

Assessment of the implementation of spatial planning and Green Infrastructure in the pilot area “Jablanica-Shebenik” and recommendations for improvements and harmonization at the cross-border level

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ACRONYMS

AAP	German Federal Environment Ministry's Advisory Assistance Program
AL	Albania
BfN	Federal Agency for Nature Conservation
BGB	Balkan Green Belt
CBD	Convention on Biological Diversity
EBRD	European Bank for Reconstruction and Development
ECNC	European Center for Nature Conservation
CMS	Convention on the Conservation of Migratory Species of Wild Animals
EEA	European Environmental Agency
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EU	European Union
GI	Green Infrastructure
IBA	Important Bird Area
IUCN	International Union for Conservation of Nature
KfW	Credit Institute for Reconstruction
LEAP	Local Environmental Action Plan
MAK-NEN	Macedonian Ecological Network
MES	Macedonian Ecological Society
MK	North Macedonia
MoEPP	Ministry of Environment and Physical Planning
NGO	Non-governmental Organization
NTS	National Transport Strategy
PE	Public Enterprise
PEEN	Pan-European Ecological Network
PTE	Public Transport Enterprise
RNM	Republic of North Macedonia
SEA	Strategic Environmental Assessment
UBA	German Environment Agency
UN	United Nations
WWF	World Wide Fund

ABSTRACT

The project "Enhancing Connectivity Along the Balkan Green Belt" focused on improving spatial planning and green infrastructure (GI) in North Macedonia and Albania. The two target countries served as examples for other countries of the Balkan Green Belt, so that it can be assumed that the results are partly transferable to countries with similar conditions.

The project was carried out in partnership between EuroNatur (Germany), Macedonian Ecological Society, MES (North Macedonia) and Preservation and Protection of Nature and the Environment Albania, PPNEA (Albania), with the aim of jointly improving the knowledge of relevant decision-makers on GI in both North Macedonia and Albania. This is an important precondition to eventually improve the implementation of GI as part of land use planning processes.

Based on the existing EU framework, the project team identified gaps and needs for adaptation of the national legal framework. Training courses supported capacity building in the relevant ministries and their subordinate authorities. In North Macedonia, a new law on spatial planning was drafted, which for the first time includes the concept of GI. The Jablanica-Shebenik cross-border region was chosen as a model region to gain a detailed understanding of the differences and similarities between the two countries and the resulting opportunities and challenges for cooperation.

This report comprehensively compiles and analyses the spatial planning procedures and relevant documents in the cross-border model region Jablanica-Shebenik. Based on this core of the report, recommendations for the integration of GI and for the improvement of cross-border cooperation have been developed. The main recommendations address the question of how the challenges for cross-border protection of the region can be met by proposing a common vision and coordinating body. Specific country recommendations are also included, particularly for the harmonization of legislation, methodological approaches, and practices in the pilot region.

KURZZUSAMMENFASSUNG

Das Projekt "Verbesserung der Konnektivität am Grünen Band Balkan" konzentrierte sich auf die Verbesserung der Raumplanung und der Grünen Infrastruktur (GI) in Nordmazedonien und Albanien. Die beiden Zielländer dienten als Beispiele für andere Länder des Grünen Bandes Balkan, so dass davon ausgegangen werden kann, dass die Ergebnisse teilweise auf Länder mit ähnlichen Bedingungen übertragbar sind.

Das Projekt wurde in Partnerschaft zwischen EuroNatur (Deutschland), der Macedonian Ecological Society, MES (Nordmazedonien) und Preservation and Protection of Nature and the Environment Albania, PPNEA (Albanien) durchgeführt. Ziel des Projektes war, es gemeinsam das Wissen relevanter Entscheidungsträger über GI sowohl in Nordmazedonien als auch in Albanien zu vertiefen. Dies ist eine wichtige Voraussetzung, um die Umsetzung von GI als Teil von Planungsprozessen zu verbessern.

Basierend auf bestehenden EU-Vorgaben identifizierte das Projektteam Lücken und Anpassungsbedarfe im nationalen Rechtsrahmen. Trainingskurse unterstützten den Kapazitätenaufbau in den zuständigen Ministerien und nachgeordneten Behörden. In Nordmazedonien wurde zudem ein neues Raumplanungsgesetz erarbeitet, das erstmals

GI enthält. Die grenzüberschreitende Region Jablanica-Shebenik wurde als Modellregion ausgewählt, um ein detailliertes Verständnis für die Unterschiede und Gemeinsamkeiten der beiden Länder und die sich hieraus ergebenden Chancen und Herausforderungen für die Zusammenarbeit zu erlangen.

In diesem Bericht werden die Raumordnungsverfahren und hierfür relevanten Dokumente für die grenzüberschreitende Modellregion Jablanica-Shebenik umfassend zusammengestellt und analysiert. Darauf aufbauend werden Empfehlungen zur Integration von GI und zur Verbesserung der grenzübergreifenden Zusammenarbeit entwickelt. Die Hauptempfehlungen beziehen sich darauf, wie die Herausforderungen für die grenzüberschreitende Zusammenarbeit in der Region überwunden werden können. Wesentliche Vorschläge sind die Erarbeitung einer gemeinsamen Vision und die Einrichtung einer grenzübergreifenden Koordinierungsstelle für GI. Darüber hinaus werden länderspezifische Empfehlungen gegeben, insbesondere zur Harmonisierung von Rechtsvorschriften, methodischen Ansätzen und Praktiken in der Pilotregion.

I. SUMMARY

This analysis aims to ascertain existing planning documents and practices in North Macedonia and Albania, and to provide recommendations for effective cross-border cooperation on GI. It is intended to function as a guide for facilitating the cooperation between the two countries. It is divided into four sections: methodology, description of the pilot region, analysis of each country, and a joint summary with recommendations for both countries.

Methodology

The methodology in each country involved data collection, interviews, document reviews, and analysis, engaging various stakeholders at national and local levels. In North Macedonia, the first phase included stakeholder engagement, document acquisition, interviews, and analysis, followed by consultations with Albanian colleagues and transboundary discussions. In Albania, the process began with collecting laws and plans, conducting interviews, and organizing open meetings, leading to a comprehensive analysis. Both countries conducted national workshops and a joint transboundary workshop to present and gather input on the reports from local stakeholders.

Description of the pilot region

The Jablanica - Shebenik area, a transboundary region shared between Albania and North Macedonia, consists of the Jablanica-Shebenik Mountain massif, spanning across eastern Albania and the southwest region of North Macedonia. The majority of the Jablanica range falls within Albania and is part of Shebenik National Park, bordered by Librazhd and Dibër municipalities. On the North Macedonia side, the massif borders the Struga municipality. The mountain massif features unique biodiversity and geological

formations, and is also significant due to its national and international importance in the Balkan Green Belt and European Green Belt. In Albania, it holds the status of a national park, while in North Macedonia it is not protected. The region faces threats in both countries due to human pressures.

Individual analysis of each country

Summary analysis North Macedonia

This section lists the relevant spatial planning and strategic documents in North Macedonia. It details various plans, strategies, and laws influencing land use, development, and environmental protection. It explains the hierarchical structure of spatial planning at a national, regional, and local level. It lists the Spatial Plan of the Country as the highest plan on this hierarchy, and further indicates a lack of specifically regional plans, as most regulations fall under the larger scope of the Spatial Plan of the Country and do not have further regional specifications. The legal framework and institutions responsible for spatial planning are outlined, including the Ministry of Environment and Spatial Planning and the Ministry of Transport and Communications. The section emphasizes the significance of spatial plans as legally binding documents and provides insight into laws governing spatial planning, urban planning, and related areas. Additionally, it delves into the procedures for developing spatial plans, the duration of these plans, and their implementation. The role of municipalities, public participation, and collaborative efforts in urban planning processes is highlighted, emphasizing the importance of citizen involvement in decision-making for sustainable development.

Summary analysis Albania

This section provides an overview of Albania's spatial planning framework,

focusing on national and local-level planning documents, legal regulations, competent institutions, and collaboration initiatives. At the national level, key documents such as the National General Plan (2015-2030) and policies for forestry and biodiversity are highlighted. The Shebenik National Park Management Plan (2018-2028) is emphasized at the local level. The text details the legal regulations governing spatial planning and the roles of institutions like the National Territorial Development Agency (NTDA), Ministry of Environment and Tourism, and Ministry of Infrastructure and Energy; the text emphasizes the NTDA's responsibility in creating the National General Plan, which guides both national and local planning. The Ministry of Environment and Tourism is described as a pivotal entity overseeing natural resources, protected areas, and environmental monitoring.

The management of protected areas, exemplified by the Shebenik National Park, involves collaboration between regional administrations, municipalities, and various directorates. The National Environment Agency and National Agency of Protected Areas play significant roles in monitoring the environment and managing protected areas. Additionally, the National Water Council is highlighted for its role in water resources management. The collaboration at the municipal level, involving territorial

development directorates and regional deconcentrated institutions, is also emphasized. The coordination between these entities is portrayed as essential for achieving sustainable development and environmental preservation at both national and local levels in Albania.

Joint summary with recommendations

This report discusses the challenges to implementing a joint, cross-border protection of the Jablanica-Shebenik region, and offers recommendations to enable such a cooperation. Key challenges include the novelty of such collaboration, low awareness of GI concepts, legal disparities, and potential conflicts of interest among institutions. The report emphasizes the need to transform the Joint Vision into a practical Action Plan, with detailed measures, assigned responsibilities, timelines, and monitoring mechanisms. A call for a new Study to re-evaluate the natural values of the target area is highlighted. Additional activities proposed include appointing focal points, establishing a Coordinating Body, conducting training, raising awareness among the local population, and involving the public through hearings. The overall aim is to navigate these challenges and foster collaboration for the successful, sustainable development of GI that transcends borders.

2. INTRODUCTION

The project “Enhancing Connectivity Along the Balkan Green Belt” focuses on enhancing sustainable spatial planning and improving land use practices in North Macedonia and Albania. Specifically, it analyses the spatial planning and GI in the Jablanica-Shebenik pilot region. The region has different protection statuses in each country, posing challenges for cross-border protection.

Cooperation between the two countries is crucial for safeguarding the biodiversity in the region effectively. Therefore, establishing clear channels of communication and fostering collaborative efforts on both sides of the border is critical. For this to be possible, comprehensive understanding of how spatial planning functions in each country is necessary. This understanding will enable communication using appropriate channels to be able to affect change.

2.1. Objectives of the joint analysis and report structure

The main objective of this joint analysis is to review the existing planning documents and practices in each country and to provide recommendations for enhancing cross-border cooperation.

This analysis can be used as a tool to promote sustainable spatial planning and coordinate the efforts of various stakeholders at the cross-border level, including central government institutions, local governments, civil society organizations, businesses, and local communities. Furthermore, the analysis can be a starting point for interaction between institutions in North Macedonia and Albania, which can foster joint activities related to GI in the pilot area and beyond.

The following part of the report is divided into four sections. Chapter 3 outlines the methodology used for the analysis and the development of recommendations. Chapter 4 provides a description of the pilot region. Chapter 5 analyses the situations in North Macedonia (Chapter 5.2) and Albania (Chapter 5.3) separately, highlighting their unique approaches to spatial planning and GI integration. The last chapter (Chapter 6) presents a joint summary and recommendations, considering the specific conditions and challenges faced by each country. This comprehensive approach aims to support the practical implementation of GI and spatial planning at the local level in the region.

3. METHODOLOGY

A similar methodology was applied to assess GI in North Macedonia and in Albania for this analysis. The process involved collecting data, conducting interviews, reviewing existing documentation, and analysis. Relevant stakeholders were engaged to ensure their involvement in the process.

In North Macedonia, the first phase included engaging with relevant stakeholders in spatial planning, nature protection, and the management of protected areas on a national and local level (The Ministry of Environment and Spatial Planning – the Spatial Planning Sector and the Nature Sector, the Agency of Spatial Planning, the Municipality of Struga, the Municipality of Vevchani, Public Enterprise National Park “Galichica”), obtaining pertinent documents, conducting interviews with the relevant administrative persons, and data from the internet (international documents in the field of Green Infrastructure). In the second phase, a comprehensive analysis of the available material and information was conducted, and conclusions were formulated. Consultations with experts from both countries and engaging in transboundary discussions and public discourse were also part of the process.

In Albania, the method of data collection was conducted in two phases. In phase I, data was collected at a national level. This included consultation of laws, spatial plans at an international and national level, sectoral/

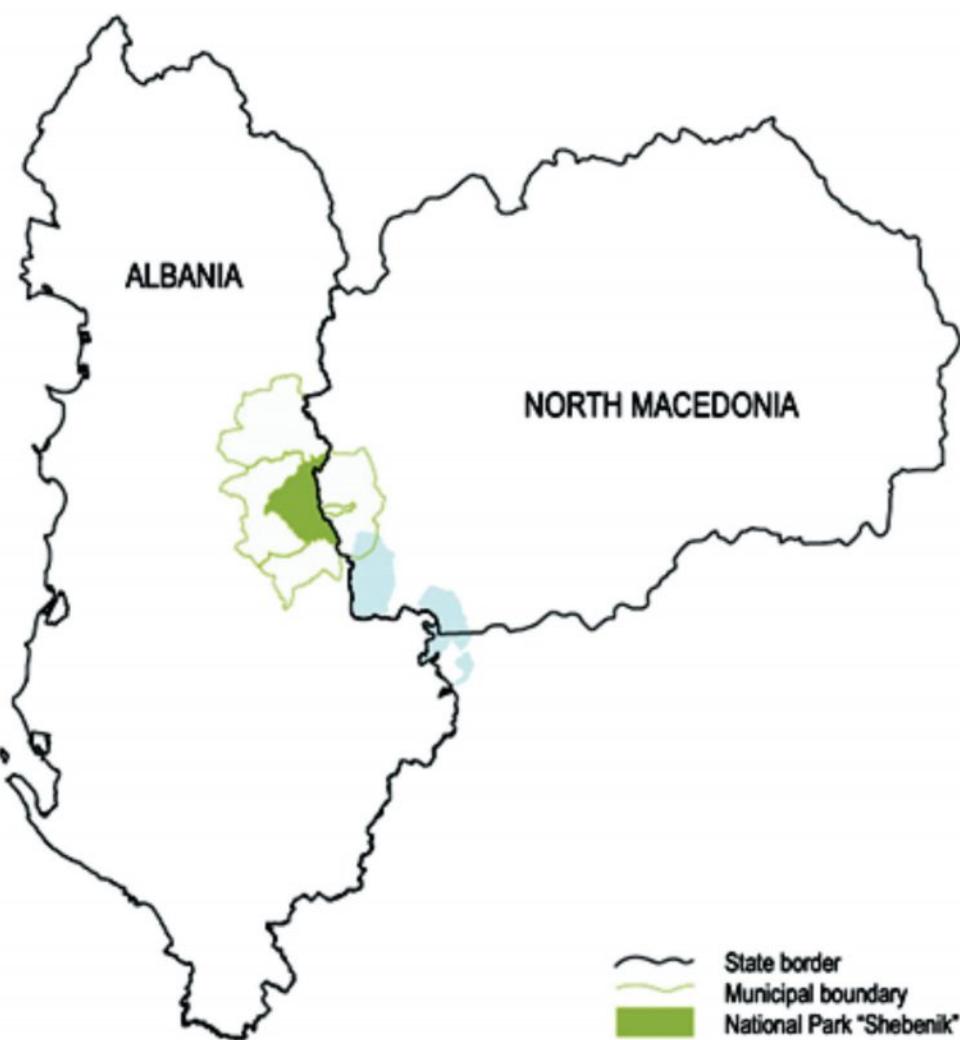
cross-sectoral plans and spatial plans on a local level, referring to the spatial planning issues that cover the National Park (Librazhd Municipality, Përrenjas Municipality, Bulqizë Municipality). Interviews were conducted with professionals at a national level, such as Ministries and National Agencies, as well as civil society/academic actors. The consultation with policy-makers and management at the central level has guaranteed the collection of quantitative and qualitative information, which has served to clarify the issues related to the design and GI planning.

In phase II, data was collected at a local/regional level, and included: consultation of the Shebenik National Park Management Plan, Sectoral/Intersector Plans, General Local Plans Librazhd, Përrenjas and Bulqizë, as the Park extends to all three of these local units. Part of the research was the consultation of the Forest, Pasture and Environment Plans of each respective municipality as well. There was a one-day field visit to Shebenik National park, as well as open-ended questions with 1 professional for each municipality of Librazhd and Përrenjas (see questionnaire format, Annex 1). Primary data was collected from 1 meeting with different stakeholders, including: representatives from RAPA Elbasan, the directorate of urban planning/directorate of environment and forests near Librazhd, Përrenjas and Bulqizë Municipalities, NGOs, businesses and freelance professionals.

4. DESCRIPTION OF THE PILOT AREA “JABLJANICA-SHEBENIK”

The Jablanica-Shebenik area, as it was defined within the project, is a transboundary region shared between Albania and North Macedonia. It mainly consists of a mountain massif which is comprised of two distinct mountains, which combined give their name to the pilot area Jablanica-Shebenik. Jablanica is a shared mountain range that extends in

a north-south direction along the border of the two countries, and Shebenik Mountain is situated in eastern Albania. The region spans across five municipalities, namely Librazhd, Perrenjas, and Bulqiza on the Albanian side, and Struga and Vevčani on the Macedonian side.



Map 1: Map of the pilot region in Albania and North Macedonia (outer green line) Source: Elaborated by Eltjana Shkrela

The majority of the Jablanica range falls within Albania and is part of the Shebenik National Park. The national park is bordered by the municipalities of Librazhd to the southeast and Dibër to the northwest.



Map 2: Map of protected areas network in Albania and the pilot region Source: akzm.gov.al



Map 3: Map of protected areas network in North Macedonia and the pilot region. Source: slideserve.com

On the North Macedonia side, the range is located within the limits of the Struga and Vevchani municipalities. The highest peak in the area is Black Rock (Albanian: Guri i Zi; Macedonian: Црн Камен), reaching an elevation of 2,257 meters and serving as a boundary marker between the two countries. Shebenik Mountain, situated in eastern Albania, serves as the centerpiece of Shebenik National Park. The mountain is surrounded by the upper Shkumbin valley to the west, the Rapuni valley to the northwest, and the Jablanica Mountain to the south. The highest peak of Shebenik Mountain is Shebenik Peak (Albanian: Maja e Shebenikut), reaching a height of 2,265 meters.

Notably, the Jablanica-Shebenik mountain massif in Albania already holds the status of a national park. By declaring the Macedonian section of the Jablanica mountain as a national park, a cross-border protected area would be established, enhancing its significance. Furthermore, apart from its national importance, the Jablanica mountain is of

European significance as it forms part of the Balkan Green Belt and the European Green Belt.

4.1. Macedonian part of the pilot area

Jablanica Mountain, which is the focal point of analysis for North Macedonia, holds great significance for the country. It possesses unique physical and geographic features, valuable natural and cultural heritage, and a diverse range of biodiversity. Jablanica Mountain is one of the 13 mountains in North Macedonia higher than 2,000 m, with the highest peak being Crn Kamen (2,257 m). Jablanica has exceptional features, especially at altitudes above 1,800 m. The uniqueness of this area is the fossil glacial and fossil and recent periglacial relief and the four glacial lakes. The „stone rivers“ and fossil rock glaciers deserve special attention. Jablanica Mountain is also



Image 1: Overlooking Struga municipality. Source: PPNEA



Image 2: Stream habitat in the area of Vevchani. Source: PPNEA

known for its biodiversity. Jablanica belongs to the Ohrid-Prespa refuge zone with several relict communities, including snow heath community (*Ericetum carneae*). The area of Jablanica Mountain is predominantly occupied by forests. Oak forests grow from 600 to 1,300 m above sea level, while between 1,300 and 1,800 m beech forests are predominant. Above this elevation subalpine and alpine pastures stretch, which are mainly used as high mountain pastures. The flora of higher plants on Jablanica Mountain is also very rich. The diversity of fauna is represented by amphibians, reptiles, birds, and mammals, the latter counting 40 species, which is half of all mammals in North Macedonia. The presence of large carnivores like bears, lynx, and wolves in Jablanica is of particular importance for biodiversity. The Balkan lynx inhabited this area in the past, and more recently the data indicate that the Jablanica Mountain is a very important bio-corridor for the lynx, which comes from the Karaorman Mountain, crossing Jablanica, into neighboring Albania.

However, the potential degradation due to the granting of mining concessions in the area for the exploitation of mineral resources is concerning. Consequently, an initiative advocates for the designation of a portion of the Jablanica mountain as a national park to ensure its preservation.

4.2. Albanian part of the pilot area

The focal point of analysis for Albania is Shebenik National Park. Situated near the sources of the Shkumbin River, it features a diverse landscape characterized by mountains, valleys, and varying altitudes ranging from 300 to 2,260 m above sea level. The park encompasses a wide range of flora and fauna, climatic conditions, geological formations, landscapes and habitats. Notably, it harbors approximately 32% of Albania's flora, including around 82% of all aromatic



Image 3: Wild oregano field in Shebenik National Park. Source: PPNEA.

and medicinal plant species, with a total number of 178 species of medicinal plants.

This geographical space is abundant in natural and cultural treasures. It features ten natural monuments, including Shebenik Lake and Rrajce Lake, as well as numerous archaeological sites such as Rrajce Castle and Skënderbeu Castle. Additionally, the area is known for its unique traditions and customs, which contribute to the development of tourism. The beech forests in the Rrajca region hold UNESCO World Natural Heritage status, not only being a valuable asset for Shebenik-Jablanica National Park and Albania but also a treasure of global significance.

Shebenik National Park was designated as a protected area of the second category by the Albanian Government through Special Decision No. 640 on May 21, 2008. It was originally named “Shebenik Jabllanicë” and the initial designated area of the park was 33,928 hectares. Following the park’s

proclamation, efforts were initiated to develop a comprehensive management plan, which was completed in October 2015. The plan was officially approved on May 4, 2018.

Subsequently, the name, area, and internal zoning of the park underwent changes through Special Decision No. 59, issued on January 26, 2022. According to this decision, the park’s name was changed to „Shebenik,“ and its total area expanded by approximately 552 hectares, reaching a total of 34,480.89 hectares.

The management plan highlights that, besides its regional and national significance, Shebenik National Park contributes to various international ecological networks. These include Important Plant Areas, the Emerald Network/Natura 2000 Network, Transboundary Conservation Areas, the Ecological Network of the Balkan Region, Global 200 ecoregions defined by WWF, Key Biodiversity Areas, and the European Green Belt, among others.

Given its significance, Shebenik National Park is an important part of the GI of the region.

4.3. Pressures in the pilot region and the relevance of spatial planning in both countries

The regions along the Balkan Green Belt in North Macedonia and Albania face significant human pressures, primarily due to intensive land use and infrastructural development. These activities often result in overlapping interests and conflicts, necessitating the need to balance different land uses while considering economic, social, and environmental aspects. However, little has been done so far to incorporate the concept of GI into existing planning activities in general and at the local level in the pilot area in specific.

To address these challenges, it is crucial to enhance spatial planning legislation, practices, and decision-making processes. The primary objective of spatial planning is to promote long-term and sustainable socio-economic development while minimizing harmful environmental impacts. This involves achieving a balance between

available space, economic and demographic growth, and the preservation of natural and cultural resources. Spatial planning can guide infrastructure development away from sensitive areas, reducing the risk of further habitat fragmentation. It can also facilitate the spatial connection or reconnection of natural areas through habitat restoration projects or the integration of ecological connectivity elements into new development schemes.

The practical implementation of GI relies on adopting an integrated and comprehensive approach to land management. This entails strategic planning on a larger scale, such as at the regional or municipal level and to examine spatial interactions between different land uses. Strategic planning also fosters collaboration among multiple sectors, enabling transparent and integrated cooperation to establish shared priorities for land use.

Considering the region's significant natural heritage on one hand and pressures on the pilot region on the other hand, this document clarifies the existing planning documents and practices at the national, regional and local level for both countries, specifically relating to spatial planning in the pilot region and to the integration of GI.

5. ANALYSIS OF GREEN INFRASTRUCTURE AND SPATIAL PLANNING IN NORTH MACEDONIA AND ALBANIA

To effectively compare and analyse the situations in North Macedonia and Albania, the following section is divided into two parts. The first part focuses on North Macedonia, outlining its current situation, addressing strategies, and recommendations. The second part delves into Albania, presenting an overview and appropriate recommendations. By addressing each country separately, the report highlights their unique approaches to spatial planning and the integration of GI into spatial planning. Before presenting both countries and their characteristics, general planning principles are being recalled.

5.1. Different levels of Planning Documents and their relation to each other

Based on the investigation and analysis of the area in both countries, we can conclude that various types of planning documents are crucial for the planning and applied land use

practices in the pilot area. In North Macedonia as well as in Albania, the existing planning documents are structured hierarchically and can be broadly categorized as follows:

1. National level: relevant planning documents encompass the entire territory of the country and hold exceptional significance for spatial planning in the pilot area.
2. Regional level: planning documents pertain to the specific region to which the pilot area belongs.
3. Municipal level: planning documents applicable in the municipalities within the pilot area.
4. Local level: planning documents include urban plans and urban documentations, which are specific to the local level and focus on urban development in the pilot area.

The pilot area and the relevant national, regional, and local planning and strategic



Figure 1: Hierarchical arrangement and mutual connection of documents regulating spatial development. The points on the left are high level documents, and the points on the right are derived from the corresponding left point. Own source.

documents are related both vertically and horizontally.

Planning documents from the national and regional level represent the vertical connection. These documents lay the foundational planning policies to which plans on the municipal and local level must adhere to. The purpose of this vertical alignment is to ensure a seamless flow of instructions from one level to the next. Planning documents on the national level provide a unified approach and common terminology that subsequent planning documents at lower levels can utilize. This alignment ensures consistency and coherence throughout the planning process.

Conversely, the municipal and local planning and strategic documents are aligned horizontally. These documents specifically focus on the pilot area and can be applied simultaneously to guide its development.. the required coordination to stir this process can be ambiguous and needs frequent communication among key actors to clarify roles and responsibilities. It is also common for different planning documents at the same level to complement each other. Regular dialogue is essential to keep everyone informed about activities affecting the pilot area's urban development.

the „Constitution of Planning“. Spatial plans relating to smaller spatial scopes provide details and elaborate on the overall plan. The comprehensive nature of the Spatial Plan, the procedural steps it goes through, and its inclusion in the parliamentary process give legal binding power to the decisions and policies outlined in all subsequent plans.

The second level includes strategies, management plans, and other planning documents developed by the Government of North Macedonia, ministries, and other competent entities. These documents are not as extensive as the Spatial Plan but must align with its overarching framework. Some of these documents focus on sectoral strategies, often with a shorter time horizon compared to the Spatial Plan. Others address the implementation of strategic decisions through specific activities, usually in the form of management plans developed by relevant entities.

The third level pertains to urban plans and projects that incorporate the policies and measures outlined in the documents on the first and second level. These types of documentation are typically carried out at the local level and are overseen by the councils of the local self-government units. If a plan holds nationwide significance, it is adopted by the Ministry of Transport and Communications.

5.2. North Macedonia

5.2.1. Levels of Spatial Planning

Spatial and urban planning in North Macedonia are regulated by laws and multiple institutions are involved in their implementation. This includes the creation, adoption, and implementation of the Spatial Plan of the Country, urban plans, and other types of urban documentation. The provided graphic visualization illustrates the hierarchical arrangement of planning documents in the country.

The hierarchy of spatial planning in North Macedonia can be divided into three levels. The first level are spatial plans created by the Assembly of North Macedonia. At the top of this category is the Spatial Plan of the Republic of North Macedonia, also known as

5.2.2. National and regional planning and strategic documents relevant for the Macedonian part of the pilot region

The following relevant documents affect the planning and land use in an integrated manner, looking at the Macedonian territory as a whole:

- Spatial Plan of the Republic of Macedonia (2004-2020)
- Spatial Plan of the Ohrid-Prespa Region (2005-2020)
- Regional Plan for the Ohrid-Prespa Region (1973-1993)
- Regional Spatial Plan covering the municipalities of Debar, Struga, Ohrid, and Resen (1988)
- Program for the Development of the

South-West Planning Region (2021-2026)

- National Strategy for Sustainable Development (2009-2030)
- Strategy of Regional Development for the Republic of Macedonia (2009-2019)
- Strategy for Balanced Regional Development of the Republic of North Macedonia (2021-2031)
- Strategy for Agricultural and Rural Development for the period of 2014-2020
- National Strategy for the Development of Culture in the Republic of Macedonia (2018-2022)
- National Strategy for Tourism - Republic of Macedonia (2016-2021)
- National Strategy for the Protection of Nature (2017-2027)
- National Strategy for Water (2012-2042)
- National Strategy for Biodiversity with Action Plan (2018-2023)
- Strategy for the Environment and Climate Change (2014-2020)
- Communication Strategy and Action Plan for Climate Change (2022-2030)
- Fourth National Plan for Climate Change (2023)
- Regional Plan for the Management of Waste in the South-West Region (2016)
- Plan for Stopping the Creation of Waste in the Republic of North Macedonia (2022-2028)
- Plan for the Management of Waste in the Republic of North Macedonia (2021-2031)
- Plan for the Management of the World Natural and Cultural Heritage Ohrid Region (2020-2029)
- Study for the Valorization of the Natural Values of Jablanica Mountain (2006)

5.2.3. Municipal and local planning and strategic documents

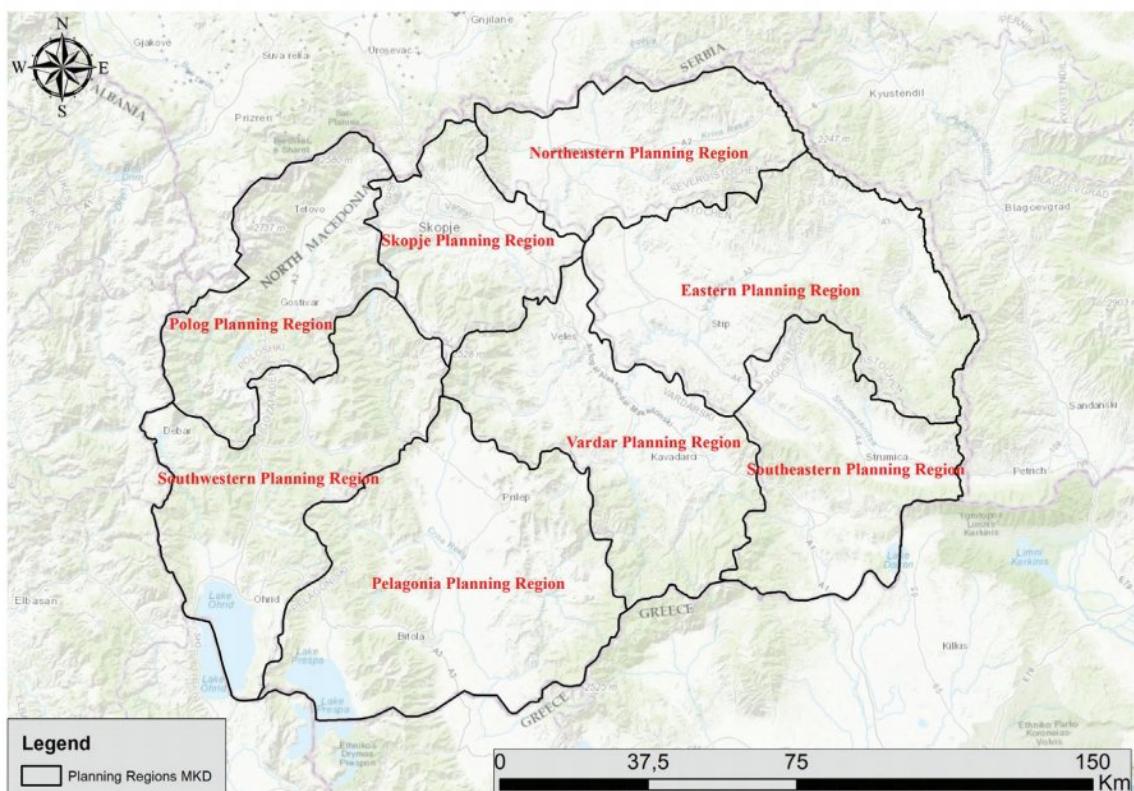
The following relevant documents affect the planning and land use within the borders of the pilot region:

- Spatial Plan of Municipality of Struga
- Strategy for Sustainable Development of the Municipality of Struga (2006-2011)
- General Urban Plan of the Municipality of Struga (2003)
- Amendment of the General Plan for the City of Struga
- Basic Urban Plan for the Municipality of Vevchani (1980-2000)
- General Urban Plan for Vevchani (1997-2007)
- Integral Plan for Local Development of the Municipality of Vevchani (2019-2022)
- Plan for the Management of Nature Monument Vevchani Springs (2019-2029)

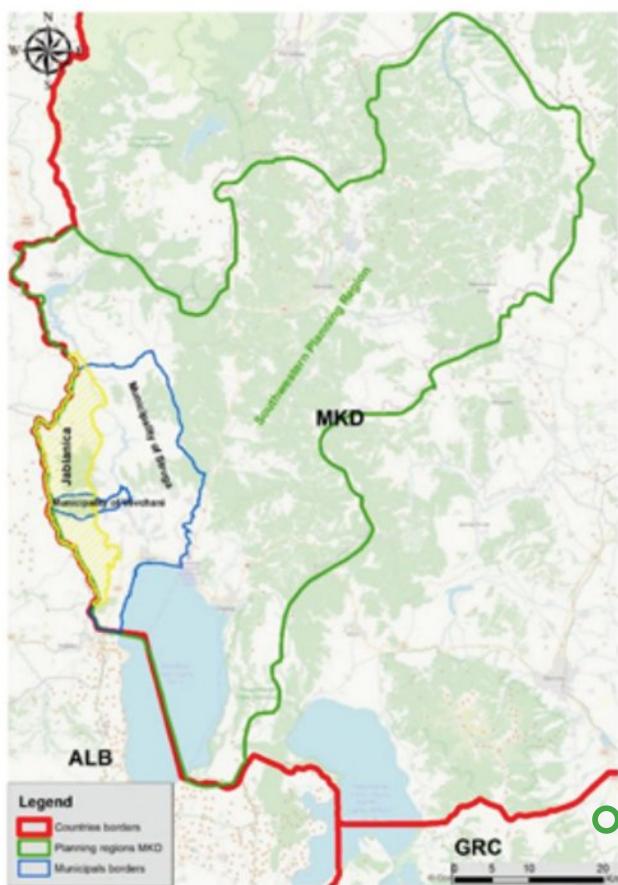
Note: Numerous urban documents within the boundaries of the pilot area exclusively pertain to urbanized areas. These documents are not included in the analysis as they are not relevant to the current study.

5.2.4. Spatial planning at national and local level

Spatial planning in North Macedonia takes place on two levels: national and local. The Spatial Plan of the Country is a comprehensive and long-term document that guides the use, protection, and management of the country's limited resources. It aims to promote societal and economic development, environmental protection, and the rational use of natural and cultural resources. It serves as the highest strategic document for spatial planning on the national level and outlines planning concepts and solutions for various fields and provides guidelines for lower-level planning documentation. This plan is developed alongside spatial plans for



Map 4: Borders of the planning regions in North Macedonia. Source: MES



Map 5: Boundaries of Vevchani and Struga Municipality and Jablanica Mountain within the south-western planning region of North Macedonia. Source: MES

regions, areas of special interest (like national parks), and local self-government units such as municipalities and the city of Skopje.

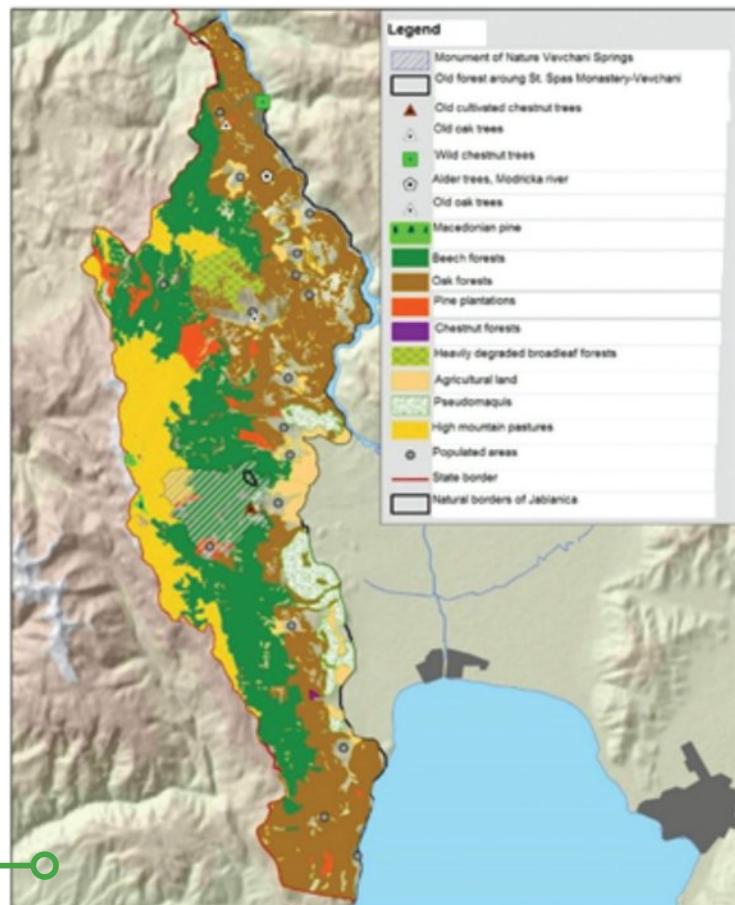
Regional spatial planning is regulated by the Law on Balanced Regional Development. The country is divided into eight planning regions, and specific areas with development needs are identified. These areas, such as border regions, rural areas, and hilly-mountainous areas, require special planning approaches and support from the government to promote balanced regional development. The targeted municipalities (Struga and Vevcani) from this study fall within the boundaries of the Southwest planning region.

The Ministry for Local Self-Government, particularly the Regional Development Bureau, is responsible for the preparation, adoption, and implementation of the Strategy for Balanced Regional Development. While there is a legal provision to create regional spatial plans, they are currently not separate plans but rather elaborations of the Spatial Plan of the Country.

Municipalities also have the option to prepare separate municipal spatial plans, which provide more detailed elaboration of the Spatial Plan of the Country. Currently, the pilot area falls under the Spatial Plan of the Ohrid-Prespa region.

5.2.5. Legal regulations for spatial planning

In the past, North Macedonia had a single law, the Law on Spatial and Urban Planning, that regulated the system of spatial and urban planning. This law was in effect until June 18, 2020. However, with the introduction of the new Law on Urban Planning on June 18, 2020, the Law on Spatial and Urban Planning became invalid. Unfortunately, this led to a temporary lack of complete regulation in spatial planning until the drafting of a new Law on Spatial Planning, which is currently in progress under the project „Enhancing Connectivity at the Balkan Green Belt.“



Map 6: Land use in the area of Jablanica. Source: Plan for the management of the Monument of Nature Vevchani Springs

To address this, a systematic solution was implemented through the Law on Organization of the Country's Administration Bodies. Instead of having a single law with two responsible institutions, the legislation was divided into two separate laws: one for spatial planning and another for urban planning. The Ministry of Environment and Spatial Planning is now responsible for spatial planning, while the Ministry of Transport and Communications handles urban planning.

Legislation plays a crucial role in the planning and utilization of space. Below is a list of laws that impact planning and the use of space in North Macedonia:

- Law on Urban Planning (“Official Gazette of the Republic of Macedonia” no. 32/20);
- Law on Spatial and Urban Planning (“Official Gazette of the Republic of Macedonia” no. 199/14, 44/15, 193/15, 31/16, 163/16 and 64/18) (no longer in effect, but some policies are still valid according to the transitional and final policies of the Law on Urban Planning);
- Law on Balanced Regional Development (“Official Gazette of the Republic of North Macedonia” no. 24/21);
- Law on Implementation of the Spatial Plan of the Republic of Macedonia (“Official Gazette of the Republic of Macedonia” no. 39/2004);
- Law on the Environment (“Official Gazette of the Republic of Macedonia” no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123/12, 93/13, 187/13, 42/14, 44/15, 129/15, 192/15, 39/16 and 99/18);
- Law on Nature Protection (“Official Gazette of the Republic of Macedonia” no. 67/04, 14/06, 84/07, 35/10, 47/11, 148/11, 59/12, 13/13, 163/13, 41/14, 146/15, 39/16, 63/16 and 113/18);
- Law on Cultural Heritage (“Official Gazette of the Republic of North Macedonia” no. 20/04, 115/07, 18/11, 148/11, 23/13, 137/13, 164/13, 38/14, 44/14, 199/14, 104/15, 154/15, 192/15, 39/16, 11/18 and 20/19);
- Law on the Management of the World Natural and Cultural Heritage of the Ohrid Region (“Official Gazette of the Republic of North Macedonia” no. 75/10);
- Law on Agricultural Land (“Official Gazette of the Republic of Macedonia” no. 135/07, 18/11, 148/11, 95/12, 79/13, 87/13, 106/13, 164/13, 39/14, 130/14, 166/14, 72/15, 98/15, 154/15, 215/15, 7/16, 39/16, 161/19 and 178/21);
- Law on Waters (“Official Gazette of the Republic of Macedonia” no. 87/08, 6/09, 52/16, 161/09, 83/10, 51/11, 44/12, 23/13 and 163/13);
- Law on Urban Greenery (“Official Gazette of the Republic of Macedonia” no. 11/18) – applies only to urbanized environments;
- Law on Mineral Resources (“Official Gazette of the Republic of Macedonia” no. 136/12, 25/13, 93/13, 44/14, 160/14, 129/15, 192/15, 39/16, 53/16, 120/16, 189/16 and 7/19);
- Law on Forests (“Official Gazette of the Republic of Macedonia” no. 64/09, 24/11, 53/11, 25/13, 79/13, 147/13, 43/14, 160/14, 33/15, 44/15, 147/15, 7/16 and 39/16);
- Law on Pastures (“Official Gazette of the Republic of Macedonia” no. 03/98, 101/00, 89/08, 105/09, 42/10, 116/10, 164/13, 193/15 and 215/15).

The Law on the Implementation of the Spatial Plan of North Macedonia was enacted simultaneously with the adoption of the Spatial Plan of North Macedonia (2004-2020). However, the planning horizon specified in this Spatial Plan has already expired. In 2017, a new procedure commenced to develop a new Spatial Plan for the country, which is currently ongoing and expected to be completed in the coming years. Despite this, according to the law, the existing Spatial Plan still holds permanent value and remains in force until a new Spatial Plan is officially adopted.

Moreover, additional spatial plans provide important details relating to the overarching Spatial Plan. These plans have longer planning horizons, such as the Spatial Plan of the

Eastern Planning Region or the Spatial Plan of National Parks Pelister and Mavrovo, which extend their projections up to 2030.

Spatial plans are adopted through the same process like enacting laws by the Assembly of North Macedonia, the highest legislative body in the country and therefore have the same legal weight as laws. Thus, spatial plans are legally binding documents that must be adopted and implemented accordingly.

5.2.6. Competent institutions for spatial planning

The Ministry of Environment and Spatial Planning is responsible for overall spatial planning in the country. It develops spatial development policies and oversees the preparation, adoption, and implementation of the Spatial Plan of the Country. The ministry coordinates the preparation of spatial plans, which are funded through its budget and can also receive domestic and foreign donations. The Spatial Planning Agency, as the designated governmental institution, exclusively produces spatial plans according to the law.

The Ministry of Transport and Communications, in collaboration with local municipalities, is responsible for urban planning and spatial planning. Municipalities are responsible for the planning and arranging of the space in their territories, while the

ministry oversees buildings of both local and national importance. The planning process at the local level involves the creation, adoption, and implementation of various urban plans and documentation, such as General Urban Plans, Detailed Urban Plans, and Urban Plans for Areas and Buildings of State Importance. Municipalities adopt plans of local significance, while the Ministry of Transport and Communications is responsible for plans and documentation of national importance.

For land use, the Ministry of Agriculture, Forestry and Water Management manages agricultural land owned by the country. It oversees the transformation of agricultural land into construction land, regulated by the Law on Agricultural Land. Construction land owned by the country falls under the management of local self-governance in accordance with the Law on Construction Land.

Construction inspections are conducted by local self-government within their respective territories. The Country's Urban Inspectorate, following the Law on Building, controls local inspections.

Given that a part of the pilot area is found within the scope of a UNESCO World Heritage Site, the Ministry of Culture, specifically the Administration for the Protection of Cultural Heritage, also has jurisdiction over the pilot area.

Spatial Planning (National Level)	Urban Planning (Local Level)
Ministry of Environment and Spatial Planning (Responsible institution for creating policies for the overall use of the entire space of the country)	Ministry of Transport and Communications (Responsible institution for arranging the space of the country)
Agency for Spatial Planning (Responsible institution for the development of spatial plans)	Local Self-Governance Units (Responsible institutions for arranging the space of their own territory)

Figure 2: Responsible institutions in spatial and urban planning at the national and local level. Own source.

5.2.7. Procedures for the development, adoption, and duration of spatial plans and plans for the management of protected areas

The pilot region has been proposed for protection in North Macedonia and is expected to gain protection status in the future. Considering this potential protection, this section focuses on procedures for protected areas, such as the creation of spatial and management plans which are necessary for the effective management and protection national parks. The process of developing a spatial plan for a national park involves multiple stages and can take over five years. The responsible institutions in North Macedonia include the Ministry of Environment and Spatial Planning, the Agency for Spatial Planning, the Government, and the Assembly of North Macedonia. The development of the spatial plan for a national park follows a methodology that includes collecting existing planning documents, forming participative bodies, and incorporating climate change adaptation measures. Expert revision and public hearings must also be conducted before the plan is adopted. Additionally, a strategic assessment of the environmental impact of the plan must be carried out in two stages, with mandatory public hearings. Spatial plans are considered valid for a minimum of 15 years and have permanent value, meaning that if a new plan is not made in the allotted time, the old plan remains in force indefinitely until a new plan has been completed.

On top of that, management plans are developed based on the Law on the Protection of Nature and the Manual on the content of management plans for protected areas. A public enterprise National Park is responsible for producing the management plan, which undergoes two stages and a public discussion. The plan is approved by the Ministry of Environment and Spatial Planning and adopted by the national park's management board. These plans have a planning period of 10 years.

The implementation of the Strategic Environmental Assessments ensures cross-border consultation with neighboring Albania, in accordance with the Convention

on Environmental Impact Assessment in a Transboundary Context (Espoo Convention). The funding for spatial plans and management plans comes from the budgets of the relevant institutions. Donations are another funding source.

It is important to note that the spatial plan is the highest planning document in the country, and all other plans, including management plans, should align with it. The spatial plan provides comprehensive guidelines for sustainable use, while the management plan focuses on defining protection zones, permitted activities, restrictions, and maintenance in more detail. However, in practice, in some cases management plans are developed before spatial plans or even in the absence of a spatial plan for the area.

5.2.8. Implementation of spatial and management plans

The Ministry of Environment and Spatial Planning is the competent institution for the implementation of the Spatial Plan. Spatial plans are implemented in accordance with the Law on Implementation of the Spatial Plan of the Republic of Macedonia (“Official Gazette of the Republic of Macedonia” no. 39/2004) and the Law on Urban Planning (“Official Gazette of the Republic of Macedonia” no. 32/20). With the adoption of the new Law on Spatial Planning (which is currently being drafted), the implementation will be integrated into one law, which will regulate the drafting and adoption. The implementation of the Spatial Plan is regulated in more detail by the Program for the Implementation of the Spatial Plan, which in accordance with the Law is adopted for at least two years. The new methodology for the preparation of spatial plans (2020) is envisaged to be medium-term and to be adopted for a period of five years. This program determines the measures, the priority activities, the organizational structure, and the authorities responsible for the implementation of the Spatial Plan, and regulates the financial resources needed for the implementation of the planned activities.

One of the instruments for monitoring the Spatial Plan of Macedonia is the Annual Report on its implementation. In accordance with the Law on the Implementation of the Spatial Plan, for the purpose of continuous monitoring of the state of space and the implementation of the Spatial Plan, the state administration bodies, local self-government units, public services, organizations, enterprises, institutions, and other legal entities are obliged to prepare Annual Reports on the conditions and changes in the space of their area and to submit them to the ministry in charge of spatial planning. These Annual Reports are prepared by the Spatial Planning Agency, in coordination with the Ministry of Environment and Spatial Planning. Since the adoption of the Spatial Plan of Macedonia (2004-2020), eleven reports on the implementation of the Spatial Plan have been prepared and submitted to the Assembly of North Macedonia. Just like the spatial plans, the reports are also publicly available on the website of the Ministry of Environment and Spatial Planning and the Spatial Planning Agency.

The preparation and adoption of urban documentation under the jurisdiction of the local self-government units or the Ministry of Transport and Communications can further support the implementation of the Spatial Plan. These include urban plans for settlements (General Urban Plans for Cities and Urban Plans for Villages), as well as urban plans and planning documentation for areas outside the settlements.

Separate funds for the implementation are not available because it is carried out through the previously mentioned mechanism of issuing Conditions for Spatial Planning – reports whose preparation is paid for by the requesters. These reports are prepared by the Spatial Planning Agency, which has its own budget. The agency also owns a digital database, on which the implementation of the Plan is recorded.

For the next Spatial Plan a new, comprehensive digital database may be created, which will allow the monitoring of the implementation of the Spatial Plan in real time, by registering all changes of space. The

new Law on Spatial Planning is supposed to regulate this new undertaking.

Competent institutions for implementing the management plans are the public enterprises – National Park. The management plans are implemented through the so-called Operational Plan, which is realized with the Annual programs for the management of the protected area. For this purpose, special funds are foreseen in the annual budgets of the respective institutions. The implementation of management plans is monitored through the Annual Program Report for the previous year.

5.2.9. Enhancing collaboration between municipalities, responsible institutions, and the public for local planning and development initiatives

In urban planning, municipalities play a crucial role for the preparation of planning documents. To ensure inclusiveness, participation, and transparency in urban planning, municipalities are required to establish participatory bodies as outlined in the Law on Urban Planning. These bodies are formed following the initiative of the mayor.

The participatory body is formed by members of the Municipality’s Urban Planning Commission appointed by the mayor, experts employed by the organization responsible for preparing the urban plan under discussion, representatives of urban and local communities, non-governmental organizations (NGOs) from various urban sectors, citizen associations, civil activists from the municipality’s territory representing different citizen groups, as well as citizens who are experts in urban planning and other relevant professional areas.

The participation in the participatory body is voluntary, and it aims to represent the diverse interests of different stakeholders within the local community. The participatory body conveys attitudes, opinions, and needs of citizens and legal entities. It monitors the planning situation, provides initiatives, directions, and suggestions for planning solutions, and considers planning programs

and solutions during the planning and adoption process.

Public participation in urban planning involves granting citizens the right to be involved and to influence the assessment of needs and taking decisions. Since citizens directly experience the consequences of spatial planning in their daily lives, it is essential to involve them in the planning and decision-making processes. Therefore, the engagement of the public by local authorities is key to enhance the quality of urban plans. The participation of the public also promotes a sense of community and raises awareness for complex planning processes and the importance of active participation in finding solutions.

5.3. Albania

5.3.1. National planning and strategic documents

The following documents affect the planning and use of space, looking at the Albanian territory as a whole:

- National General Plan (2015-2030)
 - As highest territorial planning instrument in Albania, this plan is a comprehensive framework that outlines the strategic direction for territorial development in Albania. Environmental monitoring is a valuable tool utilized within this plan to evaluate and analyse the state of the environment and its changing patterns. It plays a crucial role in informing policy development and facilitating effective policy implementation. It also provides essential information for reporting to local and national policymakers, international forums, and the public.
- Document on Forestry Sector Policies (2018-2030) - The aim of this policy is to guide and enhance the sector, restoring its natural balance and making a positive contribution to the country's economy. It serves as a means for promoting rural

development and alleviating poverty.

- Document of Strategic Policies on Biodiversity (2013-2020) - This document serves as a guiding framework for the country's approach to achieving the objectives outlined in the Convention on Biological Diversity, considering Albania's national obligations.

5.3.2. Municipal and local planning and strategic documents

The following relevant documents affect the planning and use of space within the borders of the pilot region:

- Shebenik National Park Management Plan (2018-2028)

The Shebenik National Park is one of Albania's 14 national parks, encompassing 18% of the total area designated as national parks and 8% of the overall extent of protected areas in the country. Situated in a strategic location, the park holds the potential for significant connections with other protected areas. To the south, it is linked with the Protected Landscape of Pogradec; to the east, it connects with a network of protected areas in North Macedonia. Towards the north, it is adjacent to the recently declared Korab-Koritnik Managed Nature Reserve. Additionally, it shares boundaries to the west with a cluster of protected areas in central Albania, including Dajti Mountain National Park, Qafë Shtama National Park, and M. Gropa-Bizë-Martanesh Protected Landscape.

Designated as a national park in 2008, the Shebenik Jabllanicë Park spans a total area of 33,928 hectares, as proclaimed by the decision of the Council of Ministers no. 640 on May 21, 2008. In 2018, the first 10-year Management Plan for the Shebenik Jabllanicë Park was formulated. However, a subsequent decision by the Council of Ministers no. 59 dated January 26, 2022, altered the park's status and area. This change involved increasing the park's size from 33,928.4 hectares to 34,507.9 hectares, accompanied by modifications to the zoning criteria (refer to map 2, 3, and table 1).

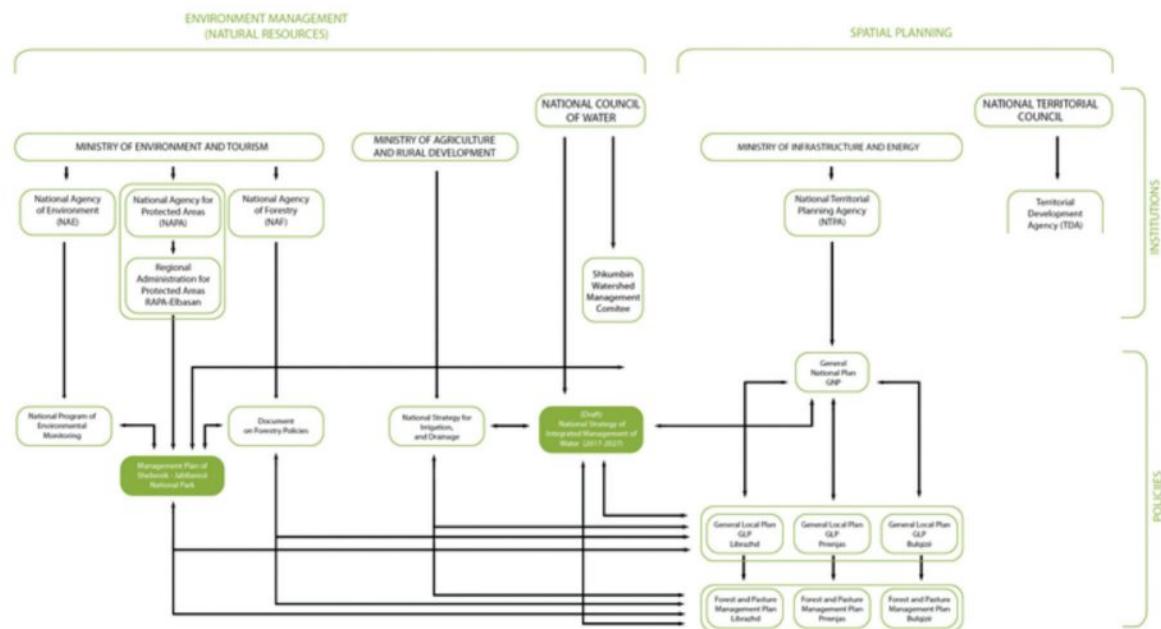


Figure 3 Institutions and policies for environmental management and spatial planning in Albania. Own source.

5.3.3. Spatial planning institutions, legislations and instruments

Spatial planning in Albania is governed by a complex web of institutions, legislation, and instruments aiming to manage natural resources, protected areas, and territory development. The key institutions responsible for these matters include the Ministry of Environment and Tourism, the Ministry of Infrastructure and Energy, and the Ministry of Agriculture and Rural Development. These ministries, in coordination with subordinate agencies, oversee various aspects of planning and development, including protected areas, water resources, air quality, biodiversity, agriculture, forestry, energy, and tourism.

One crucial institution in Albania's spatial planning landscape is the National Territorial Development Agency (NTDA), operating under the Ministry of Infrastructure and Energy. The agency is responsible for territory planning and development, guided by Law No. 107/2014 and Decision of Council Ministries (DCM) No. 427, dated 8.6.2016. The NTDA collaborates with central and local authorities to create the National General Plan (NGP), a comprehensive planning instrument approved by the Council of Ministers. The NGP addresses urban and

natural issues, agriculture, water resources, infrastructure, and tourism on a national scale, serving as the foundation for Local General Plans (LGP) developed by municipal governments. LGPs regulate land use at the local level, aligning it with national interests for sustainable development.

The implementation of LGPs involves various sectoral plans, detailed local plans, and development permits. The NTDA also holds responsibility for overseeing data on the territory, ensuring compliance with relevant laws and regulations. Meanwhile, the Ministry of Environment and Tourism takes the lead in managing natural resources, with its subsidiary institutions: the National Environment Agency (NEA), the National Agency of Protected Areas (NAPA), and the National Forestry Agency (NFA). These bodies oversee matters related to protected areas, biodiversity, forestry, and environmental monitoring throughout the country.

The Ministry of Environment and Tourism plays a crucial role in designating and zoning protected areas, following the criteria outlined in Law no. 81/2017 „On protected areas.“ Protected areas receive official status based on the categories defined in the plan,

which aligns with IUCN criteria and requires approval by the National Territorial Council (NTC). The NAPA, as the central institution responsible for protected area preservation and management, operates through Regional Administrations for Protected Areas (RAPA), such as RAPA Elbasan, responsible for the management of National Park „Shebenik.“

The development and implementation of management plans specific to each protected area is the heart of protected area management. These plans are critical for the conservation and sustainable management of these areas and are designed to align with the NGP and LGPs of the municipalities where they are located. Additionally, sectoral documents and policies related to forestry, such as the Document on Forestry Sector Policies, provide strategic direction for forest management, including within protected areas.

The NEA complements these efforts by monitoring the state of the environment annually and drafting the National Program for this purpose. To ensure effective coordination among institutions and actors, the legal framework defines the duties, responsibilities, and regulations of these organizations. Protected area management, such as that of the „Shebenik“ National Park, involves collaboration between RAPA Elbasan, local municipalities (Librazhd, Prrenjas, and Bulqizë), the Directorate of Forests

and Pastures, and the Directorate of Urban Planning.

At the municipal level, territorial development directorates collaborate with the National Council of the Territory and the Territorial Development Agency (TDA) to prepare and approve planning documents. These agencies also work closely with regional-level deconcentrated institutions and the 61 municipalities across the country, each with its respective directorates responsible for urbanism, territorial planning, agriculture, environment, pastures, and irrigations.

For water resources management, the National Water Council (NWC) plays a pivotal role. This interministerial body, chaired by the Prime Minister, oversees the administration and integrated management of water resources. The NWC approves plans, projects, and permits related to water use and discharges, especially for activities spanning multiple basins or of national importance. It also ratifies concession agreements related to water resources.

In summary, Albania's spatial planning landscape involves a network of institutions, legislation, and instruments that collectively manage natural resources, protected areas, and territory development. The coordination among these entities is essential to achieve sustainable development and environmental preservation at both national and local levels.

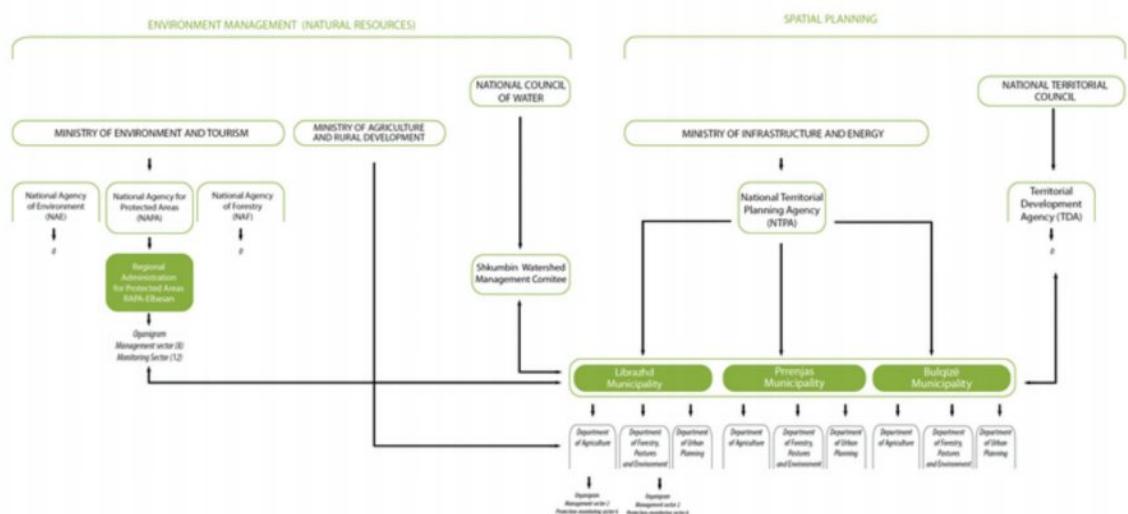


Figure 4: Organizations and organigrammes of environmental planning and spatial planning in the municipalities of Librazhd, Perrenjas, and Bulqize. Own source.

6. RECOMMENDATIONS FOR IMPROVEMENT

The following recommendations are based on research conducted in North Macedonia and Albania and are focused on the improvement of the state of GI within these countries through individual improvement of processes, as well as through transboundary cooperation. However, despite the specific focus on these two countries, the recommendations establish a baseline model for improving GI, and are therefore applicable to other countries as well, particularly countries in the neighbouring regions which have similar conditions. As such, these recommendations can be used as a guideline for improving the knowledge and implementation of GI in countries which are in the early stages of GI development and implementation.

6.1. Recommendations for integrating Green Infrastructure into spatial planning in the transboundary pilot area

To intensify cooperation within the pilot region and to develop a concrete plan for identifying, protecting and implementing GI in Jablanica-Shebenik a roadmap of seven steps has been developed. The seven steps are building on one another. In the following, exemplary activities that could be implemented in the pilot region are outlined .

6.1.1. Establish a transboundary coordinating body on Green Infrastructure in the pilot region

As a first step the formation of a coordinating body is recommended. As part of the project „Enhancing Connectivity at the Balkan Green Belt“, National Steering Committees have been established in both countries. The National Steering Committees

already interacted in a transboundary context. These committees could intensify their cross-border cooperation in the form of a coordinating body.

Together, they form a core group of stakeholders capable of shaping policies and addressing complex challenges through negotiation, utilizing strategies and tactics developed within the project framework. The task of this joint team could include to identify possible obstacles emerging from the different legal regulations and planning and strategic documents, and possibly their harmonization (although, in general, this should not pose a significant problem).

Important institutions who should be members of the coordinating body would be the Ministry of Environment and Spatial Planning (MOEPP, Department of Nature) on the Macedonian side, and the corresponding Ministry on the Albanian side. It would be possible that the ministries appoint working teams with their own contact persons (focal points).

In addition to the relevant ministries, national experts from both countries, the national park, local self-government, etc., but also representatives of the academic sector, NGOs like MES and PPNEA, and the civil sector should be represented in the coordinating body.

6.1.2. Involve relevant stakeholders

It is important to involve stakeholders from both countries in the planning process to ensure that all stakeholders are engaged in the process and have a say in the development of the GI plan. Apart from the responsible governmental institutions, this could include local communities, NGOs, and businesses.

Responsible government institutions are the ministries with jurisdiction over environmental matters, followed by public

enterprises national parks (which are controlled by these ministries). Ministries are involved as members of the coordinating body, potentially also their subordinated agencies.

Other involved stakeholders would be local self-governments (municipalities), with authority over arranging the space (urbanism) within their own territory, the local community (representing its needs, addressing its issues, and advocating its interests), non-governmental organizations (typically serving as link between authorities and the local population), the business community (with its economic interests), and the academic sector (whose scientific knowledge and approach are highly valuable).

6.1.3. Develop a shared vision

It is recommended that the coordinating body develops a common vision that aligns both Albanian and Macedonian stakeholders. This vision should focus on GI and how to implement it to support sustainable development and biodiversity conservation.

The vision should be developed by the two neighboring countries in a joint, simultaneous approach, taking the ecological functionality of the cross-border pilot area into account. It should enable flora and fauna to cross the respective administrative boundaries, and support the connectivity of the GI elements to decrease isolation of species populations through fragmentation. The formulation of a Memorandum of Cooperation could be a suitable tool to increase commitment and agree on goals and directions for the sustainable development of the pilot area.

6.1.4. Establish a common GIS map of the pilot area

With the geographic information system (GIS) data can be first managed and analysed and later displayed in form of a map, integrating location data with inventories of habitats, land uses and zoning, local communities' densities, etc. Improving data and harmonising it in a cross-border context would support the creation of a reliable basis for executing detailed analyses of fragmentation and gaps

in the ecological network, density of protected areas, ecosystem services and GI planning in the pilot region. The respective GIS expertise is required to develop a GI plan.

6.1.5. Develop a joint action plan

Developing an action plan is essential for implementing the joint vision in practice. In this plan, the general goals and recommendations will be translated into specific tasks. It will further include responsibilities of the relevant institutions, a well-defined timeline and specified resources for task execution.

This document could be prepared by an expert team selected through a tender or by the coordinating body representing both countries.

6.1.6. Develop a financing mechanism

Developing a financing mechanism to support the implementation of the GI plan could include the use of public and private funding sources, such as EU funds, national funds, and private investments.

The necessary funding for the improvement of the GI in the pilot area will be determined in the joint action plan (specifying the total amount and itemized expenses). The funds can be secured either partially or totally through the budgets of the responsible ministries for the environment (which should be timely allocated upon the proposal of the coordinating body to ensure funds are earmarked for the next fiscal year). Additionally, the project could apply for EU funding (through ministries, non-governmental organizations, or in partnership) or through the business community, which may find its own interests in this project.

6.1.7. Monitor and evaluate

Monitoring and evaluating the effectiveness of the action plan regularly is of great importance. This will allow adjustments if necessary and ensure that the plan is achieving its objectives. Responsibilities relating to the implementation of monitoring and evaluation tasks will also be outlined

in the action plan, according to indicators determined in the action plan.

A supervisory body could be a suitable structure to organize the monitoring and evaluation. This body would also be composed of representatives from both countries, which are proposed by the coordinating body. The persons nominated to the Supervisory Body would be authorized by their respective ministries. Ideally, there would be continuous monitoring and evaluation would be conducted quarterly (every three months).

6.1.8. Outlook on potential fields of work to be considered in the joint action plan

- a) **Build a common system for forest management for forest fire protection.** Such a system would be valuable for the sustainable implementation of GI in the two countries. The forest management for fire protection and the relevant stakeholders and institutions in both countries are not clearly defined at this point in time. However, there are multiple benefits of such a system, which could be a basis for fruitful future cooperation on GI and spatial planning.
- b) **Seek the opinion of the local population:** The participation of the local population should be encouraged to ensure the creation of quality green spaces that meet the population's practical needs.
- c) **Create green corridors and natural areas** to improve air quality in heavily polluted areas.
- d) **Plant rows of trees and low vegetation along roads:** This helps mitigate effects of climate change on roads and communal infrastructure. Vegetation provides shade, mitigates precipitation, regulates water flow, and absorbs vehicle exhaust gases.
- e) **Create natural habitats** by planting local, fire-resistant tree species.
- f) **Create vegetation corridors** along cycling or walking paths, such as hedges, to enhance landscape diversity.
- g) **Prioritize connectivity measures** to mitigate the impacts of intensified agriculture and road infrastructure on species movement.
- h) **Plan wildlife corridors**, also known as habitat corridors or green corridors, to minimize the fragmentation of habitats caused by grey infrastructure and human activities like logging. These corridors facilitate the movement of individuals between species populations, reducing negative effects like inbreeding and loss of genetic diversity. The corridors could include underground or above-ground natural passages for wildlife. Conduct fauna monitoring to identify optimal locations for these corridors.
- i) **Foster inter-municipal cooperation** in land-use planning, particularly to enhance environmental connectivity at local and regional levels. Coordinated management between sectoral departments is crucial, and methodological guidelines, training, and a participatory approach can help overcome obstacles in creating GI.
- j) **Facilitate exchanges of initiatives** among businesses, schools, academics, and researchers through meetings, training sessions, or study trips focused on GI. Knowledge exchange and networking among professionals from diverse fields can promote GI through collective actions.

Overall, the successful implementation of GI in a transboundary context requires coordination and collaboration between the two countries. Accomplishing this depends less on legal regulations and more on the commitment and interest of both countries in the pilot area and their willingness to cooperate. The quality and effectiveness of this collaboration will largely depend on the coordinating body, and the ability of its members to convince officials in the key institutions, primarily the Ministries of the Environment, of the importance of GI, based

on solid research. Their communication skills and organizational abilities are crucial, so it is vital to carefully select and appoint these individuals for their respective responsibilities.

6.2. Recommendations for harmonization of legislation, methodological approaches and practices at the local level

The following section presents recommendations for activities with the potential to harmonize legislation, methodological approaches and practices in the field of land use planning in the pilot region. The recommendations concern the local and cross-border level.

6.2.1. General recommendations for North Macedonia:

1. A study on the natural values and the biodiversity of Jablanica Mountain should be prepared. This valorization study is essential to determine whether the pilot area indeed possesses ecological value, potential, and if it is worth to be proclaimed as a national park. The study is done in accordance with the Law on Nature Conservation and does not pose any obstacle to spatial planning. On the contrary, spatial planning takes such studies into account, along with other relevant documents and pertinent research, and provides guidelines for development – in this particular case, the development of GI in a cross-border context. Spatial planning will present opportunities and highlight limitations, while the specific actions, in accordance with the spatial planning guidelines, will be translated and implemented through the Action Plan and management plans (that will follow).
2. Based on the results of the study, the area should be proposed for designation as a national park.

3. Following the proclamation of the area as a national park, a Public Enterprise National Park „Jablanica”, which will manage the area, should be established.
4. Institutional cooperation with the Albanian side should be established for joint management of the borders of the protected area (mentioned in the recommendations in a transboundary context).
 - Considering that the management of such areas falls under the jurisdiction of institutions like the Public Enterprise National Park, the most effective collaboration would be achieved through these corresponding institutions in both countries. This is one of the main reasons why one of the key proposals of this study is the proclamation of the Macedonian part of the area as a national park and establish an appropriate institution for its management.
5. Following the preparation of the new Spatial Plan of North Macedonia and the new Law on Spatial Planning, a new Spatial Plan for the Jablanica National Park needs to be prepared (according to a new methodology, including GI and adaptation measures for climate change)
 - The new Spatial Plan of the Country would contain a proposal to proclaim Mount Jablanica as a national park, based on the results of the valorization study. A proclamation is very likely, given that the high value of Mount Jablanica has already been determined in a study, and its protection has already been proposed. Therefore, the Law on Nature Conservation stipulates that separate spatial plans must be developed for such areas, which is also outlined in the Law on Urban Planning (currently covering the field of spatial planning), and the same will be the case with the

new Law on Spatial Planning. The responsible entities for this procedure are the Department of Nature and the Department of Spatial Planning within the Ministry of Environment and Spatial Planning. According to the law, they are obliged to initiate and conduct this procedure. The actual development of the spatial plan falls under the responsibility of the SPA, which operates in coordination with the Department of Spatial Planning. Meanwhile, the creation of the management plan is the responsibility of the national parks themselves (usually through the selection of a professional team through a tender process), all of which are under the control of the Department of Nature.

6. After the preparation of a spatial plan, a management plan for national park Jablanica should be developed.
7. GI should be integrated into existing planning frameworks. This can help ensure that GI is considered in the planning process from the very start and is aligned with other planning objectives.
8. Work is already underway on this, meaning that the definition of the concept of GI is already incorporated into the draft version of the Law on Spatial Planning, as well as guidelines for integrating the concept into the planning process. Therefore, the following spatial plans will certainly include guidelines for implementing GI through lower-level planning documentation (urban plans and projects).
9. An initiative should be launched to revise the issued concessions for exploitation of mineral resources in the area, and concessioners should be obligated to undertake offset measures.
10. The unplanned and illegal felling of forest should be prevented. This matter is under the competence of the

Ministry of Economy because it is the competent institution for granting/approving exploitation concessions. The revision of the issued concessions and their eventual revocation/cancellation can be carried out, not only on the initiative of the Ministry of the Environment (through, for example, in this case the coordinating body), but also based on reactions from the civil sector (which was actually the case with the Ilovica mine, in eastern Macedonia, on the border with Bulgaria).

6.2.2. Specific recommendations for North Macedonia:

The basis for all the below recommendations are: the Law on Urban Planning (further on, part of the provisions will remain in this law, and another part will be taken over in the Law on Spatial Planning), further the Law on the Environment (especially for the implementation of the planning documents in a cross-border context), and the Law on Nature, but it is also necessary to respect the provisions of other laws, such as: the Law on Forests, the Law on Waters, the Law on Agricultural Land, the Law on Pastures, etc. All that is generally coordinated through spatial planning, and this is precisely why it is of essential importance, including and coordinating all the responsible institutions in different areas with their competences.

1. Transboundary GI areas should be identified: potential GI areas that cross national or regional boundaries need to be identified and managed coherently to avoid fragmentation.
2. This is usually done before the preparation of each planning document, and also in their draft version, before adoption by the relevant institution. LSG or ministries are responsible for that, depending on the type of the planning document. An additional mechanism for the inclusion of the local population in the planning procedure and in the perception of the

effects of the implementation of these plans on the environment is the SEA procedure (strategic environmental assessment).

3. A bigger sense of respect towards public greenery should be fostered: By allowing certain “green activities” of the population to plan, plant, and maintain green spaces, a sense of ownership can be instilled, leading to greater care and respect.
4. This should generally be carried out by the LSG (municipalities), but the possibility of this being implemented through the Ministry of the Environment (which has its own special Department for cooperation with local self-government), and also NGOs, is not excluded. The initiative for this will come from the project itself and will be defined in the Action Plan.
5. Civil society should be considered a key stakeholder in GI management: Residents possess specific knowledge about their territory and can support the promotion of GI through collective actions.
6. This is also regulated by law (the Urban Planning Law) and, additionally, by the Aarhus Convention, which has been ratified by North Macedonia. These require the mandatory involvement of the civil sector in the planning process and provide free access to information (which is always respected by government institutions).
7. GI should be implemented in urban areas: Planning green and multifunctional urban spaces, as well as infrastructure for development in an urban context, should be prioritized.
8. Unused land (unoccupied urban plots) should be transformed into green areas.
9. Well-connected, multifunctional GI should be deployed in the rural landscape.
10. Urban-rural partnerships should be established: this would facilitate a more efficient spread of economic activities while providing access to ecosystems and their services for local settlement dwellers.
11. Encourage GI projects as cost-effective alternative solutions: gray infrastructure can be replaced by cost-effective GI solutions, prioritizing natural/semi-natural land redistributions in the context of agroecology and forestry (greening measures).
12. This set of measures from above can also be implemented through the Urbanism Commissions, which, according to the law, are established in all municipalities and approve the plans and project programs for urban plans on the basis of which these measures would be implemented. All of this could be controlled and adjusted based on proposals from participatory bodies (which are also mandatory according to the law and include representatives from the civil sector). From that aspect, legal changes in this section are not necessary. An important requirement however is a strong increase in awareness about GI, which is currently low even among municipal officials and, even more so, among the civil sector. However, this could be changed through appropriate campaigns, trainings, workshops, etc.
13. Restoration measures should be implemented in degraded areas to improve landscape permeability. These can include: restoring abandoned or unnecessarily sealed (concreted or paved) surfaces that prevent the infiltration of water into the soil, hinder the absorption of sunlight into the soil, and thus affect natural soil processes and temperature radiation, and consequently, reduce the adaptation capacity towards climatic changes.)
14. Maintain natural buffer zones around areas with industrial activity, e.g. by planting green barriers of appropriate vegetation that filter pollution and dust coming from local industrial

activities—especially quarries in the target area.

15. Reclaim abandoned industrial sites as green areas for recreation and potential elements of the GI network.
16. Prevent erosion in vulnerable areas by maintaining forest cover to mitigate avalanches on mountain slopes.
17. Plan GI as a cross-border, dynamic, and adaptable network to mitigate and adapt to climate change.

All of the aforementioned measures are under the jurisdiction of the local self-governments (municipalities) which will have to follow the guidelines from the previously mentioned planning documents, implementing them through planning/project documentation from a lower level, respecting the legal procedures. Taking the weak financial situation of the majority of the municipalities into account, intervention by the state (mainly under the responsibility of the Ministry of Transport and Communications, the Ministry of the Environment, the Ministry of Agriculture, Forestry and Water Management) would be required for cost-intensive measures, such as recycling of previously industrial or contaminated land, preventing erosion and landslides, constructing underground/overground passages for animals, etc.

3. Implement sustainable management practices for agroforestry systems, recognizing agriculture as a major threat to habitats and species. Avoid intensification of land use, particularly since it negatively impacts pollinator species, farmland birds, and semi-natural habitats. This approach also helps mitigate pollution pressures on air, water, and soil.
4. Use naturally checked dams to restore streams. Cribwalls, also known as the wooden barn method, are grid structures made of wood and stone. They are a traditional technique used for protection against water damage and erosion. Cribwalls are effective for regulating watercourses, rehabilitating erosion hotspots, and stabilizing slopes. This method is a good practice for implementing both traditional and modern water management.
5. Restore floodplains in the area. This approach is often more cost-effective and efficient in preventing floods compared to constructing new, higher dykes.
6. Invest in small-scale GI projects for quick and cost-effective climate change mitigation. GI is gaining popularity as an alternative to expensive and time-consuming engineered strategies. It offers climate resilience benefits to communities, including those in small rural areas.
7. Create an information center for Shebenik National Park, serving as an environmental education hub for visitors and local communities. This center can be constructed using natural raw materials and traditional architecture to showcase the park’s values and threats.
8. Establish common trails, similar to the High Scardus Trail (a long-distance hiking trail that spans from Kosovo, through Albania, to North Macedonia), with wooden signposts in Albanian, Macedonian, and English languages for both visitors and local inhabitants.
9. Build dew ponds to provide water

6.2.3. General recommendations for Albania:

1. Establish a local administration for Shebenik Park management because RAPA Elbasan, which currently covers the entire Elbasan region, lacks the necessary capacities to efficiently administer the park.
2. Rehabilitate areas which are eroded due to human activities, such as those along the road from Librazhd to Fushë Studën, Steblevë, and Sebisht. Given that this road traverses the park, installation of signs indicating the presence of wildlife and promoting adherence to speed limits to safeguard this important conservation area is important.

for farm animals and serve as fire protection hotspots in forests. Dew ponds collect and store rainwater, and are especially valuable in dry, hilly areas like Shebenik Park. Restoring old dew ponds and creating new ones can enhance wildlife habitat, benefiting birds and insects.

10. Install electric fences to protect cattle and bee hives of local communities. Along with educating stakeholders and community members, this intervention helps mitigate human-wildlife conflicts and negative interactions with local communities.
11. Construct ecologically built structures such as wooden houses, huts for shepherds, wooden bridges, land fences, etc. using local materials like wood, stones, and clay, while avoiding asphalt, industrial materials, iron fences, aluminum windows, and plastic materials.
12. Construct dry stone walls in arable lands for erosion protection and watershed management, reducing reliance on concrete constructions. These walls serve as important habitats, offering food, shelter, and nesting sites for various species, especially amphibians.
13. Encourage relevant national and local actors to establish a dedicated fund for GI in the transboundary area. This fund can be administered by responsible ministries or local governance, motivating local NGOs and businesses to seek funding for GI projects in collaboration with local communities.
14. Educational institutions in the Elbasan region should develop GI educational modules and collaborate with universities. Meetings with the National Steering Committee in Albania highlighted that universities are important stakeholders with untapped potential. Professors can expand the professional network of experts and provide training to aspiring professionals in fields like urban planning, contributing to the long-term success of GI and spatial planning goals.
15. Facilitate exchanges of initiatives among businesses, schools, academics, and researchers through meetings, training sessions, or study trips focused on GI. Knowledge exchange and networking among professionals from diverse fields can promote GI through collective actions.

6.2.4. Specific recommendations for Albania

The below recommendations were put forward by local partners from the Shebenik National Park pilot region, with additional input from members of the National Steering Committee and the National Expert on GI in Albania. The GPS coordinates were provided by local partners and the maps were developed by PPNEA.

1. **Construct two green bridges/overpasses for wildlife on the main road connecting Librazhd city with Fushë Studën village.** There are two locations proposed for a green bridge or overpass for wildlife. Both proposed locations are along the main road that connects Librazhd city with Fushë Studen village. They are located within corridors through which the main road passes and are inside the National Park Shebenik, close to Llangë village. These two points are important for wildlife movement.
2. **Construct an underpass on the road that links Fushë Studën village and Stëblevë village.** At this point, the road is elevated compared to the surrounding terrain, creating a vital corridor for animals attempting to cross. Unfortunately, the road currently interrupts this essential route for wildlife. Due to the historical significance of this route for wildlife and the disruption caused by the road, building an underpass here would serve as a valuable solution to facilitate safe wildlife crossings.



Figure 5: Coordinates, Green bridge proposal 1. Source: Google Earth

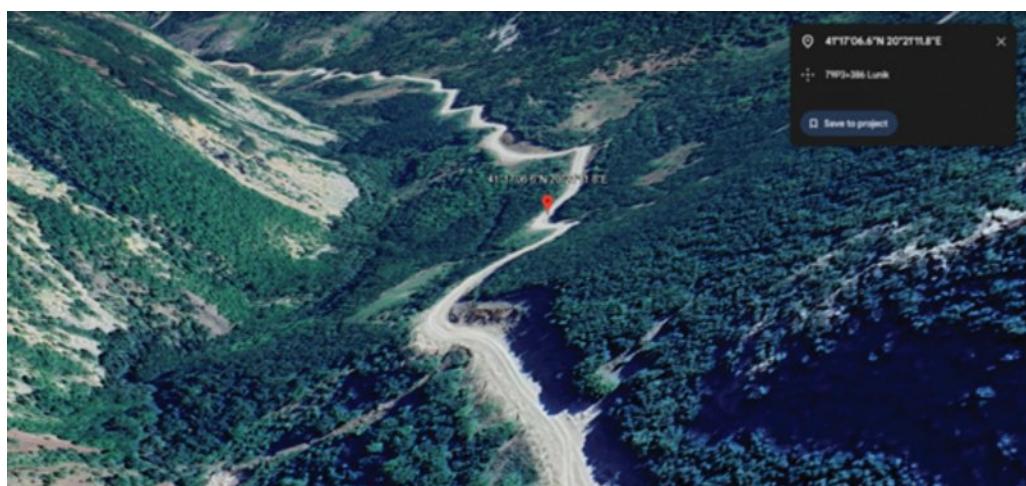


Figure 6: Coordinates, Green bridge proposal 2. Source: Google Earth

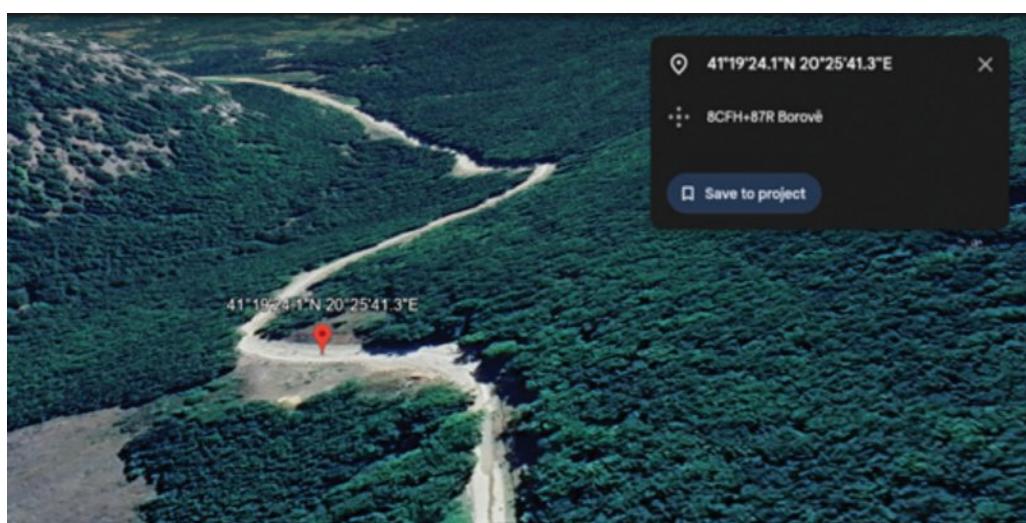


Figure 7: Coordinates, Underpass proposal. Source: Google Earth

3. Advocate for reforestation in two adjacent areas near Dorëz village, which is located within the Shebenik National Park. These areas have been subjected to illegal deforestation activities over the years. They are crucial for reforestation efforts and for

establishing a wildlife corridor because currently, human activities and deforestation have disrupted the existing corridor.

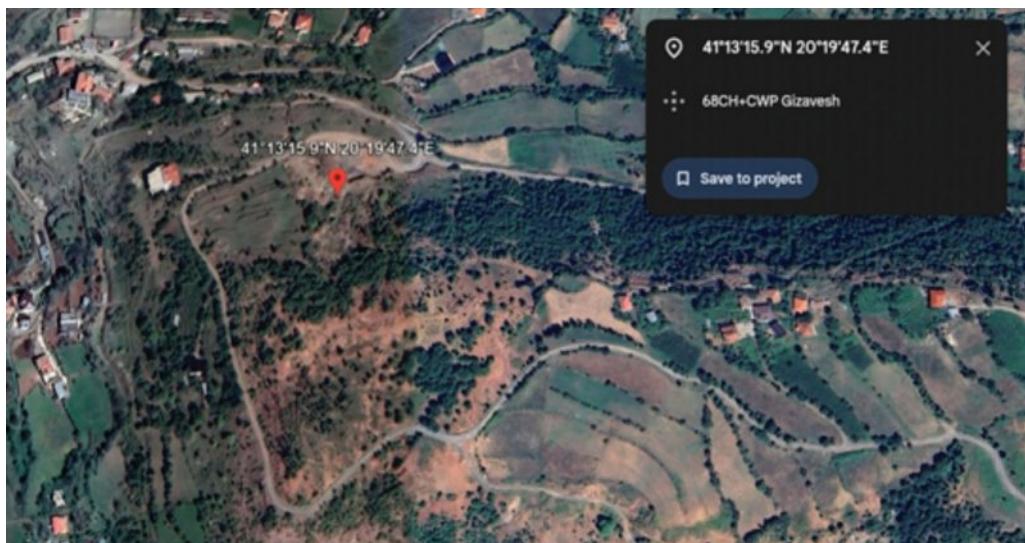


Figure 8: Coordinates, Reforestation proposal 1. Source: Google Earth

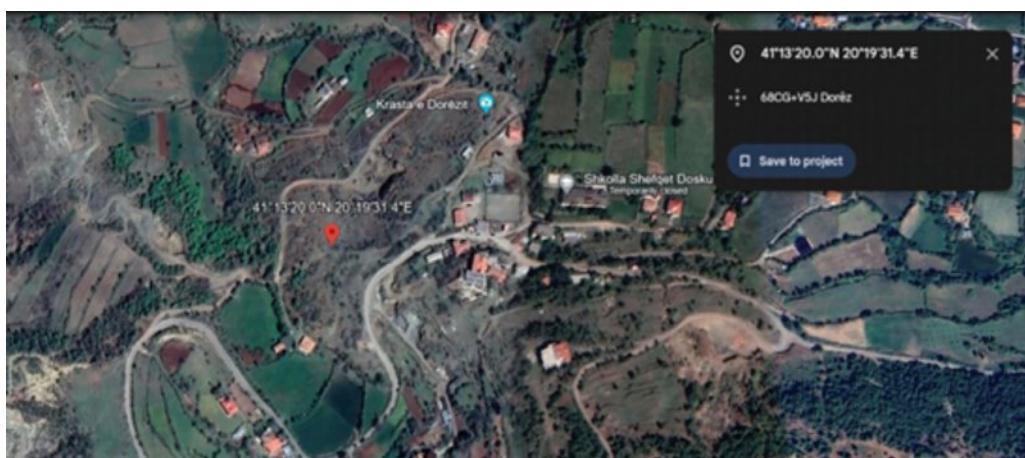


Figure 9: Coordinates, Reforestation proposal 2. Source: Google Earth

6.3. Conclusions

Implementing the recommended measures could be a big challenge, especially keeping the fact in mind that this is the first joint, cross-border GI project for both countries. The creation of a **Joint Vision** is particularly challenging; according to the recommendations, the Joint Vision should be reformulated into an **Action Plan**, to support the effective implementation of this process, whilst little knowledge of the concept of

GI exists and ecosystem services and their benefits are often unknown to the relevant stakeholders (the local authorities and the institutions from both sides, as well as the local population, including non-governmental associations).

Another issue to consider is the presence of varying legal regulations and diverse institutions with distinct competencies operating within the same domain. However, these challenges can be effectively addressed through the implementation of the proposed

Action Plan. The involvement of multiple institutions with differing competencies can lead to conflicts of interest, which can arise when institutions want to use the same space for different purposes, or when they agree on a project but pass the responsibility to another institution.

Additionally, differences in regulations between the two countries can impact the timing of administrative procedures and the coordination of tasks in the field. However, spatial planning’s core goal is to harmonize interests in utilizing the same space with different resources. The role of a **Coordinating Body** would include overseeing all procedures until they are implemented in the field, as outlined in a **Memorandum of Cooperation** accepted by the two neighbouring countries. The Memorandum of Cooperation would define the following:

1. Specify/refine generally proposed measures.
2. Define which institution is responsible for the implementation of a certain proposed measure (measures usually refer to LSGs – municipalities or PE NP);
3. Determine the necessary time period for the implementation of a certain measure;
4. Outline the financial resources necessary for the implementation of the measure; and
5. Monitor the effects of the implemented measures, understanding the results and making necessary corrections as needed.

One of the main recommendations is to conduct a study for the revalorization of the natural values of the pilot area. This is essential because the existing study dates back to 2006, and changes in the area may have occurred due to natural processes or human activities. These changes could require revisions to the proposed zoning. Importantly, the recommendations shared in this study do not apply exclusively to the protected areas. GI can spread beyond them and serve as a link

(through corridors or stepping stones) between the protected zones in a national and cross-border context. The new valorisation study of the area could give different results than the previous one, and thus propose different zones for protection. This could affect the development of GI in the sense that, in the strict protection zone, for example, no human interventions are allowed. The key point of this recommendation is that GI development is not confined to the potential protected areas; it can also extend beyond and include zones of sustainable use.

To solve these challenges facing the implementation of the recommended measures in this study, the following additional activities are proposed:

- **Appoint contact persons** (focal points) from the respective institutions in both countries and **establishing** a cross-border **Coordinating Body**. This body will maintain continuous communication and oversee the implementation. (Ministries responsible for environmental matters would ensure the harmonization of activities. Communication methods, the frequency of meetings, and related details could be formalized by the Rules of Procedure or agreed to verbally, as needed. If the workload and time commitment prove significant and necessitate a diversion from daily work duties, the members of this working group could receive appropriate compensation, subject to approval and financing by their respective ministries.)

- **Conduct training** for employees in the respective institutions in both countries who will be responsible for implementing the measures. (This training is designed for individuals across organizations, including ministries, public enterprises, municipalities, civil society, associations, and non-governmental organizations who are suspected to have only little knowledge of GI, their role in its development and the measures they will need to implement their task assigned by the Action Plan.)

- **Raise awareness** among the local population by conducting workshops and other events. These efforts aim to engage the local community in the implementation of GI measures through appropriate actions.

This engagement should be facilitated by representatives from the environmental ministries who are knowledgeable about GI, specifically the employees of the Department of Nature, or those who work on the harmonization of the national and the EU legislation.

- **Organise public hearings**, providing the population with a platform to express their opinion regarding the recommendations, including specific project ideas for the implementation of special measures. During these hearings, the public can also formulate

new proposals. This process is required by law and involves conducting public hearings for draft plans and projects, which are legally binding. (This is a foreseen requirement in the planning process, regulated by the Law on Urban Planning and the Law on the Environment. According to these regulations, no planning document can be adopted without conducting a public hearing and the inclusion of its report as an essential component of the plan or project).

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