola, and Krog, Elisabeth. *Mountains Natural Ecosystem “Korab - Koritnik National Park” Management Plan*, 2014.
- Kosovo Civil Society Consortium for Sustainable Development (KOSID). *Sharri National Park: The Target of Crime*. KOSID, 2020.
- Lacetera, Nicola. *Impact of climate change on animal health and welfare*. In: Animal frontiers 9:1, 2019. 26–31.
- Mosello, Beatrice; Alina Viehoff; Pia van Ackern; Adrian Foong and Lukas Rüttinger. *Joint co-operation strategy on climate change and security in the Shar/Šara Mountains and Korab Massif Area*. Berlin: adelphi; Vienna: OSCE, 2023.
- Stefanovski, Ivan; Danailovska, Aleksandra, and Georgievska, Mila. *Logging Down our Future: Models and Forms of Organized Criminal Illegal Logging in North Macedonia*. Skopje: Center for European Strategies Eurothink, 2021.

- Organization for Security and Co-operation in Europe (OSCE). *OSCE enhances capacities for wildfire risk reduction and early warning to reduce climate vulnerabilities and strengthen resilience 2023*. Newsroom. OSCE. October 12, 2023a. Accessed on 4 January 2024: <https://www.osce.org/oceea/554820>.
- Organization for Security and Co-operation in Europe (OSCE). *Provision of Fire suppression equipment for the OSCE Project (Protected Areas: Shar/Šara Mountains and Korab Massif Area)*. OSCE, 2023b. Accessed on 4 January 2024: <https://procurement.osce.org/tenders/provision-fire-suppression-equipment-osce-project-protected-areas-sharsara-mountains-and>.
- Organization for Security and Co-operation in Europe (OSCE). *OSCE initiates regional dialogue in South-Eastern Europe on interconnections of climate change, air pollution and health, inspiring local action*. OSCE, 2023c. Accessed on 4 January 2024: <https://www.osce.org/oceea/553552>.
- Rüttinger, Lukas; van Ackern, Pia. Gordon, Noah, and Foong, Adrian. *Regional Assessment for South-Eastern Europe: Security implications of climate change*. Berlin, Vienna: adelphi; Organization for Security and Co-operation in Europe (OSCE), 2021.
- United Nations Environment Programme (UNEP). *Feasibility Study on Establishing a Transboundary Protected Area. Sharr/Šar Planina-Korab-Dešat/Deshat*. Vienna: United Nations Environment Programme (UNEP), 2010.
- United Nations Environment Programme (UNEP). *Spreading like Wildfire - The Rising Threat of Extraordinary Landscape Fires. A UNEP Rapid Response Assessment*. Nairobi: United Nations Environment Programme (UNEP), 2022.
- van Ackern, Pia, Adrian Foong, and Lukas Rüttinger. *Co-operation in the Shar/Šara Mountains and Korab Massif area. Scoping study on addressing shared climate-related security challenges and strengthening resilience*. Berlin: adelphi; Vienna: OSCE, 2023.