Organization for Security and Co-operation in Europe

adelphi

REPORT

Co-operation in the Shar/Šara Mountains and Korab Massif area

Scoping study on addressing shared climate-related security challenges and strengthening resilience

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Scoping study on addressing shared climate-related security challenges and strengthening resilience

Pia van Ackern, Adrian Foong, Lukas Rüttinger (adelphi)

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Executive summary

The Shar/Šara Mountains and Korab Massif area is a biodiversity hotspot that comprises four protected areas: (1) **Korab-Koritnik**, (2) **Mavrovo**, (3) **Shar Mountain**, and (4) **Sharri/Šara**. The area is rich in natural resources that are important for the livelihood security and well-being of local communities. However, the impacts of climate change, along with unsustainable and illegal human activities, threaten the area's biodiversity and key economic sectors.

These impacts would affect livelihoods and exacerbate the security risks shared by local communities across the four protected areas, with women being particularly affected. As such, strengthened and targeted co-operation between the management of the protected areas and their communities is of paramount importance as it offers opportunities to address these risks in a holistic and sustainable manner. On the one hand, co-operation activities serve to improve livelihoods, security and resilience of communities in the protected areas. On the other hand, they reinforce trust and good neighborly relationships in the area.

Scoping study and methodology

This scoping study aims to assess the current context of shared climate-related security challenges in the Shar/Šara Mountains and Korab Massif area. Based on this assessment, it collects and develops ideas for co-operation activities between the various stakeholders in the area, and to identify what is required to ensure the success of such activities. These will contribute to the overall objective of enhancing co-operation and reducing climate-related security risks at the Shar/Šara Mountains and Korab Massif area.

This study is based on the findings of the Organization for Security and Co-operation in Europe (OSCE)-adelphi report "Regional Assessment for South-Eastern Europe: Security implications of climate change", which identified the Shar/Šara Mountains and Korab Massif area as a priority hotspot for co-operation. In addition, this scoping study draws heavily on insights from stakeholder consultations, which involved online meetings, interviews, and site visits. Additional desk research supplemented the preparation of this study.

Climate-related security risks

Forest governance is the primary concern affecting all four protected areas, particularly with regards to deforestation and illegal logging. The latter is driven by organized criminal groups and networks as well as unsustainable logging practices, spurred by the difficult socio-economic conditions faced by rural populations. The area is also threatened by fires (many of which are caused by indiscriminate human activities), uncontrolled hunting and the intensive commercial collection of wild plants, herbs and fruits, particularly if left unmonitored. These threaten the area's biodiversity and livelihood security, the risks of which are compounded by the impacts of climate change.

Other climate-related security risks include:

- **Agriculture and livestock sectors**: The area's population is largely dependent on extensive agriculture and herding. However, these sectors face the threat of rural out-migration and the subsequent abandonment of traditional land use practices that have been essential in preserving the biodiversity of open landscapes. The impacts of climate change further strain the agricultural sector, with women bearing the brunt of these impacts, given that they face disproportionate economic and social under-representation in the region.

- **Tourism sector**: Because of its rich geological and natural values, tourism is becoming an increasingly important sector for the region's economic development. However, unsustainable tourism-related activities threaten the area's environment. Additionally, the impacts of climate change can affect tourism activities and revenue, particularly those associated with winter activities and in mountain areas. These could lead to further out-migration and abandonment of traditional land use practices, push local communities towards unsustainable livelihood practices, and shrink the revenue and capacities of local municipalities to provide adequate infrastructure.
- **Infrastructure – water, waste and constructions**: Infrastructural development is relatively limited in the region. Poor road networks in remote areas hamper connectivity and co-operation between stakeholders in the region, while limited waste and sewage management systems result in the occurrence of illegal landfills and waste dumping into rivers. Infrastructural development plans can help address these gaps – however, they also threaten the area's ecological integrity. Conversely, the impacts of climate change can strain the area's energy sector and push people towards other unsustainable sources of energy.

Context analysis

Park management authorities and municipalities in the area face several obstacles that make it challenging to address climate-related security risks. Some common obstacles include:

- **Limited co-operation between protected areas**: Communication, co-operation, and exchanges between the management authorities of the protected areas are limited. This is also the case for municipalities between and within protected areas. In contrast, civil society organizations (CSOs) engage in regular exchanges across the four protected areas.
- **Lack of financial and human resource capacities**: Both park management and municipalities are confronted with lacking financial and human resource capacities with regards to, for example, protected area management, legal expertise, and forest and water management.
- **Limited implementation of park management plans**: At the time of developing this scoping study, park management plans, and hence the framework documents for sustainable park management, were either not available or not operational in all four protected areas.
- **Unbalanced representation of women and youth**: The involvement of women and youth in the governance of the four protected areas is currently limited, particularly with regards to park management authorities and municipal representation.
- **Competing legislation**: Competencies and responsibilities are not always clearly established, and there are overlaps between different pieces of legislation as well as a lack of harmonization between competing laws.

There are several ongoing and recently completed projects that focus on enhancing forest governance, local livelihoods, landscape fire management and conservation efforts in the region, among other topics. These projects partly address the identified climate-related security risks as well as obstacles facing the four protected areas. However, very few projects engage in joint activities and seek to address shared challenges and strengthen climate resilience across the protected areas.

Ideas for co-operation activities

To enhance co-operation, the consultation process identified several shared activities. The first set of activities include cross-cutting activities that help address various issues by strengthening co-operation and awareness:

Establishment of co-operation structures: The aims of such structures, which could be formalized to a lesser or stronger extent, include networking, the sharing of knowledge, experience and best practices, and enabling joint activities, particularly between protected area management authorities as the core group, and the municipalities and local CSOs as wider groups.

Awareness-raising: Such activities are crucial to inform and sensitize a wider range of residents and municipality representatives about the area's importance, values, and threats associated with climate change and security.

Strengthening capacities of CSOs: Such activities are important for enhancing co-operation on nature conservation and climate change adaptation, as well as contributing to trust-building and strengthening good neighborly relationships across the four protected areas. Some CSOs are organized in Local Action Groups (LAGs), which provide good entry points for co-operation activities.

These activities could build the framework and provide support for a second set of activities that are more issue-specific. In all activities, women and youth should be included as target groups.

Forest governance is the main thematic cluster for issue-specific joint co-operation that stakeholders identified. This is coupled with the fact that forest governance is perceived to be the most important challenge related to climate-security in the area. It also offers the most opportunities for successful co-operation and is the topic that entails the most ideas for activities, including those related to:

- Legal framework and legal enforcement to address illegal activities with a particular focus on illegal logging
- Incentives to reduce unsustainable and illegal logging by private households
- Forest protection and restoration
- Fire management

Other issue-specific thematic clusters that emerged during the consultation process include:

- Local livelihoods and cultural heritage
- Sustainable tourism
- Nature conservation and pasture management
- Waste management
- Water management

Based on the results of this study, this project will proceed to fill the identified gaps by establishing a joint co-operation strategy and implementation plan. These will serve to propose a shared vision as well as to narrow down and refine the suggested co-operation activities. At a later stage, a pilot project will be implemented together with local partners and actors who will also be engaged as the main stakeholder group for future activities.

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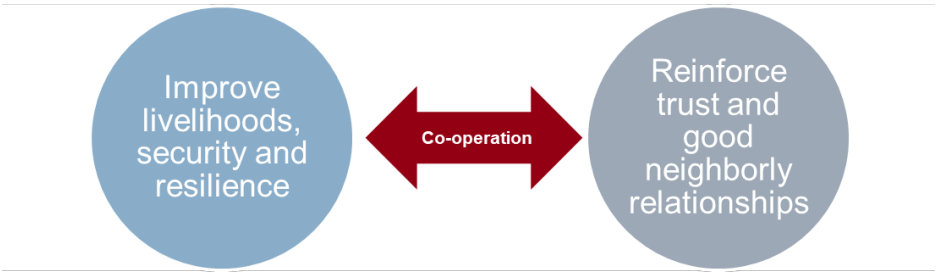
1 Introduction

The Shar/Šara Mountains and Korab Massif area is a biodiversity hotspot with outstanding natural value. Comprising four protected areas (i.e., Korab-Koritnik, Mavrovo, Shar Mountain, and Sharri/Šara), the area has a coverage of more than 240,000 ha, making it one of the largest contiguous protected areas in Europe (see Figure 2). Natural resources in the area provide economic opportunities for local communities, and are therefore important for safeguarding rural livelihood security and well-being.

Climate change poses a threat to the natural and economic values of the Shar/Šara Mountains and Korab Massif area. Combined with unsustainable and illegal human activities, the impacts of climate change threaten the area's rich biodiversity and key economic sectors, all of which would affect livelihoods and feed into the security risks faced by local communities. Given the area's inter-connectivity, these security risks would very likely be shared across the four protected areas. Strengthened and targeted co-operation between the management of the protected areas and their communities is therefore of paramount importance as it offers opportunities to address these risks in a holistic and sustainable manner. On the one hand, co-operation activities would serve to improve livelihoods, security and resilience of communities in the protected areas in the context of a changing climate. On the other hand, they would reinforce trust and good neighborly relationships in the area (see Figure 1).

Figure 1: Purpose of co-operation addressing climate-related security risks.



The Shar/Šara Mountains and Korab Massif area was identified as a priority hotspot for co-operation in the OSCE-adelphi report "Regional Assessment for South-Eastern Europe: Security implications of climate change" (Rüttinger et al. 2021). Taking these findings as a starting point, this scoping study[1] aims to assess the current context of joint activities at the protected area level in the Shar/Šara Mountains and Korab Massif area. Based on this assessment, it aims to collect and develop ideas for co-operation activities between the various stakeholders in the area, and to identify what is required to ensure the success of such activities. These will contribute to the overall objective of enhancing co-operation and reducing climate-related security risks at the Shar/Šara Mountains and Korab Massif area.

The next two sections provide a brief description of the project under which this scoping study was prepared, as well as the process that went into this study's preparation. Chapter 2 provides background information on the Shar/Šara Mountains and Korab Massif area, including an overview of the area's climate projections and climate-related security risks. Chapters 3 proceeds with a context analysis, followed by Chapter 4, outlining of ideas for co-operation activities in the area. Chapters 5 provides a stakeholder mapping and Chapter 6 concludes the scoping study.

[1] Previously referred to as 'pre-feasibility study' in earlier stages of the project, the term 'scoping study' was used as it provides a clearer definition of the objectives and content of this paper, based on feedback from stakeholders.

1.1 Project

The OSCE, in partnership with adelphi, has embarked on an extra-budgetary financed project "Strengthening responses to security risks from climate change in South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia" (Project Number: 1102151) in 2020.[2] This project aims to:

1. Enhance the understanding of how climate-related security risks impact South-Eastern Europe, South Caucasus, Central Asia, and Eastern Europe.
2. Increase co-operation among regional stakeholders to jointly address climate-related security risks.
3. Increase awareness and capacities for an integrated approach on climate change and security among main stakeholders.

This scoping study contributes to all aims of the project, with a special focus on the second aim.

1.2 Scoping study and methodology

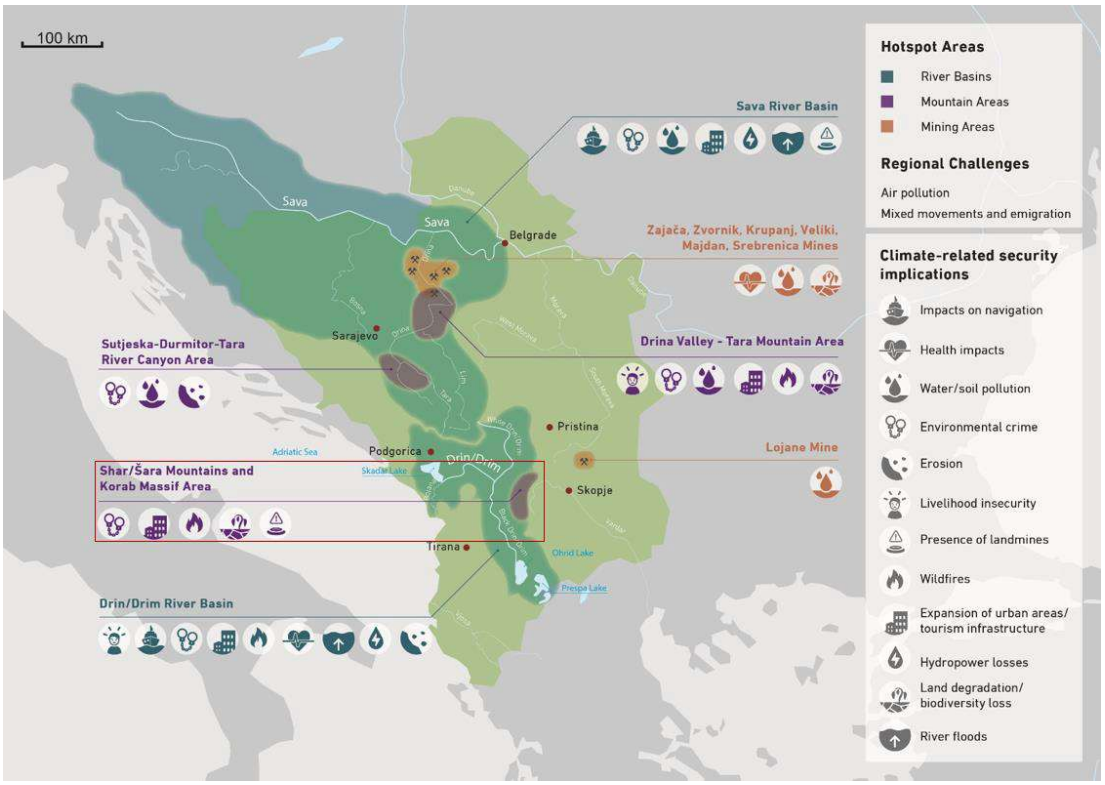
The objective of this scoping study is to assess the current context of shared climate-related security challenges in the Shar/Šara Mountains and Korab Massif area. Based on this assessment, it aims to collect and develop ideas for co-operation activities between the various stakeholders in the area, and to identify what is required to ensure the success of such activities. It builds on the findings from the OSCE-adelphi report "Regional Assessment for South-Eastern Europe: Security implications of climate change", which identified two regional challenges affecting the region as well as seven climate-security hotspots, including the Shar/Šara Mountains and Korab Massif area (see Figure 2). Hotspots are shared locations that face multiple converging challenges, including climate change impacts as well as environmental, social, economic, and political pressures. Regional challenges are similar to hotspots, but are not bound to a specific geographic area; rather, they are spread across the region (Rüttinger et al. 2021).

In addition to the above-mentioned report, this scoping study draws heavily on insights from the following activities conducted within the project's scope:

- **Online consultation for hotspot prioritization:** Between July and October 2021, Project Focal Points, experts from the region and OSCE Field Operations in South-Eastern Europe were consulted on via online meetings and interviews. Their engagement was essential in narrowing down and prioritizing the hotspots and challenges identified in the previous report. From these discussions, the Shar/Šara Mountains and Korab Massif area emerged as a priority hotspot, forming the basis of this scoping study.
- **Broader stakeholder consultation:** In March and April 2022, the OSCE and adelphi project team visited Tirana, Skopje, and Pristina to meet with and consult stakeholders representing environmental and other agencies, civil society organizations (CSOs), and international partners. The project team also conducted several site visits in the Shar/Šara Mountains and Korab Massif area to meet with and consult local level stakeholders of the four protected areas, including representatives of the respective park management authorities, municipalities, and CSOs. The results of these consultations were especially important to formulate the ideas for co-operation activities as outlined in Chapter 4.
- **Desk research**: The findings of other relevant projects and studies that were conducted in the Shar/Šara Mountains and Korab Massif area, along with additional desk research by the project team, supplemented the preparation of this study.

[2] For more information on the project, see: https://www.osce.org/node/521965.

Figure 2: Climate-security hotspots identified in the regional assessment.



Note: The priority hotspot Shar/Šara Mountains and Korab Massif area is framed in red.

Looking ahead, the scoping study will serve as the basis for the project's upcoming activity, that is, a consultation with a broader circle of stakeholders, the results of which will inform the development of a strategic framework for co-operation/joint adaptation in the Shar/Šara Mountains and Korab Massif area.

In sum, the measures assessed in this scoping study ultimately aim to enhance co-operation and to reduce climate-related security risks at the Shar/Šara Mountains and Korab Massif area.

2 Background information

2.1 Protected areas in Shar/Šara Mountains and Korab Massif area

The Shar/Šara Mountains and Korab Massif area is a region of diverse landscapes, shaped by geological, fluvial and glacial processes and, more recently, by human influences (Bogner et al. 2021). Mountains and deep valleys characterize the landscape: some of the largest and highest mountain ranges on the Balkan Peninsula are situated in the area, with altitudes of up to 2,747m at Titov Vrv and 2,764m at Golem Korab (EuroNatur 2020; Keçi and Krog 2014). The landscape is also dotted by numerous glacial lakes and springs that feed into several rivers that traverse the region, including, among others, the Luma, Pena and Radika (Keçi and Krog 2014; Milevski and Aleksova 2019; UNEP 2010).

Such an array of terrains has led to the development of a remarkably rich biodiversity – the area is home to a diverse range of endemic and rare species of flora and fauna (Melovski et al. 2010). Owing to its largely intact, unfragmented forest areas, the area has been able to sustain large mammalian species such as the brown bear, grey wolf, and lynx (EuroNatur 2020). While the conservation status of many of these species have shown improvements at the European level (EEA 2020), several sub-species that are largely confined to the area such as the Balkan lynx remain under threat (Bazzicalupo et al. 2022).

In total, the Shar/Šara Mountains and Korab Massif area covers a combined area of more than 240,000 ha, making it the largest contiguous protected area in South-Eastern Europe, and one of the largest in the continent (UNEP 2010). The area's population, which numbers more than 100,000 (see below), is largely dependent on forest resources, with farming, livestock breeding, and grazing constituting some of its major economic activities (Bogner et al. 2021; Keçi and Krog 2014).

For the purposes of this study and project, the 'Shar/Šara Mountains and Korab Massif area' is defined as the area consisting of the following four protected areas:

- **Korab-Koritnik**: Located west of Mavrovo and Sharri/Šara, the park was established in 2011 and covers an area of 55,550.2 ha. The park includes the municipalities of Dibër and Kukës, and has a mostly rural population of around 19,000 (Keçi and Krog 2014).
- **Mavrovo**: Located east of Korab-Koritnik, west of Shar Mountain and south of Sharri/Šara, the park was first established in 1949 and later expanded in 1952. According to its official website, the park covers an area of 73,088 ha that includes the municipalities of Mavrovo-Rostushe and Gostivar (Mavrovo National Park n.d.a). The park includes 37 settlements of the Mavrovo-Rostushe municipality, with a total population of around 8,600 (Mavrovo National Park n.d.b).
- **Shar Mountain**: Located east of Mavrovo and Sharri/Šara, the park is the latest of the four protected areas to be proclaimed as such, being established in July 2021 (UNEP 2021). It covers an area of 62,700 ha with a population of around 17,000 across seven municipalities (Bogovinje, Gostivar, Jegunovce, Mavrovo-Rostushe, Tearce, Tetovo, and Vrapchishte) (Bogner et al. 2021).
- **Sharri/Šara**: Located north of all of the above listed protected areas, the park was established in 1986 and enlarged in 2012, and covers an area of 53,469 ha (KOSID 2020). The park includes five municipalities (Kaçanik/Kačanik, Štrpce/Shtërpcë, Suharekë/Suva Reka, Prizren, and Dragash/Dragaš), with a population of around 61,000. The park is adjacent to Korab-Koritnik, Mavrovo, and Shar Mountain (MESP, Pristina 2014).

2.2 Climate projections

Temperatures across the region have become warmer in recent decades in comparison with historical averages. For example, in the area of Mavrovo, temperatures have been on the rise since the 1970s, particularly during the summer period (Dimishkovska et al. 2017). These trends are expected to continue in the coming years. South-Eastern Europe is projected to experience an enhanced warming with values of up to double the global mean, and with some estimates projecting more than 1.5°C of warming for the region by the end of the 21st century (IPCC 2021a).[3] Along with the rise in temperatures, the region could also see an increase in aridity, fire weather conditions and droughts by mid-century (IPCC 2021b).

Snow cover has and will continue to decline (IPCC 2021b), with some estimates predicting a 50-day decrease in snow cover days by 2050 (Alfthan et al. 2015). Higher temperatures will also shift the snowline upwards, while more intense rainfall and increased snowmelt during winter will increase river flood risks during both winter and spring (Alfthan et al. 2015).

Moreover, the rich biodiversity that characterizes the Shar/Šara Mountains and Korab Massif area is likely to face increasing pressures from climate change. Specifically, projections of warmer temperatures, drier conditions, and higher probabilities of fires could accelerate biodiversity loss in the region (Vasilijević et al. 2018). Warmer temperatures, for example, will likely decrease the amount of suitable habitat space for current terrestrial ecosystems in the region (IPCC 2022).

The very safety of communities living in the area are also very likely to come under increasing threat from climate-related disasters such as floods, storms, and wildfires. Indeed, floods and storms have been identified as some of the biggest climate-related threats to the communities of both the protected areas of Shar Mountain and Sharri/Šara (Bogner et al. 2021; MESP, Pristina 2014). These events not only increase the risk of people getting directly harmed or suffering economic damages, they could also affect public health – disaster-related displacements could, for example, contribute to the outbreak of infectious diseases if displaced populations are unable to receive or access adequate health, water and sanitation services (Alfthan et al. 2015).

All in all, climate change poses significant risks for the natural values and livelihood security in the Shar/Šara Mountains and Korab Massif area, and aggravates the challenges that the area is already facing.

2.3 Climate-related security risks

The following climate-related security risks in the Shar/Šara Mountains and Korab Massif area were identified based on consultations during the site visits and a literature review. In general, stakeholders highlighted forest governance as the major challenge in the protected areas, with a particular emphasis on unsustainable and illegal logging as well as on forest fires (2.3.1). Stakeholders also raised the challenges regarding agriculture and livestock (2.3.2), followed by tourism-related challenges (2.3.3) and challenges linked to infrastructure (2.3.4).

[3] According to IPCC (2021a), these projections refer to the entire Balkans region as well as Turkey, the Iberian Peninsula and North Africa.

2.3.1 Forest governance

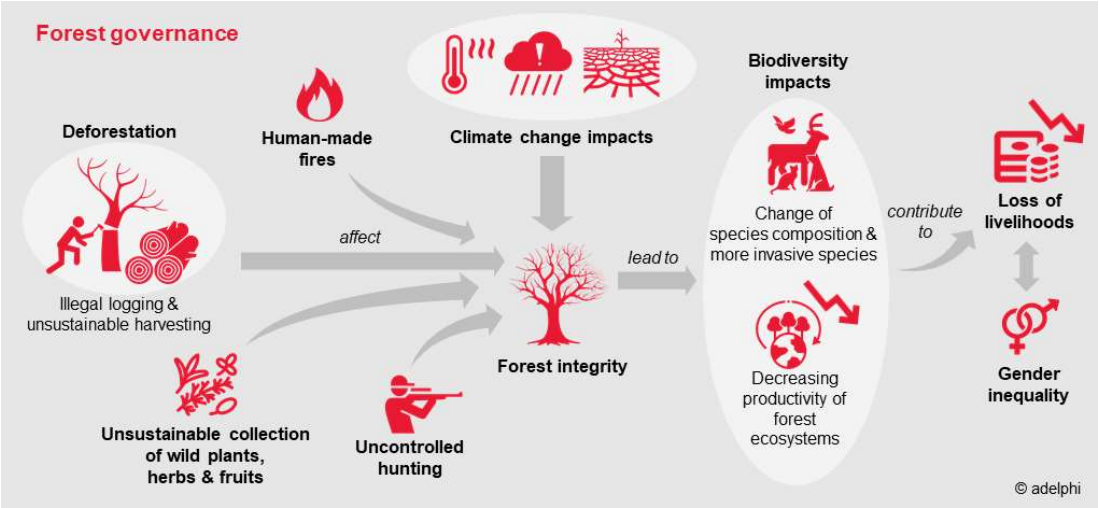
Forests are an important natural resource for the region's communities and their livelihoods, particularly in mountainous and rural areas. Firewood is used for fuel and heating, while timber is used for construction as well as trade (Bjegović 2021; EuroNatur 2020; Keçi and Krog 2014). In addition, forests are reservoirs of biodiversity and provide important ecosystem services (Alfthan et al. 2015). However, the region suffers from unsustainable harvesting practices and, more importantly, illegal logging, all of which lead to significant deforestation (Bogner et al. 2021; KOSID 2020). Two factors drive illegal logging in the region: (1) organized criminal groups and networks, and (2) difficult socio-economic conditions that push rural populations to resort to unsustainable logging for heating or generating income (Bjegović 2021; KOSID 2020; Stefanovski et al. 2021). Concerns were also raised that logging in the protected areas is driven by the limited financial capacities of park management authorities to fund their own operations (see also Chapter 3.1).

In addition to deforestation, other threats to the region's forests and ecosystems, particularly if left unmonitored, include uncontrolled hunting and the intensive and commercial collection of wild plants, herbs and fruits (Bogner et al. 2021; Keçi and Krog 2014; MESP, Pristina 2014). Wildfires constitute another major threat – in Sharri/Šara for example, many of these fires have reportedly been started by indiscriminate human activities, causing extensive damages to forest pines and the rapid emergence of pest species (KOSID 2020). In some cases, 'forest mafias' have been identified as one of the most common perpetrators of forest fires, as they gain financial profits from such fires by reselling wood harvested in affected areas (Stefanovski et al. 2021). Likewise, in other areas, a combination of forest fires and livestock grazing threaten the wood stock and resource base of forests (Bjegović 2021).

Changes in temperature and precipitation levels are likely to alter habitat distributions and threaten the biodiversity and species richness that are characteristic of the area (Bogner et al. 2021). In fact, climate change was identified as one of the major threats to the loss or reduced vitality of certain species in the Shar Mountain region (GIZ 2017). In general, high altitude mountain ecosystems are particularly under threat due to the projected decline in snow cover and rise in temperatures (Melovski et al. 2010; MESP, Pristina 2014).

Although deforestation in catchment areas has contributed to floods and excess erosion in the past (Milevski and Aleksova 2019), the risks of such events will increase with more intense rainfall and increased snowmelt (Alfthan et al. 2015). Similarly, although wildfires have for the most part been deliberately caused by human activities (KOSID 2020), fires could turn more severe as climate conditions become more conducive for forest fires as a result of higher temperatures (MESP, Pristina 2018).

Figure 3: Forest governance - climate-related security risks.



It should also be noted that the rate at which climate change is occurring could itself be accelerated by uncontrolled and unsustainable deforestation and fire activities. In particular, the loss of forests as a result of such activities can hamper their key functions in acting as carbon sinks while at the same time releasing large amounts of CO_2 into the atmosphere, thus affecting the carbon cycle and exacerbating global warming (UNEP 2022).

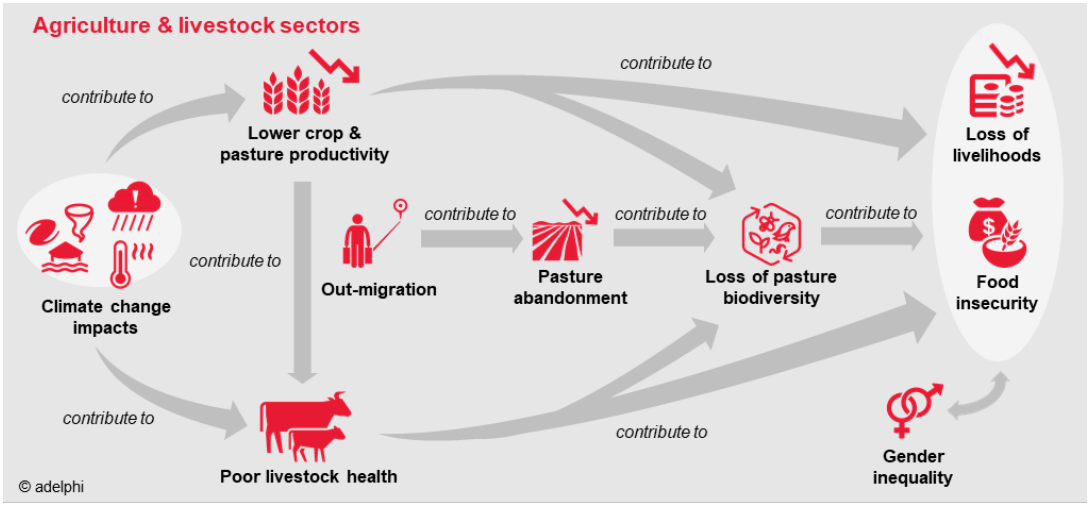
2.3.2 Agriculture and livestock sectors

The population living in the Shar/Šara Mountains and Korab Massif area is predominantly rural and largely dependent on extensive agriculture and herding, with little or no engagement in industrial activity (UNEP 2010). In the protected area of Shar Mountain, traditional agriculture has created a "diverse and richly structured landscape around villages", with mosaics of fields and meadows as well as pastures for livestock grazing and rearing (Bogner et al. 2021). As such, extensive grazing is essential in preserving the biodiversity of open landscapes that characterize the region (EuroNatur 2020).

However, several rural communities are experiencing significant out-migration to urban centers (Bogner et al. 2021; Keçi and Krog 2014). In the protected area of Shar Mountain, the decline and abandonment of traditional land use practices have led to the overgrowth of pastures, subsequent conversion of habitats, and decrease in biological diversity (Bogner et al. 2021). At the same time, in parts of the protected area of Korab-Koritnik, overgrazing has been identified as a threat by stakeholders, as livestock have reportedly grazed young forest areas, and the capacity of grazing areas have not been respected.

The agricultural sector is likely to be further strained by the impacts of climate change. For example, warmer temperatures, declining precipitation and forage shortages affect the health of ruminant animals (Lacetera 2019), which could subsequently affect livelihood and food security in the area. Women, in particular, are likely to bear the brunt of these impacts, given that they often face disproportionate economic and social under-representation in the region – for example, a large number of unemployed youth in the region are women) (Rüttinger et al. 2021).

Figure 4: Agriculture and livestock sectors - climate-related security risks.



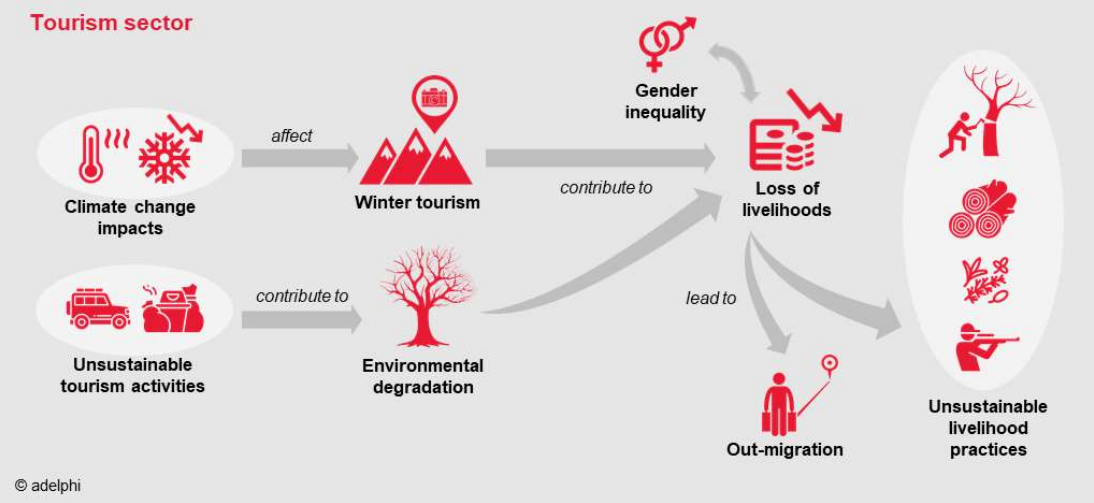
2.3.3 Tourism sector

Because of its rich geological and natural values, tourism is becoming an increasingly important sector for the region's economic development (EuroNatur 2020; GIZ 2017). Recreational activities include skiing, hiking, horse riding, and mountain biking – however, the unregulated use of off-road motorized vehicles has emerged as a growing threat to the region's environment, along with the disposal of untreated solid waste and sewage connected to ski resorts and recreational areas.

Climate change is affecting tourism. Its sectors, particularly those associated with winter activities such as skiing, would suffer as snow cover days and extent shrink. This could reduce the scope of economic opportunities available for local mountain communities, particularly women who are already disproportionately facing high unemployment rates (Alfthan et al. 2015). This contributes to a number of challenges that are already present, such as rural-urban migration and the abandonment of pastures. It may also push local communities to resort to unsustainable livelihood practices to make ends meet, including excessive (and illegal) logging (for domestic or commercial use), uncontrolled hunting, and wild plant harvesting activities.

With regards to winter tourism specifically, tourism authorities may consider using artificial snow to make up for reduced snow cover – an adaptation measure that has been considered in other parts of South-Eastern Europe – although such interventions could lead to higher energy and water consumption and are therefore deemed unsustainable (Alfthan et al. 2015). Additionally, the potential loss of tourism revenue could reduce the capacities of local municipalities to provide adequate infrastructure to address long-standing issues such as road maintenance and sewage and solid waste management.

Figure 5: Tourism sector - climate-related security risks.



2.3.4 Infrastructure: water, waste and constructions

Besides a number of small hydropower plants, infrastructural development is relatively limited in the region. While most settlements are connected by a network of paved asphalt roads, roads in the more remote areas are generally unpaved or in poor condition (Bogner et al. 2021; GIZ 2017; Keçi and Krog 2014). This affects connectivity between the various stakeholders in the area, particularly the frequency of direct personal contacts between authorities across multiple jurisdictions, thereby presenting a challenge for co-operation in the region (GIZ 2017; UNEP 2010).

Furthermore, waste disposal systems are generally absent or under-developed – an issue that has resulted in uncontrolled and illegal solid waste disposal in rivers and on land (Bogner et al. 2021; UNEP 2010). Stakeholders also noted that park management authorities face the problem of illegal landfills occurring within protected areas. Sewage infrastructures are also limited, and in some cases where there are existing sewage systems, wastewater has reportedly entered rivers untreated (Bogner et al. 2021).

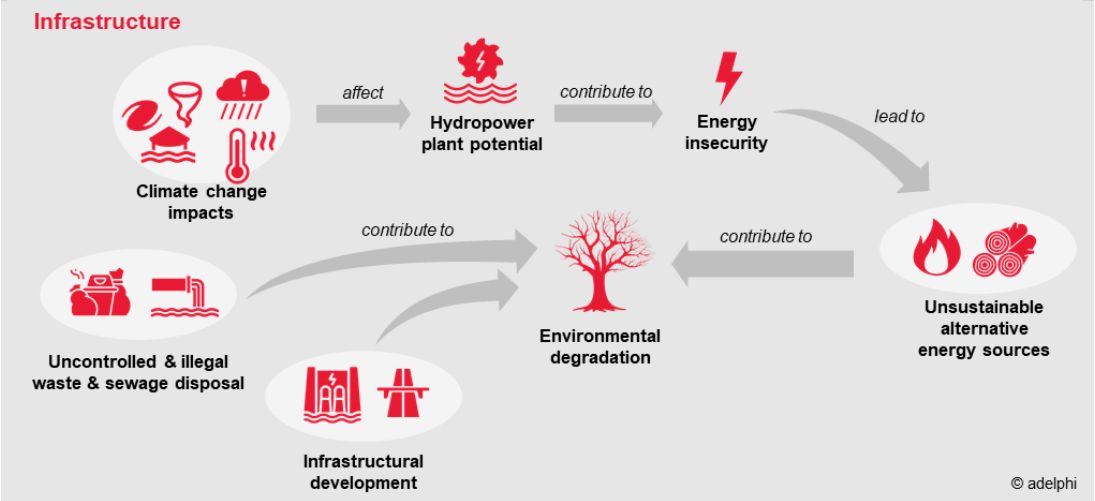
To address the gaps in infrastructural development, several infrastructural planning initiatives have taken place in the area, but these occasionally run against nature conservation policies and regulations. Stakeholders for example referred to several plans involving the construction of highways and tunnels that aim to improve road connectivity across the Shar/Šara Mountains and Korab Massif area. Such plans pose a threat to the area's biodiversity and habitats, and, as emphasized by stakeholders, could lead to other risks such as landslides. Another issue that was brought up by stakeholders was illegal constructions of buildings, a challenge faced by park management authorities and municipalities that, according to stakeholders, requires better oversight.

The construction of small hydropower plants poses additional challenges. While these plants are important for electricity production, they have disrupted ecological processes in river ecosystems, and are now considered a major threat to biodiversity – a threat that is already evident in the Korab-Koritnik and Sharri/Šara protected areas (Bogner et al. 2021; Keçi and Krog 2014; MESP, Pristina 2014). In the Shar Mountain protected area, the construction of hydropower plants causes the fragmentation of habitats, changes in chemical properties in river waters, and disruptions to flow regimes, all of which have a negative impact on flora and fauna in and along the rivers (Bogner et al. 2021).

Furthermore, changes to fluvial cycles brought by the construction of small hydropower plants threaten the integrity of the area's diverse geological features (Milevski and Temovski 2018). In the protected area of Shar Mountain, their construction may also have led to drinking water supply disruptions in several municipalities (Bogner et al. 2021). New constructions are, however, currently banned under the park's recent proclamation (Bogner et al. 2021).

Climate impacts are likely to strain the area's energy sector. Rising temperatures and reductions in water flow are expected to reduce the hydropower potential of existing plants in the area, such as those in the Korab-Koritnik and Sharri/Šara protected areas (Keçi and Krog 2014; MESP, Pristina 2014). It could also push people towards other sources of energy such as firewood, which in turn may drive up the rate of illegal logging in the area.

Figure 6: Infrastructure - climate-related security risks.



3 Context analysis

This chapter maps out the obstacles that stakeholders at the park management and municipality levels are confronted with when addressing the challenges described in Chapter 2.3. The chapter then proceeds to map out projects in co-operation with international partners that attempt to address these issues, and from which a new project or joint activity could fill gaps and build synergies.

3.1 Mapping of obstacles

The park management authorities and municipalities face several obstacles that make it challenging to, on the one hand, address the above-mentioned issues, and, on the other hand, engage in co-operation with other protected areas. Some issues that were raised across the protected areas are:

- **Limited co-operation between protected areas:** There is limited communication between the management of protected areas but there is no tangible co-operation, e.g. there are no established mechanisms for collaboration or no joint projects initiated or implemented by the protected areas. Municipalities have even less exchange with other municipalities, not only across protected areas, but even within the same protected area. In contrast, CSOs engage in regular exchanges[4] across the four protected areas and are partly organized in a network of Local Actions Groups (LAGs; see Section 4.1.3).
- **Lacking financial and human resources capacities:** Both the park management and municipalities are confronted with lacking financial and human resources capacities, e.g. in Sharri/Šara there are insufficient numbers of park rangers to take care of the protected area, working conditions are modest and legal expertise is limited. In Korab-Koritnik, funds are lacking to improve forest and water management.
- **Limited implementation of park management plans:** Park management plans are not (yet) available or not operational in all four protected areas. Therefore, framework documents for sustainable park management were missing across the protected areas at the time of the development of the scoping study. However, park management plans are a key reference point for activities that directly engage the park management authorities.
    - Mavrovo: Although a draft management plan for Mavrovo exists, the financial resources to finalize the plan are yet to be mobilized.
    - Shar Mountain: The park management plan for the new Shar Mountain protected area is in its finalization phase and will be adopted in 2022.
    - Korab-Koritnik: A park management plan exists but it has either expired or is not in use. Stakeholders provided different information about the status of the management plan.
    - Sharri/Šara: There is a draft operational plan for the protected area, which is envisioned to be adopted in 2022. In addition, insufficient zoning of the park area and its different classifications was mentioned by stakeholders.
- **Unbalanced representation of women and youth:** At present, with regards to the governance of the four protected areas, especially concerning park management authorities and municipal representation, the involvement of women and youth is limited. This was evident during the stakeholder consultation events at the local level, where the degree of participation by women and youth was low despite efforts to engage them. To establish inclusive joint activities at the protected area level, a more balanced representation would be needed.

[4] The regularity of exchanges was affected by contact restrictions in the context of the COVID-19 pandemic.

- **Competing legislation:** Consultations revealed that competencies and responsibilities are not always clearly established and that there are overlaps between different pieces of legislation. For example, there is a lack of proper application of environmental impact assessment (EIA) mechanisms, particularly with regards to infrastructural development projects such as hydropower plants. Compliance with Multilateral Environmental Agreements (MEAs), such as the Aarhus Convention[5] and the Espoo Convention[6] in the area is also limited. Therefore, the harmonization of laws across jurisdictions was desired by stakeholders.

3.2 Mapping of projects

Figure 7 maps the most relevant projects funded by international and regional organizations that seek to address the above-mentioned issues and obstacles and aim to strengthen climate resilience and adaptation in the protected areas of the hotspot and beyond. These are projects that are still running at the time of writing or have been completed in the past year.

Figure 7: Mapping of key projects.

Project	Donor	Topics	Mavrovo	Shar Mountain	Korab-Koritnik	Sharri/ Šara
Support to Economic Diversification of Rural Areas in Southeast Europe (SEDRA II) *2021-2024*	BMZ		✕	✕	✕	✕
Sustainable Future for Shar-Korab-Koritnik *2021-2023*	DBU		✕	✕	✕	✕
Environment Partnership Programme for Accession (EPPA) in the Western Balkans and Turkey *2019-2022*	EU		✕	✕	✕	✕
Landscape Fire Management in the Western Balkans *2019-2025*	SDC		✕	✕	✕	✕
Environmental Actors Programme *Since 2017*	PONT		✕	✕	✕	
Protected Areas Programme *Since 2017*	PONT		✕	✕	✕	
Biodiversity Conservation, Sustainable Land Management and Sustainable Tourism Development in North Macedonia *2022-2025*	GEF/ UNEP		✕	✕		
Capacity Building for Ecosystem Based Disaster Risk Reduction through Sustainable Forest Management in North Macedonia *2017-2022*	JICA		✕	✕		
Afforestation, training and education for sustainable community-based forest management in Albania *2019-2022*	ADA				✕	
Protected Areas for Nature and People (PA4NP) *2020-2022*	SIDA				✕	
Capacity Building for Disaster Risk Reduction through National Forest Fire Information System (NFFIS) and Eco-DRR *2021-2026*	JICA					✕
Sustainable Natural Resources for Environment and Economic Development (SUNREED) *2022-2026*	SIDA					✕

Legend: Disaster risk reduction; Fires; Forests; Nature conservation; Legislation; Logging; Rural livelihoods

Note: ADA: Austrian Development Cooperation; BMZ: Federal Ministry for Economic Cooperation and Development (Germany); DBU: German Federal Environmental Foundation; EU: European Union; GEF: Global Environment Facility; JICA: Japan International Cooperation Agency; PONT: Prespa Ohrid Nature Trust; SDC: Swiss Agency for Development and Cooperation; SIDA: Swedish International Development Cooperation Agency; UNEP: United Nations Environment Programme.

[5] United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters.

[6] United Nations Economic Commission for Europe (UNECE) Convention on Environmental Impact Assessment in a Transboundary Context.

Four projects cover all four protected areas. One of these, the German Federal Environmental Foundation (DBU)-funded "Sustainable Future for Shar-Korab-Koritnik" project, implemented by EuroNatur, the Macedonian Ecological Society (MES), Protection and Preservation of Natural Environment in Albania (PPNEA) and Connecting Natural Values and People (CNVP), is specifically and solely active in all four protected areas and supports CSOs and small enterprises to implement model projects for sustainable development linked to agriculture and tourism. The other three projects have a more regional focus, covering also areas beyond the Shar/Šara Mountains and Korab Massif, and addressing various issues. While the German Federal Ministry for Economic Cooperation and Development (BMZ) project SEDRA II, implemented by the Standing Working Group for Regional Rural Development in South Eastern Europe (SWG RRD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), seeks to strengthen the potentials for increasing employment and incomes in the rural areas in South-Eastern Europe, the European Union Environment Partnership Programme for Accession (EU EPPA) project, implemented by the respective environmental authorities in the region, has the overall objective to strengthen the implementation of the EU environmental acquis in the Western Balkans and Turkey and address shared environmental issues, including combatting illegal logging. Meanwhile, the regional project of the Swiss Agency for Development and Cooperation (SDC) focuses on landscape fire management in the region and involves various partners, including the Global Fire Monitoring Center (GFMC) and its regional branch, the Regional Fire Monitoring Center (RFMC).

The grant programs of the Prespa Ohrid Nature Trust (PONT) do not cover the whole Shar/Šara Mountains and Korab Massif area, but focus currently on Mavrovo, Shar Mountain and Korab-Koritnik, supporting the implementation of management plans of protected areas and the conservation and community involvement activities of environmental actors. The remaining projects are applicable to individual protected areas (i.e., Mavrovo and Shar Mountain, Korab-Koritnik or Sharri/Šara), all of them having a focus on forests, with elements of rural development, disaster risk reduction and fires.

3.3 Synthesis

In the Shar/Šara Mountains and Korab Massif area, the main climate-related security risks are linked to forest governance, especially illegal logging and other illegal activities, the agriculture and livestock sectors, the tourism sector, and infrastructure. The park management authorities and municipalities in the area face several obstacles that make it challenging to, on the one hand, address these climate-related security risks, and, on the other hand, engage in co-operation with other protected areas. Some common obstacles include a lack of financial and human resource capacities, limited implementation of park management plans, the lack of harmonization between competing laws, and unbalanced representation of women and youth. The context analysis further showed that the level of co-operation between protected areas is currently limited.

There are several ongoing and recently completed projects that focus on enhancing forest governance, local livelihoods, landscape fire management and conservation efforts in the region, among other topics. These projects partly address the identified climate-related security risks as well as obstacles facing the four protected areas. However, very few projects engage in joint activities and seek to address shared challenges and strengthen climate resilience across the protected areas. Chapter 4 presents a set of ideas for co-operation activities that seek to fill these gaps.

4 Ideas for co-operation activities

This chapter lays out the ideas for co-operation activities across the four protected areas that stakeholders raised during consultations and site visits in March and April 2022, complemented by desk research.

4.1 Strengthening co-operation and awareness

The first set of activities that were identified were cross-cutting activities that help address various issues by strengthening co-operation and awareness. These activities could build the framework for the issue-specific activities, by supporting and enhancing them.

4.1.1 Establishment of co-operation structures

There have been occasional exchanges between the four protected areas, but these are neither facilitated by any institutional structures, nor are they conducted in a regular format. Building on these past experiences, the establishment of co-operation structures between the four protected areas, in particular the protected area management authorities (core group) and the municipalities of the protected areas and local CSOs (wider group), was identified as a co-operation opportunity, which would contribute to trust building and strengthening good neighborly relationships in the Shar/Šara Mountains and Korab Massif area and could serve as platform for advancing activities that aim to improve livelihoods, security and resilience of communities in the protected areas in the context of a changing climate.

The format of co-operation could range from a looser network to more formalized structures. The aims of establishing co-operation structures are networking, the sharing of knowledge, experience and best practices, and enabling joint activities. Stakeholders suggested the following formats and activities:

- Establishing regular and frequent meetings between stakeholders of the four protected areas to exchange experiences and engage in joint projects
- Conducting study visits across the four protected areas and to other parks or regions to enable stakeholders to experience best-practice examples, e.g. on the implementation of park management plans
- Engaging jointly in the Cross-Border Cooperation (CBC) programme of the European Union
- Establishing a Memorandum of Understanding or other general or issue-based agreements on co-operation between the four protected areas

In addition to enhancing co-operation between stakeholders of the four protected areas, stakeholders underlined the need to establish fora for exchange between different institutions at different levels, both horizontally and vertically.

4.1.2 Awareness-raising

Awareness-raising activities were found to be crucial to inform and sensitize a wider range of residents and municipality representatives of the protected areas about the importance and value of the nature of the Shar/Šara Mountains and Korab Massif area, as well as the threats associated with climate change and security. Targeting women and the youth was presented as a particular priority, with stakeholders pointing out the lack of young people in communities and villages to carry on traditional livelihood and land management practices, due to them leaving primarily for economic reasons. As such, awareness-raising would also mean encouraging the youth to remain in their respective communities to ensure that traditional practices are maintained. For awareness raising, stakeholders proposed the following activities:

- Establishing a joint website for all four protected areas
- Co-ordinating joint communication through social media platforms
- Developing joint curricula for schools on the protected areas' values and the benefits of conservation and protection
- Establishing a natural history museum, covering all four protected areas
- Conducting joint summer camps for young adults with a focus on nature protection and offering volunteer opportunities in the park

4.1.3 Strengthening capacities of CSOs

Strengthening the capacities of CSOs that are engaged across the protected areas was highlighted as crucial for enhancing co-operation on nature conservation and climate change adaptation.

There are several CSOs, some of them organized in Local Action Groups (LAGs)[7], that provide a good entry point for co-operation activities, which would also contribute to trust-building and strengthening good neighborly relationships across the four protected areas. In the Shar/Šara Mountains and Korab Massif area, LAGs have been established in all protected areas and are in the process of getting formalized and creating Local Actions Plans. They, together with other actors, have played an important role in supporting the proclamation process of the Shar Mountains Protected Area, as well as raising awareness among women and youth in general. Hence, CSOs and LAGs could be supported through the following activities:

- Providing training on topics where CSOs and LAGs see a need for further qualification
- Supporting awareness-raising activities of CSOs and LAGs
- Enabling regular meetings between CSOs and LAGs, and enhancing networking and exchange

[7] LAGs are legal forms of partnerships consisting of public and private organizations at the local level that operate based on Local Action Plans, which are ensembles of actions and goals that aim to valorize and develop a specific rural area European Association of Public-Private Partnership (EAPPP) n.d..

4.2 Issue-specific activities

Issue-specific activities are clustered along six thematic areas that emerged from the stakeholder consultations. These activities would address specific risks in the four protected areas that are linked to forest governance, local livelihoods and cultural heritage, sustainable tourism, nature conservation and pasture management, water management, and waste management. All activities would be implemented in a joint manner, involving stakeholders from all four protected areas. The issue-specific activities would serve to improve livelihoods, security and resilience of communities in the context of a changing climate, while also including trust and relationship building elements across the four protected areas.

4.2.1 Forest governance

Forest governance is the main thematic cluster for joint co-operation that stakeholders identified, coupled with the fact that this is perceived as the most important climate-security challenge in the area. Several issue-specific activities were proposed:

- Activities that concern the **legal framework and legal enforcement to address illegal activities with a particular focus on illegal logging**:
  - Identifying jointly which legal loopholes exist, how legislation could be improved, how legal enforcement could be enhanced and how competing laws could be harmonized
  - Engaging in joint monitoring and control of illegal logging
  - Offering capacity building for rangers and other local stakeholders and improving relevant technical equipment and means for monitoring
  - Exchanging on practices of how to address corruption in the protected areas, including in land-use, construction, nature resource use, and supply chains of forest products
  - Fostering better co-operation between different institutions and actors, and across protected areas
  - Introducing a moratorium or ban on fishing and hunting in protected areas
  - Providing support for data collection on illegal activities in a harmonized and standardized manner across protected areas, while also facilitating data and information exchange
  - Training of local police officers and other law enforcement officers, as well as judges, prosecutors, and investigators
- Activities that create incentives to **reduce unsustainable and illegal logging by private households**, particularly those in rural communities and mountain villages:
  - Promoting alternative energy sources, such as photovoltaics
  - Diversifying heating sources, such as replacing the use of wood for heating
  - Awareness-raising to encourage more sustainable resource use

- Activities to **protect and restore forests**:
  - Improving forest and pastures conditions, through natural regeneration, clean-up action, and construction of livestock aquifer and anti-erosion mechanisms/contractions
  - Establishing communication lines between protected areas with toll-free communication to monitor and act upon illegal fishing, hunting and logging
- Activities concerning **fire management**:
  - Supporting fire management and firefighting training and certification of local volunteers, focusing on the protected areas
  - Training of local communities on fire management
  - Continuing and expanding the work on Early Warning System on Wildfires of the Crises Management Centre in Skopje, established in collaboration with Japan International Cooperation Agency (JICA), so that it can be implemented and used in the four protected areas, e.g. through trainings
  - Enhancing co-ordination and communication between different municipalities within and across the protected areas, so as to enable them to detect fires at an early stage to aid in firefighting, as well as to support monitoring of forest fires
  - Taking stock of equipment and devices needed (e.g. fire extinguishing vehicles, alarm devices, and toll-free phone line to report fires) and how these could be commonly used across the four protected areas

4.2.2 Local livelihoods and cultural heritage

Activities fostering local livelihoods and preserving the region's cultural heritage were also prominently featured by stakeholders to offer opportunities for local residents, especially young people and women, to recognize historical-cultural values. Ideas for joint activities include:

- Creating a trade mark for local goods from the four protected areas
- Offering support to livestock breeders and pastoralists; preserving traditional sheep races
- Promoting traditional practices and livelihoods by supporting local entrepreneurs, e.g. in wool processing and production of cloths, in the production of wicker baskets, cheese production and meat production
- Enhancing the use of secondary forest products, e.g. (medicinal) plants, fruits, and herbal products
- Strengthening the role of women in rural and local development, e.g. by involving them in consultations and decision-making committees with regards to forest resource management, as well as providing support for women-led businesses

4.2.3 Sustainable tourism

Sustainable tourism emerged as another thematic cluster with the following activities proposed:

- Establishing joint information centers on the whole area in the four protected areas
- Developing joint development of touristic infrastructure (roads, trails, guest houses, facilities, etc.) that are accessible throughout the year; this infrastructure could also be used by park authorities and municipal representatives while working in the protected areas
- Establishing agreements to enable tourists and hikers to move freely between the four protected areas, e.g. through issuing a joint permit

4.2.4 Nature conservation and pasture management

Stakeholders also referred to the importance of nature conservation and pasture management and proposed the following activities:

- Enhancing joint research and monitoring of flora and fauna with a focus on endemic species and medical plants, e.g. through establishing a joint inventory of flora and fauna
- Enhancing the joint management of pastures and cleaning from overgrowth to improve pasture conditions

4.2.5 Waste management

Given the severity of the damages caused by untreated solid waste and sewage in the area, stakeholders highlighted waste management as another priority issue. As such, stakeholders suggested the following activities:

- Developing a joint waste clean-up project in the protected areas
- Enhance general waste management, while also focusing on the principles of ‘reduce, reuse, and recycle’

4.2.6 Water management

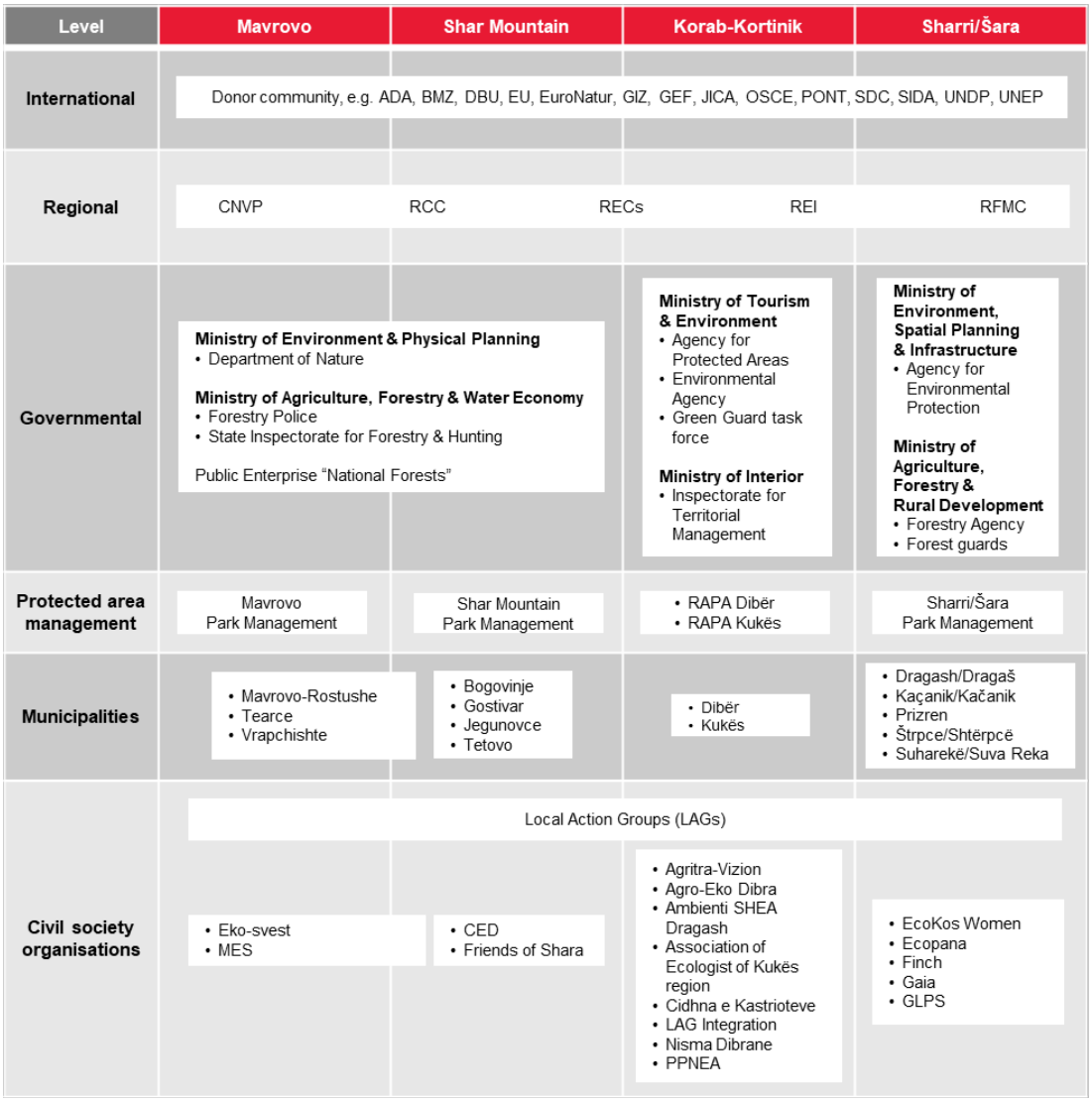
Water is linked to a variety of issues in the Shar/Šara Mountains and Korab Massif area and its protected areas. Stakeholders proposed a variety of activities that seek to address different water-related issues:

- Enhancing general water management and flood risk management, e.g. by sharing experiences and best practices
- Improving household water sources
- Enhancing water access for livestock herding in the mountains
- Reassessing the environmental and social impacts of small hydropower plants

5 Stakeholder mapping

To develop and implement activities successfully and in an inclusive manner, stakeholders at different governance levels need to be involved. Figure 8 provides an overview of key stakeholders.

Figure 8: Mapping of key stakeholders.



Note: ADA: Austrian Development Cooperation; BMZ: Federal Ministry for Economic Cooperation and Development (Germany); CED: Centre for Education and Development; CNVP: Connecting Natural Values and People; DBU: German Federal Environmental Foundation; EU: European Union; GEF: Global Environment Facility; GLPS: Group for Legal and Political Studies; JICA: Japan International Cooperation Agency; MES: Macedonian Ecological Society; PONT: Prespa Ohrid Nature Trust; PPNEA: Protection and Preservation of Natural Environment in Albania; RAPA: Regional Agencies of Protected Areas; RCC: Regional Cooperation Council; REC: Resource Environmental Center; REI: Regional Environmental Institute; RFMC: Regional Fire Monitoring Center; SDC: Swiss Agency for Development and Cooperation; SIDA: Swedish International Development Cooperation Agency; UNDP: United Nations Development Programme; UNEP: United Nations Environment Programme.

The core stakeholders are the management authorities of each protected area. It should be noted that their organizational structures differ from one another: Mavrovo and Shar Mountain are organized as (partially) self-funded Public Institutions; Sharri/Šara is managed by a directorate; and Korab-Koritnik is under the Regional Agencies of Protected Areas (RAPA) of Dibër and Kukës, who are also responsible for several other protected areas.

At the local level, representatives of the relevant departments (e.g. forestry, conservation, agriculture, urban, and tourism) of the municipalities that are part of the protected areas are important stakeholders. For joint activities, CSOs are particularly relevant as most of them are already organized in a network of LAGs. It is also crucial to ensure the involvement of youth representatives, as well as to establish a balanced gender representation.

Beyond local level actors, authorities that are in general responsible for protected areas and environmental protection and management need to be involved when developing or implementing joint activities. Depending on the nature of the activity, forest and/or pasture authorities and the police would also need to be involved.

At the regional level, key stakeholders include the Regional Cooperation Council (RCC), the RFMC, CNVP and the respective Resource Environmental Centers (RECs). There is also a wider community of international donors and implementing agencies that are financing and/or implementing various projects in the region; they should also be engaged in the development and implementation of activities, so as to ensure a good level of co-ordination of all activities in the region, and to achieve synergies, where applicable (see Chapter 3.2).

6 Conclusions

Comprising four protected areas, the Shar/Šara Mountains and Korab Massif area is a biodiversity hotspot rich in natural resources that are important for the livelihood security and well-being of local communities. The impacts of climate change, along with unsustainable and illegal human activities, threaten the area's biodiversity and key economic sectors, all of which would affect livelihoods and feed into the security risks shared by local communities across all four protected areas. Women are particularly affected, given that they often face disproportionate economic and social under-representation in the region. As such, strengthened and targeted co-operation between the management of the protected areas and their communities is therefore of paramount importance as it offers opportunities to address these risks in a holistic and sustainable manner. On the one hand, co-operation activities serve to improve livelihoods, security and resilience of communities in the protected areas. On the other hand, they reinforce trust and good neighborly relationships in the area.

An extensive consultation process has shown that forest governance is the primary concern affecting all four protected areas. Unsustainable and illegal human activities, particularly those related to illegal logging, deforestation, and fires, threaten the area's biodiversity and livelihood security, the risks of which are compounded by the impacts of climate change. Moreover, co-operation between stakeholders of the four protected areas is currently limited, and park management authorities and municipalities in the area face several obstacles that make it challenging to address climate-related security risks. Some common obstacles include a lack of financial and human resource capacities, limited implementation of park management plans, the lack of harmonization between competing laws, and unbalanced representation of women and youth.

There are several ongoing and recently completed projects that focus on enhancing forest governance, local livelihoods, landscape fire management and conservation efforts in the region, among other topics. These projects partly address the identified climate-related security risks as well as obstacles facing the four protected areas. However, very few projects engage in joint activities and seek to address shared challenges and strengthen climate resilience across the protected areas.

To enhance co-operation, the consultation process identified several shared activities. The first set of activities include cross-cutting activities that help address various issues by strengthening co-operation and awareness, through the establishment of co-operation structures, awareness-raising, and strengthening capacities of civil society organizations.

These activities could build the framework and provide support for a second set of activities that are more issue-specific. Forest governance is the main thematic cluster for issue-specific joint co-operation that stakeholders identified. It is also perceived as the most important challenge related to climate-security in the area. Forest governance also offers the most opportunities for successful co-operation and is the topic that entails the most ideas for activities. Other thematic clusters that emerged during the consultation process include agriculture and livestock, tourism, and infrastructure. In all activities, women and youth should be included as target groups.

Based on the results of this study, this project will proceed to fill the identified gaps by establishing a joint co-operation strategy and implementation plan. These will serve to propose a shared vision as well as to narrow down and refine the suggested co-operation activities. At a later stage, a pilot project will be implemented together with local partners and actors who will also be engaged as the main stakeholder group for future activities

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