GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title
Integrated nature protection in Republic of North Macedonia, through achieving Land Degradation Neutrality (LDN) and biodiversity conservation

Region	GEF Project ID
Europe and Central Asia	12301
Country(ies)	Type of Project
North Macedonia	MSP
GEF Agency(ies):	GEF Agency ID
UNDP	10346
Executing Partner	Executing Partner Type
Ministry of Environment and Physical Planning of North Macedonia	Government
GEF Focal Area (s)	Submission Date
Multi Focal Area	3/10/2026

Project Sector (CCM Only)
AFOLU

Taxonomy
Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approache, Stakeholders, Communications, Private Sector, Local Communities, Beneficiaries, Awareness Raising, Public Campaigns, Education, Behavior change, Large corporations, Individuals/Entrepreneurs, SMEs, Capital providers, Non-Governmental Organization, Civil Society, Academia, Community Based Organization, Participation, Type of Engagement, Consultation, Partnership, Information Dissemination, Capacity, Knowledge and Research, Capacity Development, Knowledge Exchange, Learning, Knowledge Generation, Indicators to measure change, Theory of change, Adaptive management, Gender Equality, Gender Mainstreaming, Gender results areas, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Access and control over natural resources, Access to benefits and services, Participation and leadership, Knowledge Generation and Exchange, Focal Areas, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Productive Landscapes, Mainstreaming, Tourism, Agriculture and agrobiodiversity, Biomes, Rivers, Grasslands, Temperate Forests, Land Degradation, Sustainable Land Management, Restoration and Rehabilitation of Degraded Lands, Ecosystem Approach, Integrated and Cross-sectoral approach, Sustainable Livelihoods, Income Generating Activities, Sustainable Agriculture, Sustainable Pasture Management, Sustainable Forest, Improved Soil and Water Management Techniques

Type of Trust Fund	Project Duration (Months)
GET	54
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
4,007,143.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)

380,677.00	0.00
Total GEF Financing: (a+b+c+d) 4,387,820.00	Total Co-financing 31,400,000.00
PPG Amount: (e) 136,986.00	PPG Agency Fee(s): (f) 13,014.00
PPG total amount: (e+f) 150,000.00	Total GEF Resources: (a+b+c+d+e+f) 4,537,820.00
Project Tags CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No	

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B “project description”.(max. 250 words, approximately 1/2 page)

North Macedonia faces persistent land degradation, soil erosion, and ecosystem pressures in forest, wetland, agricultural, and pasture landscapes, driven by unsustainable land-use practices, fragmented governance, and limited operationalization of LDN commitments. These pressures undermine biodiversity, ecosystem services, and climate resilience. In addition, institutional capacity, monitoring systems, and sustainable financing mechanisms remain weak. The project will address LDN and strengthen the conservation and resilience of priority ecosystems through an integrated, landscape-scale approach, combining enabling policy and institutional reforms, improved monitoring and incentives, and adoption of SLM and SFM practices. The project is transformative by moving beyond pilots to establish nationally coherent systems, such as soil protection bylaws, LDN monitoring frameworks, sustainable financing mechanisms, and coordinated capacity development, which enable replication and scaling. The project will achieve this through three interlinked components: (i) strengthening soil governance, LDN monitoring systems, and landscape-scale piloting of NbS and SLM / SFM practices; (ii) improving management effectiveness, ecological integrity, and financial sustainability of PAs and associated ecosystems; and (iii) strengthening knowledge, capacity, and communication systems to support durable implementation and national scaling. The project’s anticipated GEBs include improved management of 113,597 ha of terrestrial PAs, restoration of 5,550 ha of degraded ecosystems, adoption of improved practices across 50,000 ha of landscapes, and direct benefits to approximately 26,000 people (14,000 women and 12,000 men). Preliminary estimates of the project’s GHG mitigation potential from the AFOLU sector is more than 5 million tCO2e. Additional benefits include reduced soil erosion, improved ecosystem integrity, enhanced water regulation and drought resilience, and strengthened institutional capacity to sustain biodiversity and LDN outcomes beyond the project lifetime.

Indicative Project Overview

Project Objective

Catalyze integrated ecosystem management in North Macedonia's priority forest and wetland landscapes to enhance biodiversity conservation, advance Land Degradation Neutrality, and strengthen climate resilience

Project Components

1. Sustainable Landscape Management for Land Degradation Neutrality (LDN)

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
2,000,000.00	17,000,000.00

Outcome:

Outcome 1.1 LDN advanced in priority forest and wetland landscapes through landscape-scale adoption of SLM and SFM practices supported by improved monitoring, incentives and local governance mechanisms, as indicated by:
4 legal instruments (laws, policies, regulations, etc.) developed / recommended for revision to improve implementation of LDN practices
Governance system developed (National Soil Protection Council) to operationalize LDN target setting
10 monitoring and reporting instruments and programs implemented to support LDN target setting and achievement of LDN
5,550 ha of restored priority forest and wetland ecosystems
50,000 ha under SLM / SFM practices
Tons of CO2 equivalent: 5,746,300 tCO2e.

Output:

Output 1.1.1: Strengthened national enabling environment for LDN implementation and monitoring, including:
- At least three bylaws on soil protection developed supporting implementation of the Soil Protection Law
- Establishment of the National Soil Protection Council with operational guidelines developed
- Developed Soil Quality Monitoring Programme
- Monitoring system and related capacity for LDN in place

Output 1.1.2: NbS piloting in selected high biodiversity wetland ecosystem sites
Output 1.1.3: Demonstration of LDN monitoring approach in at least one pilot site/hotspot, for scaling up at the national level and piloting of SLM and SFM practices

Output 1.1.4: Transition to innovative SLM and SFM best practice approaches, including improved wildfire management, that provide carbon benefits and support LDN on forest, agriculture and pastureland in selected land degradation hotspots / pilot sites

2. Conservation and Resilience of Priority Ecosystems

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
1,026,327.00	8,000,000.00

Outcome:

Outcome 2.1 Improved management effectiveness, ecological integrity and financial sustainability resulting in strengthened conservation of critical ecosystems, as indicated by:
113,597 ha of terrestrial protected ecosystems with improved management (as assessed by METT)

Population trends of indicator species for improved ecological condition and management effectiveness:
Lake Ohrid, Lake Prespa, and associated wetlands:
- Ohrid trout (*Salmo letnica complex*)
- Prespa trout (*Salmo peristericus*)
- Dalmatian pelican (*Pelecanus crispus*)
- Pygmy cormorant (*Microcarbo pygmaeus*)

- Relict wetland vegetation types (Habitat-level indicator): Alkaline fens (Natura 2000 habitat 7230); Alluvial forests with Alnus and Fraxinus (91E0);

Reedbeds (Phragmites-dominated complexes)

Jablanica Mountains:
- Balkan lynx (*Lynx lynx balcanicus*)
- Brown bear (*Ursus arctos*)
- Western capercaillie (*Tetrao urogallus*)
- Chamois (*Rupicapra rupicapra balcanica*)

4 financial and environmental PA legislature instruments enhanced for biodiversity-inclusive sustainable finance and effective PA management

5 sustainable product / service lines developed for protected area management

Output:

Output 2.1.1. Supported establishment of Ohrid Lake and Monospitovo and Katlanovo wetlands managing authorities, effective management, capacity building and governance
Output 2.1.2. Supported management of Jablanica Mountains through development, approval, and implementation of a management plan and supported operations of the newly established managing authority (ongoing valorization and proclamation process)
Output 2.1.3: Improved zonation of protected areas according to EU legislation and IUCN criteria, as well as best practices

Output 2.1.4: Establishment of sustainable financing mechanisms for the PA system

3. Knowledge and Enabling Systems for Integrated Ecosystem Management

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
600,000.00	3,300,000.00

Outcome:

Outcome 3.1 Policy, institutional, and knowledge systems are strengthened to enable integrated forest and wetland ecosystem management, support national scaling, and ensure the durability of biodiversity, LDN, and climate resilience outcomes, as indicated by:
20 capacity building trainings and programs conducted
5 communication products and campaigns launched to improve capacity building and finance flows
5 knowledge products, lessons learned, and best practices documented and widely disseminated for upscaling

Output:

Output 3.1.1: Capacity building trainings and mentorship of management authorities for sustainable management and financing of NbS in selected protected areas (emphasis on wetlands) (linked with Outcome 2)
Output 3.1.2: Joint national communication, visual identity, visibility and promotional plan
Output 3.1.3 Capacity building program in place on LDN target setting and its implementation for local and central government staff and local communities Output 3.1.4: Lessons learned and upscaling

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
190,000.00	1,600,000.00

Outcome:

Outcome 4.1 Project implemented in an accountable and transparent manner, with results documented and available to the public

Output:

Output 4.1.1 Project Monitoring

Output 4.1.2. Project Evaluation

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
1. Sustainable Landscape Management for Land Degradation Neutrality (LDN)	2,000,000.00	17,000,000.00
2. Conservation and Resilience of Priority Ecosystems	1,026,327.00	8,000,000.00
3. Knowledge and Enabling Systems for Integrated Ecosystem Management	600,000.00	3,300,000.00
M&E	190,000.00	1,600,000.00

Subtotal	**3,816,327.00**	**29,900,000.00**
Project Management Cost	190,816.00	1,500,000.00
Total Project Cost ($)	**4,007,143.00**	**31,400,000.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

Socio-Environmental Context:[1][1] Despite its modest size and lack of a coastline, the Republic of North Macedonia, situated in the heart of the Balkan Peninsula, ranks among Europe's biodiversity hotspots, despite being a small (25,713 km2) landlocked country. Nearly half of the country (44.1%) sits at elevations between 500 and 1000 meters. The landscape is dominated by mountainous areas (almost 80% of the territory), with four principal river basins draining the country, of which the Vardar catchment is by far the largest, encompassing roughly 80% of national territory. Climatically, the lowlands in the south are influenced by sub-Mediterranean conditions, the broader country exhibits continental characteristics, while areas above 1500m above sea-level have a mountain climate. Eight climatic-vegetation and soil zones have been delineated, the most extensive being the warm sub-Mediterranean-continental belt dominated by pubescent oak. Mountainous precipitation averages range from 1,000 to 1,500 mm/year, valley areas typically receive 600–700 mm/year, and the Ovche Pole plain is the driest region with only about 490 mm/year.

Using a modified EUNIS framework, analysts have identified 28 principal ecosystem groups or key ecosystem types (including several anthropogenic systems that nevertheless support biodiversity), which correspond to 177 level 3 habitat types under the same classification - a clear indicator of the country's rich ecosystem variety. Forests occupy around 38.5% of the land (988,835 ha) while agricultural land accounts for approximately 44% (1,120,000 ha). Roughly 90% of forest estate is publicly owned. Deciduous Stands are the most widespread (22.3% of territory), followed by mixed forests (11.6%), with coniferous woodlands representing a small share (2.8%). Agricultural land is divided between cultivated areas (about 44.2%) found mainly in valleys (arable fields, gardens, meadows, vineyards and orchards) and pastures (55.6%) largely situated at higher elevations. High-quality pastures appear throughout the mountain zones, particularly in the west. Grasslands cover extensive areas, frequently arising as secondary habitats following the degradation of forest communities or through the abandonment and natural recolonization of former farmland.

The country contains three major tectonic lakes: Ohrid, Prespa, and Dojran. It also has some 43 small glacial lakes, nearly half of which lie on the Shar Planina massif. Historically extensive wetland vegetation that once occupied broad swathes of the central valley has been dramatically altered by drainage schemes, converting much of it to cropland; only a few relic wetlands now persist (seven small marshes remain), and these fragmented communities harbor some of the most threatened species.
Wetlands/bogs of critical importance that require conservation and protection include, but not limited to, Monospitovo Bog (Monospitovska Blato) and Katlanovo Marsh (Katlanovksa Banja). Current inventories list about 1,700 algal species, 3,200 vascular plants, over 2,000 fungi, 450 lichens, some 13,000 invertebrates, 85 fishes and cyclostomates, 15 amphibians, 32 reptiles, 333 birds and 84 mammals - figures that largely reflect an incompletely studied biota. Levels of endemism are high: at least 150 endemic algal taxa, around 120 endemic vascular plants and more than 700 endemic invertebrates have been recorded. Freshwater fishes are notably diverse with 27 endemic species. Lake Ohrid, with an estimated age of 3.5 million years, is the primary center of endemism (hosting 212 endemic taxa) and is regarded as one of the world's centers of unique biodiversity. Beyond the lake, some 9,671 km^2 (about 38% of national territory) meet criteria for Key Biodiversity Areas.
Presently about 9% of the national territory is designated as protected, within 86 protected areas; among the re-proclaimed sites are one strict nature reserve, two national parks, nine natural monuments, one nature park and one multipurpose area, while the remaining areas await re-classification under the new categories envisaged by the Law on Nature Protection and the IUCN-aligned system. Management bodies have been appointed for 13 protected areas and a small number have comprehensive management plans in place. Sites of international importance have been identified, including Important Bird Areas, Important Plant Areas, Prime Butterfly Areas and Key Biodiversity Areas; two wetlands (Prespa and Dojran Lakes) are listed as Ramsar sites and the Ohrid region holds World Natural and Cultural Heritage status. Prespa Park represents a notable transboundary initiative co-managed by three countries (North Macedonia, Albania and Greece).
The national lists of strictly protected and protected wild species (adopted in 2011) include 194 strictly protected taxa and 820 species under protection, although the lists were compiled without a prior threat-status categorization. Species designated as game are regulated under the Law on Hunting, which addresses some 110 bird and 23 mammal species; of those, most (74 bird species and 9 mammal species) receive full protection. Collection and trade in threatened and protected wild plants, fungi and animals and their parts is permitted only with the relevant collection license and trade documentation (including CITES certification where applicable). Two indigenous domestic breeds have been officially recognized as endangered populations.
Demographically, the 2002 census recorded 2,022,547 inhabitants, giving an average density of 78.7 persons/km2. Approximately 57% of the population lives in urban areas (with around half of those urban residents concentrated in the capital, Skopje), while the remaining 43% reside in rural communities.

Enabling environment: The Law on Nature Protection (originally adopted in 2004 and subsequently amended, largely to transpose elements of the EU acquis) sets out the fundamental principles and measures for biodiversity conservation. A broader legal framework also touches on biodiversity and the sustainable use of natural resources, including statutes governing water management, forestry, hunting, agriculture and rural development, and fisheries. The Republic of North Macedonia has ratified the principal multilateral environmental agreements relevant to nature protection and has engaged in the development of the Pan-European Biological and Landscape Diversity Strategy, which extends biodiversity concerns across landscapes using the Pan-European Ecological Network as its principal implementation mechanism; this approach underpinned the development of the national ecological network (MAK-NEN). Other notable policies incorporating nature conservation and climate change adaptation/mitigation principles in the Republic of North Macedonia include:

- The Long-Term Strategy on Climate Action and Action Plan produced by the Ministry of Environment and Physical Planning in 2020, setting out an overarching contribution towards emissions reduction (mitigation) and reducing vulnerability to the impacts of climate change (adaptation) through a shared national vision and objectives
- The National Strategy for Nature Protection produced by the Ministry of Environment and Physical Planning within the Nature Conservation Programme in Macedonia, for the years 2017-2027, proposing appropriate measures and activities for protection and sustainable management of nature based on an analysis of the Study on Geodiversity and Heritage of the Republic of Macedonia and Other Components of Nature
- The Enhanced Nationally Determined Contribution produced by the Ministry of Environment and Physical Planning in 2021, focusing on climate change mitigation through GHG emission reductions

Varying levels of spatial planning have been carried out in the project's target landscapes, but spatial planning is primarily conducted at the national level.
Notwithstanding these instruments, biodiversity considerations remain marginal beyond the environment and conservation sectors. Sectoral policies frequently treat biodiversity as a secondary or formal concern rather than a cross-cutting priority, resulting in weak coverage of biodiversity needs in many policy frameworks. The National Biodiversity Strategy and Action Plan (NBSAP) for the period 2018-2023 proposes monitoring of wild endangered species involved in national and international trade, and inspections are conducted to control illegal tree felling and the unauthorized harvesting of wild plants. Nevertheless, conservation actions and sustainable use of biological resources outside formally protected areas are not systematically monitored at the national level. The Republic of Macedonia plans to update its NBSAP and submit its Seventh National Report to the Convention on Biological Diversity (CBD) in early 2026. Baseline data on ecological corridors is available, but additional data collection and analysis is necessary to improve the granularity for full implementation and management of corridors. A landscape-scale assessment of ecological connectivity will be conducted prior to the development of new laws and improved practices, including all targeted areas.
The country faces accelerating biodiversity loss and progressive land degradation driven by unsustainable land use, fragmentation of protected areas, weak management capacity, inadequate soil protection mechanisms, and limited long-term financing for maintaining protected areas, sustainable tourism, ecosystem services, and implementation nature-based solutions (NbS) with co-benefits across biodiversity, land management, and climate change sectors.
Soil is the hidden but binding constraint linking biodiversity loss, water stress, agricultural decline, forest degradation, and climate vulnerability, yet it remains largely unmanaged as a system. Across North Macedonia's diverse mountain, forest, agricultural and pasture landscapes, soil degradation — through erosion, nutrient depletion, compaction, salinization and unsustainable land practices — undermines ecosystem resilience from the ground up. Degraded soils reduce water retention and infiltration, intensify runoff and sedimentation in rivers and lakes, diminish forest regeneration, lower pasture and crop productivity, and accelerate habitat fragmentation. Despite its centrality to ecosystem function and climate regulation, soil health is insufficiently integrated into spatial planning, agricultural support schemes, forest management practices and watershed governance. As a result, soil degradation acts as a systemic bottleneck that constrains the effectiveness of biodiversity conservation, land restoration and climate adaptation efforts alike.
Key wetlands, forests, agricultural and pasture landscapes, while essential for biodiversity, water regulation and livelihoods, are degraded or under threat. These ecological pressures are compounded by a changing climate: increasing drought frequency, altered hydrological regimes, and more frequent extreme weather events that amplify erosion, lower productivity, and undermine the capacity of

ecosystems to provide the services communities rely upon. In the absence of a coherent national program to tackle these interlinked trends, the conservation, restoration and sustainable management of the country's natural capital remain fragmented, project-based and vulnerable to reversal once external funding ends.

Main pressures on biodiversity

North Macedonia's economic transition has placed sustained pressure on biodiversity, as short-term economic gains from resource exploitation have often been prioritized over conservation and sustainable management. Although ecosystem services underpin economic resilience—through forestry, erosion control, fisheries, recreation, tourism, and other functions—their broader value remains poorly reflected in policy, planning, and investment decisions. Recent growth has relied heavily on unsustainable water abstraction, mineral extraction, and urban expansion, driving habitat loss, fragmentation, and degradation of priority lowland ecosystems. At the same time, rural depopulation and agricultural intensification have created additional, uneven pressures on habitats.

This development model has displaced a management-oriented approach that would prioritize the long-term productivity of forests, waters, and soils. The result is a systemic bias toward short-term resource use over stewardship of ecosystem services, weakening the foundations for sustainable land management and biodiversity conservation across the landscape. This in turn underserves critical functions for protecting, conserving, and managing ecosystems and biodiversity endowments in favor of economic extraction in the short run. This is reflected by high rates of neglect of sustainable land management practices in agriculture - according to FAO reports from 2023, approximately 32% of arable agricultural land in the Republic of North Macedonia faces abandonment.[2][2]

Despite the country's rich forest resources, the increased use of firewood for energy purposes, extensive commercial logging and rampant illegal logging have resulted in forest degradation in recent years. Between 2001 and 2024, North Macedonia lost 50 kha of tree cover, equivalent to a 6.0% of the 2000 tree cover area (not accounting for any gains in tree cover over the same period).[3][3] There is a need to strengthen capacities in the field of municipal forest management by involving local communities, owner associations and other stakeholders in the preparation of forest management plans. Wildfires are a significant driver of habitat modification: between 2003 and 2013 a total of 92,223 ha were consumed by fires, particularly affecting thermophilous oak formations and shrublands that support high species diversity and contain elements characteristic of Mediterranean coastal forest and maquis assemblages. In 2024 again over 85,000 hectares of land burned during the wildfire season,[4][4] contributing to habitat modification. The increasing frequency and intensity of wildfires also have adverse impacts on the function of forests and vegetation in mitigating climate change. While the forest sector is seen as a major carbon sink, the years with heavy wildfires put the sector at a negative, as was the case in 2021, 2017, and 2019[5][5]. The fires themselves release vast amounts of carbon, but at the same time more frequent wildfires, rising temperatures, and land use changes are weakening the sector's ability to sequester carbon.[6][6]

As of 2025, naturally occurring wetlands occupy 1.5% of North Macedonia (38,055 hectares). Only 22% (8,400 hectares) of the total wetland area is under official protection or proposed for protection. Estimates posit that in the 1960s, the extent of wetland soil was ~ 86,000 hectares. This suggests a 56% decrease in wetland area between 1960 and 2025.[7][7],[8][8]
These pressures have led to declines in many species' populations and to contraction of priority habitats. Other contributing pressures include macroeconomic shocks, rural economic vulnerability, unsustainable hunting and fishing practices, stubble burning, uncontrolled collection of wild plants and fungi, illegal logging and widespread poaching, often involving non-selective methods.
The drivers behind these trends are diverse and mutually reinforcing. Short-term economic incentives push land conversion, overgrazing and unsustainable extraction; institutional fragmentation, unclear mandates and weak enforcement paralyze effective environmental governance; technical gaps exist in monitoring and in-country capacity for designing and scaling NbS; and social factors, such as limited livelihood alternatives and weak local participation in governance, reduce incentives for stewardship.

However, clear enablers exist. The Ministry of Environment and Physical Planning has signaled political will to engage; there is an existing, albeit under-resourced, protected area network; local research institutes and NGOs possess relevant technical know-how; and the development of sustainable tourism and green-income products provides an economic entry point for conservation incentives. Other enabling priorities include establishment of the Natura 2000 network which several projects are working toward, strengthening the capacities of protected area authorities, and implementation of regulations concerning the obligations of hydropower investments to protect nature. Administrative capacities will have to be significantly strengthened, in relation to application of the Habitats and Birds Directives, with respect to assessment, compensatory measures and other specifics with regards to establishment of the Natura 2000 network.

Key Barriers to Ecosystem Integrity, Sustainable Land Management, and Conservation of Critical Ecosystems:

Barrier 1: Sustainable Landscape Management / LDN: Despite existing policy commitments to Land Degradation Neutrality and sustainable land management, adoption of sustainable land and forest management practices in priority ecosystems remains limited. Land users often lack access to practical technical guidance, economic incentives, and locally adapted models that demonstrate the productivity and resilience benefits of SLM and SFM approaches. Monitoring systems and soil information are insufficiently integrated into land-use decision making, while coordination mechanisms at national and local levels remain fragmented. In particular, the absence of operational soil protection bylaws, a permanent cross-sectoral coordination mechanism for soil governance, and a harmonized national soil and LDN monitoring framework prevents soil considerations from being systematically embedded in planning, investment, and management decisions across forest, wetland, agricultural, and pasture landscapes. As a result, land degradation pressures continue to affect forest, wetland and surrounding production landscapes, constraining progress toward Land Degradation Neutrality, biodiversity conservation and climate resilience.

Barrier 2: Priority Ecosystem Conservation: High-value ecosystems, including forests, wetlands and other priority habitats, continue to face pressures from habitat degradation, fragmented management, and limited long-term financing for conservation. Management authorities often operate with constrained technical capacity, incomplete management frameworks, and limited access to sustainable financing mechanisms that would allow conservation objectives to be maintained beyond project cycles. In many biodiversity sensitive

sites, managing authorities are newly established or not yet fully operational, management plans and zoning aligned with EU legislation and IUCN standards are incomplete or absent, and conservation outcomes remain weakly linked to soil, land-use and LDN considerations in surrounding production landscapes. While protected and conserved areas provide a critical foundation for ecosystem conservation, their ecological integrity and connectivity remain vulnerable without strengthened governance, restoration, and financing models that extend beyond PA boundaries into surrounding geographies and landscapes, that can be applied consistently across priority ecosystems.

Barrier 3: Enabling Systems, Knowledge and Scaling: Policy, institutional and knowledge systems remain insufficiently aligned to support integrated ecosystem management at scale, including limited institutional capacity to translate soil, LDN and ecosystem monitoring data into planning, financing and management decisions. Tools such as data monitoring and reporting systems related to biodiversity, land degradation and ecosystem services are not fully harmonized, limiting their usefulness for adaptive management and investment planning. Capacity gaps persist across institutions and stakeholder groups, while lessons from pilot initiatives are not systematically captured or translated into policy, financing and planning processes. This limits the ability of successful local interventions to inform national strategies, attract additional investment, and ensure the durability and replication of project results.

Depending on the implementation of the project, there are **two potential future scenario narratives** linked to the assumptions and risks outlined in the Theory of Change presented in the following section:

Business-as-Usual Scenario: If the proposed project's interventions do not materialize, the baseline trajectory suggests a continuation of piecemeal and reactive measures: protected areas will often be proclaimed but lack functioning authorities, management plans, staff capacity and sustainable financing; there will be no operational national soil-quality monitoring or soil protection council; spatial data for soil erosion, drought vulnerability and soil carbon will remain limited, having cascading and integrated impacts on e.g. carbon stock of AFOLU sector; municipal-level planning will not incorporate voluntary LDN targets at scale; and practices that reverse degradation (i.e. sustainable land management and sustainable forest management) will remain rare and locally confined. Knowledge and lessons from isolated pilots will remain unstandardized and poorly shared, leaving national policy and investment decisions lacking the empirical evidence required for scaling. Under that scenario, land degradation will continue to erode ecosystem resilience, greenhouse gas emissions from degraded soils and biomass may rise, and communities dependent on natural resources will face deeper vulnerability to climate variability and shocks. Erosion and land degradation also increase the risk of floods, as pointed out under previous projects addressing severe erosion due to continuous deforestation as factors contributing to the devastating impacts of the 2016 floods in Skopje and Northwestern parts of the country in the upper parts of the Vardar Basin (Polog region).[9][9]

Conservation and sustainable management of critical ecosystems Scenario (project scenario): Under the project scenario, an integrated, landscape-scale approach will be implemented to address the root causes

of land degradation and biodiversity loss by combining enabling policy and institutional reforms, operational monitoring systems, and on-the-ground adoption of sustainable land, forest, and pasture management practices. The project will establish the national systems required to operationalize LDN, including soil protection bylaws, coordinated soil and LDN monitoring frameworks, and local governance mechanisms that link national objectives with municipal-level action. These enabling conditions will be coupled with targeted demonstration of nature-based solutions, SLM, and SFM practices in priority forest and wetland landscapes, supported by incentives, sustainable financing mechanisms, and strengthened institutional capacity. As a result, conservation and restoration outcomes will be embedded in planning, investment, and management decisions rather than remaining as isolated pilots. Through this integrated approach, the project will initiate and operationalize the three concurrent actions required to achieve LDN: (i) avoiding new degradation by maintaining and improving the management of healthy land and ecosystems; (ii) reducing existing degradation through the adoption of sustainable land-use practices that enhance biodiversity, soil health, and productivity; and (iii) restoring degraded lands through targeted rehabilitation and nature-based restoration. Together, these actions will generate measurable and durable biodiversity, land, and climate resilience outcomes that can be scaled nationally beyond the project's lifetime.[10][10]

In North Macedonia, **baseline investments** supporting land management, biodiversity conservation, and climate resilience are being implemented through national policies, sectoral strategies, and donor-supported initiatives. Public institutions continue to finance core functions related to land use planning, forestry, agriculture, water management, and protected area administration under their respective mandates. However, these efforts remain largely sector-specific, with limited integration across land degradation, biodiversity, and climate objectives, and with uneven operationalization at the landscape and municipal levels.

At the national level, the policy framework includes the Soil Protection Law, forestry and biodiversity legislation, spatial planning instruments, and strategies related to agriculture, rural development, climate adaptation, and EU approximation. While these frameworks provide an important foundation, gaps remain in implementation capacity, harmonized monitoring systems, and incentives to support Land Degradation Neutrality and sustainable land management in practice. Ongoing EU-supported initiatives (including IPA-funded programmes), bilateral cooperation (e.g. GIZ, SIDA), and international financing institutions support aspects of protected area management, biodiversity conservation, agriculture, and water management, but typically address these themes in isolation.
At the subnational and site levels, municipalities, protected area authorities, and land users are engaged in planning and management processes, including local development planning, forest and pasture management, and wetland conservation. However, limited technical capacity, fragmented financing, and the absence of coordinated LDN monitoring and incentive mechanisms constrain the scale and durability of results.

The proposed GEF project is designed to complement and build upon these baseline initiatives by integrating policy reforms, monitoring systems, financing mechanisms, and landscape-scale demonstrations into a coherent framework. By aligning national and local actions around LDN, sustainable land and forest management, and resilient ecosystem conservation, the project addresses critical gaps in coordination, implementation, and scalability that are not covered by existing baseline investments.

A full detailed project **Stakeholder Engagement Plan** will be developed during the PPG.

The project will strive to actively and continuously involve all stakeholders - encompassing individuals of different ethnic, age and social backgrounds, as well as women and men - in the design, planning, implementation and monitoring of all project activities.

Gender Dimensions of Land Degradation and Ecosystem Governance: North Macedonia has a strong formal framework for **gender equality**, but persistent gaps remain in practice—particularly in rural areas and in sectors relevant to this project (forestry, land management, protected areas, and nature-based livelihoods). Women contribute substantially to agriculture and household-level natural resource management, yet they face structural constraints in access to and control over land and productive assets, limited access to extension services, finance, and green job pathways, and lower representation in environmental governance and decision-making at both local and national levels. Available data indicate that women hold only around 29% of registered property, highlighting persistent gender disparities in access to land and productive resources that are essential for participation in sustainable land management and ecosystem restoration initiatives. UNDP CO gender analyses carried out few years ago as part of the project aimed at improving the capacities for protected areas management, further show that women and men often interact with natural resources in different ways due to socially defined roles and responsibilities. Women are more frequently engaged in subsistence agriculture, household food production, small livestock management, and collection and forest products, while men tend to dominate commercial forestry, fishing, and market-oriented agricultural activities. Women represent a substantial share of agricultural labour but remain significantly underrepresented as landowners and heads of agricultural holdings, which limits their ability to benefit from investment schemes, training opportunities, and decision-making processes related to land management and ecosystem governance.

At the institutional level, environmental governance and green economy sectors remain highly gender-segregated. Sectors central to the green transition, such as forestry, construction, energy, water management, and infrastructure, are predominantly male-dominated. Institutional assessments also highlight limited capacity for gender mainstreaming within environmental and climate-related institutions and weak coordination between environmental governance systems and gender equality mechanisms.

These disparities create risks that project benefits (skills, jobs, incentives, and financing mechanisms) could disproportionately accrue to men unless deliberate measures are taken to ensure inclusive participation and equitable benefit sharing. Accordingly, the project will adopt a gender-responsive approach across all components by ensuring targeted outreach and participation targets for women in consultation and governance processes; tailoring capacity building and technical assistance so women can access and lead sustainable land management, restoration, and protected area-related livelihood opportunities; and embedding gender considerations into the design of incentive mechanisms, sustainable financing (including PES and nature-based enterprise support), and communications. To further strengthen gender integration, a gender-responsive Rapid Social Assessment (RSA) and **Gender Analysis and Gender Action Plan** (GAP) will be prepared during the PPG. The RSA will first analyze gendered roles in production, access to resources and services, and decision-making power and will identify meaningful opportunities to promote gender equality and women economic empowerment in the project. The Gender Action Plan – that outlines the practical steps required to promote gender

equality - will then be developed to ensure the mainstreaming of gender inclusivity into the project outcomes, outputs, and activities. Gender-sensitive indicators will also be developed and fully integrated into the projects overall M&E system.

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[8] Chobanova, M., Jovanovska, D., Tanneberger, F., Barthelmes, A., & Hristovski, S. (2025). Exploring the Heterogeneity and Conservation Status of Mires and Other Wetlands in North Macedonia (SE Europe): Insights From Mapping Efforts. *Mires and Peat*, *32*, 11. https://doi.org/10.19189/001c.143181

[9] UNEP. https://www.unep.org/regions/europe/our-projects/building-shield-against-flooding-vulnerable-areas-north-macedonia

[10] UNCCD. https://www.unccd.int/land-and-life/land-degradation-neutrality/overview

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

The basic premise of the Theory of Change is that:

Component 1 – Sustainable Landscape Management for Land Degradation Neutrality

IF the enabling policy and institutional framework for soil protection and land management is strengthened through the development of implementing bylaws under the Soil Protection Law, the establishment of a

National Soil Protection Council, and the operationalization of soil quality monitoring systems (Output 1.1.1), **AND IF** national monitoring, reporting, and data systems are upgraded to support Land Degradation Neutrality (LDN) target setting, tracking, and reporting across forest, wetland, agricultural, and pasture landscapes (Output 1.1.1), **AND IF** Nature-based Solutions and sustainable land and forest management practices are demonstrated and adopted in land degradation hotspots and selected priority forest and wetland landscapes through pilot interventions, local inclusive stakeholder platforms, and incentive mechanisms (Outputs 1.1.2–1.1.4), **THEN** Land Degradation Neutrality and non-depleting agricultural practices will be advanced in high biodiversity value forest and wetland landscapes through landscape-scale adoption of sustainable land and forest management practices that enhance soil productivity, supported by improved monitoring, incentives, and local governance mechanisms (Outcome 1.1).

This will result in reduced land degradation pressures, improved soil and ecosystem function, enhanced carbon co-benefits, and increased resilience of forest, wetland, agricultural, and pasture ecosystems to climate and land-use pressures.

Component 2 – Conservation and Resilience of Priority Ecosystems

IF governance arrangements, institutional capacity, and management frameworks for priority ecosystems are strengthened through the establishment and operational support of managing authorities, improved management planning, and alignment with EU and IUCN zoning and management standards (Outputs 2.1.1–2.1.3), **AND IF** sustainable financing mechanisms for ecosystem conservation are designed and operationalized through financial and institutional assessments, biodiversity expenditure and finance reviews, biodiversity finance planning, and the development of Payments for Ecosystem Services and conservation-compatible revenue models (Output 2.1.4), **THEN** management effectiveness, ecological integrity, and financial sustainability of critical ecosystems will be improved, resulting in strengthened conservation of priority habitats and ecosystem services of national and global importance (Outcome 2.1).

This will lead to enhanced ecological condition and connectivity of high-value forest, wetland, and mountain ecosystems, reduced degradation of sensitive habitats, and increased long-term viability of conservation investments beyond the project period (Project Impact B).

Component 3 – Knowledge and Enabling Systems for Integrated Ecosystem Management

IF the capacities of national and local institutions, ecosystem managers, and community stakeholders are strengthened for integrated ecosystem management, Nature-based Solutions, sustainable financing, and LDN implementation through targeted training, mentorship, and peer learning in an inclusive and gender-responsive manner (Outputs 3.1.1 and 3.1.3), **AND IF** coordinated communication, visibility, and knowledge-management systems are established to promote learning, stakeholder engagement, and public awareness of ecosystem values and conservation outcomes (Output 3.1.2), **AND IF** lessons learned from pilot interventions are systematically captured, documented, and translated into policy, planning, and investment processes to support replication and scaling (Output 3.1.4), **THEN** policy, institutional, and knowledge systems will be strengthened to enable integrated forest and wetland ecosystem management, support national scaling, and ensure the durability of biodiversity, Land Degradation Neutrality, and climate resilience outcomes (Outcome 3.1).

This will result in improved coherence between policy, practice, and investment, enabling successful pilot approaches to inform national strategies and future public and private financing for ecosystem management.

Overall Impact Pathway

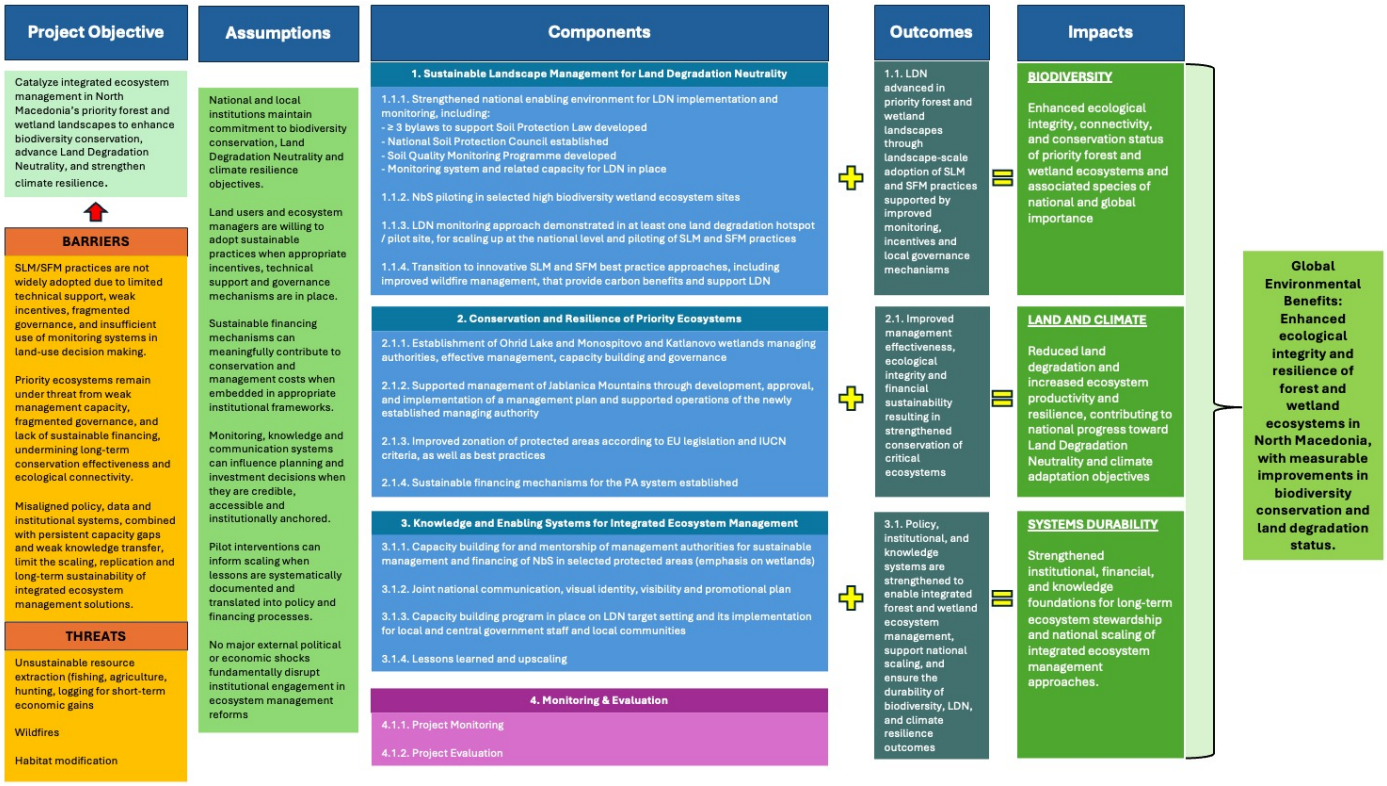
Together, these three pathways reinforce one another by linking improved land-use practices, strengthened ecosystem conservation and financing, and enabling policy and knowledge systems. This integrated approach will lead to **improved ecological integrity, connectivity, and resilience of North Macedonia's forest and wetland ecosystems**, resulting in enhanced biodiversity conservation, reduced land degradation, and increased resilience to climate pressures.

The ToC is based on the following assumptions:

- **Sustained institutional commitment:** National and local institutions maintain commitment to biodiversity conservation, Land Degradation Neutrality, and climate resilience objectives, including continued implementation of relevant laws, strategies, and EU-alignment processes.
- **Adoption of sustainable practices:** Land users and ecosystem managers are willing to adopt sustainable land and forest management practices when supported by appropriate incentives, technical assistance, and governance frameworks.
- **Effective use of data and monitoring systems:** Monitoring, reporting, and knowledge systems developed under the project are institutionalized and inform planning, management, and investment decisions.
- **Viability of conservation financing mechanisms:** Sustainable financing mechanisms for priority ecosystems are politically feasible, institutionally anchored, and contribute meaningfully to long-term management and conservation costs.
- **Scalability of pilot interventions:** Pilot interventions generate credible lessons that can inform national policy, planning, and future investment, enabling replication and scaling beyond project sites.
- **Stable enabling context:** No major political, economic, or climatic shocks fundamentally undermine institutional engagement or project implementation.

The narrative below provides more details on the TOC, including a brief description of:
(i) the project components, outputs, and activities (including knowledge management, alignment with national policies and gender mainstreaming).
(ii) the project risks.
(iii) the involvement of stakeholders in project design and implementation.
(iv) the global environmental benefits (impacts) of the project.

The TOC in Figure 2 (see below) should thus be read in conjunction with this narrative.



The overall project objective is to *catalyze integrated ecosystem management in North Macedonia's priority forest and wetland landscapes to enhance biodiversity conservation, advance Land Degradation Neutrality, and strengthen climate resilience.*

The project operationalizes an integrated approach to PA management, LDN, and NbS in North Macedonia by sequencing enabling policy and institutional reforms, site-level pilots, and sustainable financing mechanisms. The interventions respond to documented gaps in governance, data, and financing that constrain effective conservation and sustainable land management, while aligning national commitments with EU and IUCN standards and generating durable GEBs.

The project is structured around three interlinked technical components that correspond directly to the theory of change: (i) establishing the policy, planning, and institutional foundations for PA management and LDN implementation; (ii) piloting NbS and operationalizing sustainable financing mechanisms for protected areas; and (iii) strengthening national and local capacity to monitor and achieve LDN while scaling sustainable land and forest management practices. Mandatory project management, monitoring, evaluation, and reporting activities are addressed separately under the project's M&E component and are not described in detail in this narrative.

Monitoring and evaluation arrangements will integrate gender-responsive indicators aligned with the GEF Gender Policy and national gender equality priorities. Sex-disaggregated data will be collected for all relevant indicators, and baseline gender data will be established during the PPG phase to enable tracking of differential outcomes for women and men, including participation, benefit-sharing, and access to ecosystem-based economic opportunities.

The project's central logic links national-level policy and institutional changes to landscape demonstrations and municipal engagement so that pilots in Monospitovo, Katlanova, Jabalnica, and Ohrid can be absorbed into government/local systems, finance models can secure recurrent management costs, and knowledge

products can influence and mainstream improved practices across sectors and scales. The interventions are designed to produce mutually reinforcing feedback: governance and monitoring enable investment and oversight; restoration and SLM/SFM generate environmental and livelihood benefits; financing mechanisms lock in resources for ongoing management; and knowledge systems ensure replication and continuous improvement.

Component 1. Sustainable Landscape Management for Land Degradation Neutrality

Outcome 1.1: LDN advanced in priority forest and wetland landscapes through landscape-scale adoption of SLM and SFM practices supported by improved monitoring, incentives and local governance mechanisms

Component 1 establishes the technical, institutional, and monitoring foundations required to advance land degradation neutrality across priority forest, wetland, agricultural, and pasture landscapes. The component combines soil governance reforms, national and local monitoring systems, and landscape-scale piloting of NbS, SLM, and SFM practices to translate LDN commitments into operational action.

The component begins by strengthening the national legal and institutional framework for LDN implementation and monitoring. Under Output 1.1.1., at least three bylaws supporting implementation of the Soil Protection Law will be developed, informed by targeted legal analyses, including recommendations for improving the Law on Mountain Trails where it intersects with erosion risk, land degradation, and sustainable access in upland areas. These bylaws will clarify roles, standards, and enforcement mechanisms, providing a practical regulatory basis for soil conservation and sustainable land use. Legal updates and revisions will include specific considerations of gender perspectives, including through women's participation in public consultation. In parallel, a National Soil Protection Council (NSPC) will be formally established with operational guidelines, creating a permanent cross-sectoral platform to coordinate soil policy, oversee implementation of the Soil Protection Law, and guide LDN-related decision-making. To support gender mainstreaming, the NSPC membership will support balanced gender perspectives, including a minimum of 25% women's participation among representatives. To underpin these governance reforms with robust data, the project will develop a national Soil Quality Monitoring Program and operationalize a comprehensive monitoring system for LDN. This includes upgrading national information, monitoring, and reporting systems with harmonized soil datasets and indicators; supporting LDN target setting based on agreed metrics; and establishing the technical building blocks required by the Soil Protection Law, such as soil regions and a baseline soil register system. Spatial diagnostics—including soil maps, erosion maps, R/USLE-based soil loss modelling, drought vulnerability mapping, and climate modelling—will provide a defensible scientific basis for tracking land condition, prioritizing interventions, and reporting against national and international LDN commitments. The indicators could be taken into consideration while upgrading the national MRV system (this activity is part of the project for the development of the National Adaptation Plan and the project for preparation of the 5th National Communication to UNFCCC). Gender mainstreaming will be supported through the consideration of gender balance in engagement of scientists and experts on soil science, climate science, and data management.

Building on these enabling systems, the component will demonstrate nature-based solutions in selected wetland ecosystems (Output 1.1.2), with pilot sites, indicators, and implementation modalities to be finalized during the PPG phase. These pilots will test restoration and management measures that enhance hydrological functioning, biodiversity values, and ecosystem services, generating practical evidence on costs, benefits, and performance. For example, as part of wetland restoration activities, to control invasive fish species, such as *Gambusia holbrooki*, key measures would include targeted eradication where feasible, and long-term containment and habitat management. In larger lakes or connected marsh systems, full eradication is unlikely to be realistic, so efforts should focus on containment, preventing spread to

uninvaded sites, protecting native fish and amphibian refugia, and restoring habitat conditions that favor native species rather than invasive live-bearing fish. Wetland restoration designs should therefore include controllable inlets and outlets, screened water connections, seasonal drying where ecologically appropriate, structurally complex vegetation, and isolated fish-free breeding areas for amphibians and other sensitive species. Gender considerations will be integrated in all project restoration activities, and will include the involvement of women in local communities.

At the local level, the project will demonstrate an operational LDN monitoring approach in at least one pilot hotspot while piloting SLM and SFM practices for national scale-up (Output 1.1.3). This includes establishing inclusive local multi-stakeholder groups in selected municipalities (with particular attention on women's participation, and a gender mainstreaming approach); supporting voluntary LDN target-setting programs; identifying local transformative programs of action; and developing associated resource mobilization plans. Where appropriate, selected incentive mechanisms or subsidy models will be piloted to encourage investments in sustainable pasture and land management with equitable access for diverse land users, vulnerable populations, and women's participation.

The component culminates in the transition to innovative SLM and SFM best practices in selected hotspots over 50,000 ha (Output 1.1.4), delivering measurable LDN, soil improvement, and carbon benefits across forest, agricultural, and pasture lands. Interventions include indirect or direct conversion of approximately 50 ha of degraded forest land, improved wildfire management, adoption of improved SLM practices on agricultural land, and implementation of sustainable pasture management approaches such as rotational grazing aligned with carrying capacity. This will include attention to fire management, and post-fire ecological restoration. These activities will be carried out with particular consideration of potential gender dimensions, and the strong involvement of women, vulnerable populations, and other disadvantaged groups. Together, these actions demonstrate how governance reforms, monitoring systems, and incentives can enable landscape-scale adoption of practices that reverse land degradation and support long-term resilience.

Component 2. Conservation and Resilience of Priority Ecosystems

Outcome 2.1: Improved management effectiveness, ecological integrity and financial sustainability resulting in strengthened conservation of critical ecosystems.

Component 2 focuses on strengthening the governance, management effectiveness, and financial sustainability of priority protected areas and associated ecosystems, ensuring that biodiversity conservation outcomes are resilient and durable.

The component supports the establishment and strengthening of managing authorities for Ohrid Lake and associated wetland ecosystems, including Monospitovo and Katlanovo (to be confirmed during PPG), coupled with capacity building and governance support to enable effective management (Output 2.1.1). In parallel, it supports management of the Jablanica Mountains through development of a draft management plan and operational support to the newly established managing authority, aligned with the ongoing valorization and proclamation process (Output 2.1.2). These interventions formalize mandates, clarify responsibilities, and enable staffing, budgeting, and enforcement functions essential for effective protected area management. This will include attention to improved wildfire management, and integration with other government wildfire response services. The project will support gender mainstreaming through advocating for and facilitate hiring of women staff in the new or strengthened PA management authorities, and If needed, the project can provide training or internships to build a pipeline of women candidates.

To ensure ecological coherence and alignment with international standards, the component undertakes an assessment and recommendation analysis to improve protected-area zonation in line with EU legislation, IUCN criteria, and best practices (Output 2.1.3). PA management planning and zoning will be developed integrating gender perspectives, and the project will hold gender-specific stakeholder consultations in the communities around PAs. The project will use these inputs to ensure the PA management plan addresses issues like women's access to certain resources (e.g. allowing regulated collection of non-timber forest products important to women's livelihoods) and includes actions to benefit communities (e.g. improving local water sources, where women gain). Improved zonation strengthens ecological connectivity, reduces land-use conflicts, and supports sustainable use and access consistent with conservation objectives. Additional monitoring and analysis of ecological corridors will be established to improve their designation and management, and a landscape-scale assessment of ecological connectivity will be conducted.

A core pillar of Component 2 is the establishment of sustainable financing mechanisms for the protected area system (Output 2.1.4). This includes a comprehensive assessment of financial and administrative processes; screening and feasibility assessment of existing and new financing mechanisms; improvements to the finance policy of the nature sector through economic valuation, biodiversity expenditure and financial reviews, and institutional analysis; development of biodiversity finance plans incorporating taxation, fees, fundraising, loans, and revenue management; and practical approaches to setting and implementing targets related to financing nature, greenhouse gas emissions, sustainable consumption and production, and financial inclusion. The activities will be closely coordinated with the ongoing BIOFIN project and will utilize the financial instrument that will be included in the National Biodiversity Plan. The component further supports development of at least three payment for ecosystem services (PES) plans and at least five sustainable brands of products or services linked to protected areas, such as ecotourism, recreation, and authentic local products. Under this component, at least two of the sustainable product/value-chain initiatives will focus on women-led enterprises. When developing PES, the project will support gender considerations by ensuring that women farmers are included among PES beneficiaries, and the project will adopt guidelines on equitable benefit sharing. Together, these measures link conservation outcomes to predictable revenue streams and reduce long-term financial risks to ecosystem management while promoting inclusive access to ecosystem-based economic opportunities.

Component 3. Knowledge and Enabling Systems for Integrated Ecosystem Management

Outcome 3.1: Policy, institutional, and knowledge systems are strengthened to enable integrated forest and wetland ecosystem management, support national scaling, and ensure the durability of biodiversity, LDN, and climate resilience outcomes.

Component 3 consolidates and scales project impacts by strengthening human, institutional, and knowledge systems that enable integrated ecosystem management across forest and wetland landscapes.

The component delivers targeted capacity building and mentorship programs for management authorities and key stakeholders to support sustainable management and financing of NbS in selected protected areas, with an emphasis on wetlands (Output 3.1.1). Activities include training and mentoring for PA management authorities; diversification of human resources and clarification of responsibilities; training programs for rangers and national intervention teams; capacity building for the State Inspectorate for Nature; study visits; and specialized training programs on environmental crime and liability to be finalized during PPG. Community stakeholders engaged in spatial and urban planning and NbS are also capacitated to develop business models that encourage investments in degraded agricultural land and pastures to achieve SLM and LDN.

To support coherent communication, visibility, and visitor management across the protected area system, the component develops a joint national communication, visual identity, and promotional plan (Output 3.1.2). This includes preparation of a protected area brand book; unification of visual identity and promotional materials; joint public relations and marketing campaigns; establishment of shared communication channels; preparation of visitor management plans; development of toolkits to support ecotourism services; and strengthened connectivity among protected areas for coordinated actions such as joint monitoring and education.

The component further establishes a capacity building program on LDN target setting and implementation for local and central government staff and local communities (Output 3.1.3). Trainings and mentorship focus on observation, monitoring, and reporting of LDN indicators, as well as supporting transitions from unsustainable practices to innovative SLM and SFM approaches. Finally, lessons learned from implementation across all components will be systematically captured and synthesized to inform upscaling and national replication (Output 3.1.4).

Global environmental benefits: The project will generate global environmental that would not occur under the baseline scenario, as the GEF grant finances public-good investments and system-level reforms that are unlikely to be supported through national budgets or market mechanisms alone. GEF support enables the establishment of a national framework for Land Degradation Neutrality, including soil protection bylaws, a National Soil Protection Council, and operational soil and LDN monitoring systems, alongside landscape-scale piloting of nature-based solutions and sustainable land, forest, and pasture management practices. These interventions deliver measurable global environmental benefits, including reduced soil erosion and land degradation, improved carbon storage, enhanced ecosystem integrity in priority forest and wetland landscapes, and strengthened conservation effectiveness of protected areas. The project provides climate mitigation benefits, through the restoration of important carbon sequestering ecosystems, including forests, and wetlands, and the sustainable management of grasslands and agricultural lands, which provides significant soil carbon benefits. The preliminarily estimated GHG mitigation potential is 5,746,300 tCO2e. The project also delivers climate adaptation benefits by improving water retention, flood regulation, and drought resilience in vulnerable ecosystems. Without GEF financing, these enabling systems, integrated monitoring frameworks, and demonstration models would remain fragmented or unimplemented, limiting the durability and scalability of biodiversity, LDN, and climate resilience outcomes. In addition to area-based indicators, the project will strengthen the articulation of global environmental benefits by linking improvements in the management effectiveness of approximately 113,597 ha of protected and conserved areas to measurable biodiversity outcomes, including selected endemic, threatened, or indicator species associated with priority forest, wetland, and freshwater ecosystems, including Ohrid trout (*Salmo letnica complex*), Prespa trout (*Salmo peristericus*), Dalmatian pelican (*Pelecanus crispus*), Pygmy cormorant (*Microcarbo pygmaeus*), Balkan lynx (*Lynx lynx balcanicus*), Brown bear (*Ursus arctos*), Western capercaillie (*Tetrao urogallus*), Chamois (*Rupicapra rupicapra balcanica*). The species-level indicators will be refined during the PPG phase.

Knowledge generation: The project is designed to ensure that technical interventions are translated into durable practice through targeted capacity development, knowledge generation, and learning. Across all components, the project will generate applied knowledge on LDN monitoring, soil protection, NbS implementation, sustainable land and forest management, and protected area financing, and will package this knowledge into practical tools such as monitoring protocols, implementation manuals, training modules, and communication products. Lessons learned from pilots and institutional reforms will be systematically captured through mentoring programs, study visits, and synthesis products to support replication and national scaling. Knowledge exchange among ministries, protected area authorities, municipalities, and local

stakeholders will reduce implementation risks, support policy uptake, and ensure that project results inform future investments and programs.

Stakeholder engagement: The Ministry of Environment and Physical Planning (MoEPP) will lead policy development, national coordination, and oversight of LDN, soil protection, and protected area reforms. Protected area managing authorities will implement site-level conservation measures, NbS pilots, and sustainable financing mechanisms, while municipalities will host LDN pilot programs, establish local multi-stakeholder platforms, and set voluntary LDN targets. Research institutes and universities will support soil mapping, monitoring systems, and applied technical studies, while civil society organizations and community groups will facilitate stakeholder engagement, stewardship, and value-chain development linked to sustainable land use and ecosystem management. A gender balanced approach, including the strong involvement of women, will be a priority, and is further described in the Gender Action Plan. Private sector partners will contribute to the development of payment for ecosystem services schemes, sustainable brands, ecotourism, and market access for nature-positive products and services. Through these roles, stakeholders gain durable co-benefits—including strengthened institutional capacity, improved access to data and finance, diversified livelihoods, and enhanced management effectiveness—that create long-term incentives for stewardship and ensure the persistence of global environmental and climate adaptation benefits beyond the project lifetime. Potential PES schemes that will be explored during the PPG phase will be related but not limited to: to forest conservation for biodiversity and watershed protection (landowners or communities to be paid to conserve or restore native forests, which provide habitat for wildlife and maintain watershed functions by municipal governments or hydroelectric companies); agroforestry and sustainable agriculture incentives (subsidies for farmers already exist in the country and they can be further shaped); ecotourism revenue sharing (communities or landowners are compensated for conserving biodiversity-rich areas that attract ecotourism. A portion of tourism revenue collected by the municipalities is shared with those who manage the land sustainably, providing an incentive to maintain habitats and wildlife populations). The ongoing BIOFIN project will analyze the PES, and these analyses and recommendations will be further taken into consideration by the project.

The Stakeholder Engagement Plan to be developed during PPG will include a gender-responsive stakeholder mapping, identifying women's associations, rural women's cooperatives, women entrepreneurs in tourism and agriculture, and relevant civil society actors. Consultations will ensure meaningful participation of women, particularly in municipalities where climate and land degradation pressures intersect with rural economic vulnerability. Special outreach methods will be applied where needed to address barriers related to time constraints, mobility, or access to information.

Policy coherence: The project strengthens policy coherence by aligning land, soil, biodiversity, climate, and protected area policies across national and subnational levels to support durable LDN and ecosystem conservation outcomes. It promotes horizontal coherence by synchronizing soil protection bylaws, LDN monitoring systems, protected area zoning, and sustainable financing instruments, and vertical coherence by linking national policy frameworks with municipal LDN target-setting and landscape-level implementation. By harmonizing ecological objectives with land-use planning, protected area management, and biodiversity finance reforms, the project reduces policy conflicts, avoids perverse incentives, and ensures that conservation and restoration outcomes are reinforced rather than undermined by parallel sectoral policies.

The project is explicitly designed to be transformative, sequencing pilots with legal and finance reforms so that tested, investible models e.g. PES plans, sustainable brands, and municipal LDN programs can be scaled by national government and other mandated stakeholders. Scaling will be driven by evidence packages produced by Components 1 and 2, and the policy and institutional frameworks and capacity routes delivered

by Component 3. Robust monitoring, adaptive management and documentation of outcomes will ensure that the lessons and tools are transferable nationally and regionally.

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

North Macedonia has an active and evolving portfolio of initiatives related to land degradation neutrality, biodiversity conservation, protected area management, and climate resilience, many of which are at early stages of development or implementation. These initiatives are being led by different national and subnational institutions and are not yet coordinated through a single, fully operational cross-sectoral mechanism. In this context, the project is designed to complement and add value to ongoing efforts by strengthening national systems for soil protection, LDN monitoring, protected area management, and sustainable financing, while avoiding duplication through close coordination led by the Ministry of Environment and Physical Planning (MoEPP) and relevant line ministries.

The project will cooperate with ongoing and planned initiatives in forest, wetland, agriculture, and protected area landscapes through information exchange, alignment of monitoring systems, shared technical studies, and coordinated capacity-building activities. Opportunities for co-location of activities, joint use of data and monitoring platforms, and sharing of expertise across projects will be identified and further refined during the PPG phase. At this stage, the project is expected to be implemented under national execution arrangements, and the GEF Agency is not expected to play an execution role. However, during the PPG phase, potential execution gaps will be assessed and options for execution support will be carefully considered.

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
113597	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

113597	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Jablanica Mountains	555787161		17,980.00						
Katlanovsko Blano	555787170	Habitat/Species Management Area	35.00						
Monospitovsko Blato		Habitat/Species Management Area	1,082.00						
Ohrid Lake (within Ohrid Region Natural and Cultural Heritage Site)	555795332	National Park							
Ohrid Region Natural and Cultural Heritage Site	2015	National Park	94,500.00						

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5550	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
50.00			

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Woodlands	5,000.00			

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500.00			

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
50000	0	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
50,000.00			

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	5746300	0	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	5,746,300			
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting	2028			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	14,000			
Male	12,000			
Total	**26,000**	**0**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

Project Core Indicator 1

The calculation is based on the sum of the area (in hectares) of the target protected areas that will be addressed by project activities. Target protected areas include:

Katlanovsko Blano = 35 ha

Monospitovsko Blato = 1,082 ha

Ohrid Region Natural and Cultural Heritage Site = 94,500 ha

Ohrid Lake = 24,800 ha

Jablanica = 17,980 ha

Area statistics are derived from the World Database on Protected Areas managed by Protected Planet. Giving a prospective total of 113,597 ha (Ohrid Lake protected area is not included in the calculation as it is a nested subset of the larger Natural and Cultural Heritage Site of the Ohrid region).

Project Core Indicator 3

- 50 ha of direct/indirect conversion of degraded forest landscapes
- In line with the action plan on the Long-Term Climate Plan, 5,000 hectares of barren land to be reforested/afforested with oak
- 500 ha of wetland area restored (see text on baseline statistics for wetlands below for initial estimates for what this target could be)

o Lowland peatlands have historically suffered from and are more susceptible to land degradation processes due to excessive water drainage for agricultural use. Therefore, low-lying peatlands such as Katlanovsko Blano and Monospitovsko Blato could be identified as target landscapes for restoration efforts. Target could be around 500 hectares of degraded peatlands to be restored (20 in Katlanovsko Blano, 480 in Monospitovsko Blato).

Project Core Indicator 4

The 50,000 ha reflects the estimated area of agricultural, pasture, and forest landscapes within pilot municipalities where improved SLM and SFM practices are expected to be adopted as a result of LDN monitoring, incentives, and local governance mechanisms, and will be refined during the PPG phase.

Project Core Indicator 6

GHG calculations per EX-ACT tool calculation, based on: 50 ha of forest restoration; 5,000 ha of supported natural forest regeneration; 500 ha of restored wetlands; 50,000 ha of SLM/SFM (of which, 10,000 ha SFM; 20,000 ha grassland/pasture; 20,000 ha agricultural land). Assumptions include an annual rate of deforestation of 0.25% (based on publicly available sources indicating North Macedonia has lost 5% of its forest in the last 20 years), and fire periodicity of 5 years without the project, and 20 years with the project. In addition, a 10% current land degradation rate is conservatively assumed for pasture/grassland.

Project Core Indicator 11

26,000 inhabitants of local communities directly targeted by project interventions, including reduced landslide and flood risk, of which 14,000 women and 12,000 men.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Climate change is increasing the frequency and severity of natural hazards in North Macedonia, including droughts, heatwaves, forest fires, erosion events, and extreme precipitation that can trigger flooding and sediment runoff. These risks are particularly relevant in the project's forest and wetland landscapes, where altered hydrological regimes,

		reduced soil moisture, and rising temperatures could negatively affect ecosystem integrity, biodiversity, soil stability, and water quality. Increased wildfire incidence also poses a direct threat to forest habitats, carbon storage, and restoration investments. Extreme climate events during the project lifetime could disrupt field activities, damage restored sites, or affect local communities dependent on ecosystem services. Mitigation: The project will reduce climate risks by: (i) assessing climate vulnerabilities of priority forest and wetland ecosystems, including impacts on soil function, hydrology, and biodiversity; (ii) integrating climate risk considerations into Land Degradation Neutrality monitoring systems, spatial planning tools, and restoration prioritization; (iii) promoting climate-resilient sustainable land and forest management practices that enhance soil moisture retention, reduce erosion, and improve ecosystem adaptive capacity; (iv) strengthening wildfire prevention and management approaches within forest landscapes; (v) implementing nature-based restoration measures in wetlands and degraded lands to improve water regulation, drought resilience, and flood buffering; (vi) establishing monitoring systems to track climate-related impacts on ecosystem condition and management effectiveness; and (vii) incorporating adaptive management and contingency provisions to enable recovery of project interventions affected by extreme climate events.
Environmental and Social	Moderate	At the PIF stage, a preliminary Social and Environmental Screening (pre-SESP) has been completed to identify potential environmental and social risks associated with the proposed interventions in Macedonia's high value forest and wetland ecosystems. While a full Social and Environmental Screening Procedure (SESP) and Environmental and Social Management Framework (ESMF) have not yet been undertaken, the initial screening indicates that the project is likely to present moderate environmental and social risks, consistent with other integrated approaches to land degradation, biodiversity conservation and climate initiatives. Potential risks identified at this stage include: (i) concerns related to access to land and natural resources arising from strengthened conservation and management measures; (ii) risks related to the equitable distribution of project benefits, including for women and vulnerable groups; (iii) cumulative environmental pressures linked to development activities within project sites and watersheds; and (iv) institutional and coordination risks associated with multi-sectoral governance arrangements. There is a potential limited risk of stakeholders' resistance in individual areas due to perceived trade-offs (e.g., land-use changes, park regulation). During the project preparation phase, a full SESP will be conducted in line with UNDP Social and Environmental Standards to further assess risks and define appropriate mitigation measures. An ESMF, including a Grievance Redress Mechanism, will be prepared as required. The project will ensure inclusive stakeholder engagement throughout design and implementation, comply with Northern Macedonia's national legal and regulatory framework, and promote non-discriminatory participation through project governance structures. Participatory planning, benefit-sharing, and communication strategies will help manage these risks. The project will also ensure gender-responsive monitoring

		of participation and benefit-sharing to prevent unintended exclusion of women and other vulnerable groups.
Political and Governance	Low	Political and governance risks relate primarily to potential shifts in policy priorities, institutional leadership changes, and coordination challenges across sectors responsible for land management, biodiversity conservation, and climate resilience. Although North Macedonia maintains a strong legal and policy framework aligned with EU accession processes and international environmental agreements (UNCCD, UNFCCC, CBD, Ramsar), implementation remains dependent on sustained inter-ministerial coordination, stable institutional mandates, and continuity of political support. Changes in government priorities, administrative restructuring, or turnover at national and municipal levels during the project period could delay policy reforms, slow adoption of regulatory instruments (such as soil protection bylaws), or weaken cross-sectoral collaboration required for integrated ecosystem management. Mitigation: The project will reduce governance risks by: (i) anchoring key reforms and outputs within existing national legal frameworks, EU approximation processes, and formal government strategies to ensure continuity beyond electoral cycles; (ii) strengthening institutional capacities and clarifying roles and mandates through establishment of permanent coordination mechanisms, including the National Soil Protection Council and strengthened protected area management authorities; (iii) supporting multi-sectoral coordination platforms at national and municipal levels to improve alignment between land, forestry, agriculture, water, and biodiversity institutions; (iv) embedding project interventions within formal planning and budgeting processes to enhance institutional ownership and sustainability; and (v) maintaining continuous engagement with both political leadership and technical staff to ensure institutional memory and operational continuity during potential administrative changes.
INNOVATION		
Institutional and Policy	Moderate	North Macedonia has a relatively comprehensive legal and policy framework relevant to biodiversity conservation, land degradation neutrality, soil protection, and climate resilience, aligned with EU accession processes and international environmental agreements. However, there remains a moderate risk that existing policies may not be fully operationalized or sufficiently harmonized across sectors to support integrated ecosystem management. Institutional mandates related to land, soil, forestry, agriculture, water management, and protected areas are distributed across multiple agencies, which can result in fragmented implementation, overlapping responsibilities, and weak coordination. In addition, key policy instruments—such as soil protection bylaws, integrated monitoring systems, and mechanisms linking Land Degradation Neutrality targets with planning and financing processes—are not yet fully developed or institutionalized. Mitigation: The project will address these risks by: (i) supporting the development and operationalization of implementing regulations under the Soil Protection Law and strengthening alignment with biodiversity, forestry, and land-use policies; (ii) establishing

		permanent cross-sectoral coordination mechanisms, including the National Soil Protection Council, to improve institutional coherence and policy integration; (iii) strengthening national monitoring and reporting systems to provide an evidence base that supports policy implementation and decision-making; (iv) building institutional capacities across relevant ministries, protected area authorities, and municipal stakeholders to support integrated ecosystem management and cross-sectoral planning; and (v) embedding project outputs within formal policy, planning, and budgeting frameworks to ensure sustainability and reduce risks of policy discontinuity.
Technological	Low	The project includes several technical and technology-dependent interventions, particularly related to the development and operationalization of national monitoring and information systems for Land Degradation Neutrality, soil quality, ecosystem condition, and spatial planning. These include integration of spatial datasets (e.g., soil mapping, erosion modelling, drought vulnerability analysis, and climate data), development of monitoring platforms, and application of technical tools for restoration planning and wildfire management. While these approaches are based on proven methodologies, there is a moderate risk that technological challenges—such as data gaps, interoperability constraints, limited technical capacity among end-users, or insufficient institutional resources for long-term system maintenance—could reduce their effectiveness or sustainability. In addition, scaling nature-based restoration and sustainable land management practices may face technical adaptation challenges under local ecological and climatic conditions. Mitigation: The project will address these risks by: (i) prioritizing the use of technically mature, internationally validated tools and methodologies adapted to national conditions; (ii) strengthening technical capacity of national and local institutions through targeted training, mentorship, and technical assistance on monitoring systems, data management, and ecosystem restoration approaches; (iii) ensuring close collaboration with national research institutions and technical partners in system design and implementation; (iv) piloting and testing technological and restoration approaches at demonstration sites prior to scaling; (v) integrating technology development with institutional processes to ensure usability and long-term operational ownership; and (vi) promoting knowledge exchange and adaptive learning to enable refinement of technical solutions over the project lifecycle.
Financial and Business Model	Moderate	There is a moderate risk related to the long-term financial sustainability of ecosystem management and monitoring systems beyond the project period. Protected area authorities, municipalities, and sectoral agencies operate under constrained public budgets, and conservation financing remains limited and fragmented. While the project includes support for sustainable financing approaches—such as biodiversity finance planning and exploration of ecosystem service-based revenue opportunities—there is a risk that these mechanisms may face institutional, regulatory, or market constraints that could limit their uptake or long-term effectiveness. Mitigation: The project will mitigate these risks by: (i) focusing on realistic, context-appropriate financing

		approaches aligned with national policies and institutional mandates; (ii) strengthening financial planning and management capacities of relevant institutions; (iii) embedding financing considerations within broader policy, planning, and protected area management processes; and (iv) leveraging existing public funding streams and co-financing to support continuity of key project results.
EXECUTION		
Capacity	Moderate	Both the implementing and executing agencies (UNDP and MoEPP) have extensive experience in designing, implementing, and operationalizing activities that meet national biodiversity, sustainable land management, and climate change goals, also corresponding to international conventions of which the North Macedonia is a signatory. Regarding capacities of local stakeholders, some gaps exist in technical, coordination, and enforcement capacity at municipal and agency levels. These will be addressed through training, technical assistance, and inter-agency coordination mechanisms. Although the Ministry of Environment and Physical Planning is experienced in using the national procurement system the project might face delays in the implementation due to its specific procedures. To mitigate this risk, options for engagement of Responsible parties or service providers will be explored.
Fiduciary	Low	MoEPP has demonstrated sound fiduciary performance for more than 2 decades of various projects implementation.
Stakeholder	Low	Diverse and sometimes competing stakeholder interests (e.g., tourism vs conservation) could affect implementation. The project includes stakeholder engagement, gender action, and communication strategies to manage expectations and build consensus. The design of the respective component builds on the broad and deep experience of the executing agency in such activities, demonstrated in the successful implementation of GEF projects. UNDP's Social and Environmental safeguards contain the necessary activities to identify and manage such risks and ensure inclusivity.
Other		
Overall Risk Rating	Moderate	The experience of the implementing and executing agencies (both thematically and geographically) and the resources available to them, the consultation with and engagement of key stakeholders, the building up on the findings of previous projects and relevant plans and laws that have a natural integration of biodiversity, land degradation, and climate change, indicate a moderate overall risk for the successful implementation of the project.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

Under the **Biodiversity** Focal Area, the project contributes to BD Objective 1-1 (financial sustainability, effective management, and ecosystem coverage) by strengthening the management effectiveness, ecological integrity, and financial sustainability of priority protected areas and associated ecosystems. Through improvements in protected area governance, zoning aligned with EU and IUCN criteria, nature-based solutions, and sustainable financing mechanisms, the project will support improved management of approximately 113,597 ha of terrestrial protected areas and associated ecosystems, contributing to measurable results under relevant GEF-8 biodiversity core indicators.

Under the **Land Degradation** Focal Area, the project aligns with LD Objective 1 (avoid and reduce land degradation through sustainable land management) by strengthening soil protection frameworks, operationalizing national and local LDN monitoring systems, and promoting landscape-scale adoption of sustainable land, forest, and pasture management practices across agricultural, forest, and wetland landscapes. The project further contributes to LD Objective 2 (reverse land degradation through restoration) through targeted rehabilitation of degraded forest, pasture, agricultural, and wetland ecosystems, supporting restoration across approximately 5,550 ha and improved land-use practices across 50,000 ha. Together, these interventions reduce soil erosion, improve soil health and ecosystem functioning, enhance carbon storage, and support climate-resilient land use consistent with national LDN commitments.

Project alignment with targets of the National Strategy for Nature Protection 2017-2027

- National Target 2: To protect, conserve and monitor the components of the geodiversity, geoheritage, biological and landscape diversity
  - 2.1.8 (landscape management)
  - 2.1.9 (protected areas)
  - 2.1.12 (protection against improper utilization of mountain areas and glacial lakes)
  - 2.2 (landscape diversity)
  - 2.3 (biodiversity)
- National Target 4: Incorporate traditional local knowledge and best practices into conservation measures and sustainable use of nature

Project alignment with targets of the NBSAP (2023)

- Target 5: To establish management practices in forestry, agriculture, hunting and fishery that contribute to conservation of biodiversity and maintenance of ecosystem services
- Target 9: To integrate measures for adaptation and mitigation of climate change and combating desertification
- Target 10: To prevent loss, degradation and fragmentation of natural habitats of national and European importance

- Target 11: Increase coverage of protected areas to 15% as well as their functional connectivity through an ecological network, and establish effective management of protected areas in collaboration with local communities
- Target 12: Determine the level of threat to wild species in order to prevent the extinction of endangered species, and to improve the conservation status particularly of declining species

Project contributions to KMGBF targets

- Target 1 – Biodiversity-inclusive protected area management contributes to reducing loss of high biodiversity areas
- Target 2 – Ecosystem restoration contributions through LDN and SFM/SLM approaches
- Target 3 – Improving effective protected area management
- Target 4 – Protection of genetic diversity through baseline assessments of genetic resources
- Target 8 – Climate resilience fostered through NbS activities and SFM/SLM approaches providing carbon benefits
- Target 10 – Forest, agriculture and pastureland sustainable management activities to reduce pressures on biodiversity
- Target 11 – Ecosystem services enhanced through implementation of green income financial models and promotion of ecotourist activities
- Target 14 – Biodiversity and LDN approaches mainstreamed into policy through various analyses of existing legal instruments
- Target 19 – Additional financial resources towards biodiversity mobilized through improvements to the Finance Policy of the Nature Sector
- Target 20 – Capacity-building for biodiversity strengthened through targeted training activities for PA authorities
- Target 21 – Best available knowledge supplied for decision-making through improvements into and implementation of monitoring systems for LDN approaches

The project is also directly aligned with North Macedonia's EU approximation agenda and long-standing EU accession aspirations, including progressive alignment with the EU nature acquis, the Natura 2000 network, the Habitats and Birds Directives, and the EU Nature Restoration Regulation. This alignment will be achieved through project support for strengthened protected-area governance, improved management planning, ecological connectivity assessment, and protected-area zonation in line with EU legislation, IUCN criteria, and relevant best practices. During the PPG phase, the project will further assess how restoration priorities in target forest, wetland, agricultural, and pasture landscapes can support Natura 2000-related site identification, management needs, and restoration planning, while contributing to the EU Nature Restoration Regulation's objective to put restoration measures in place across at least 20% of land and sea areas by 2030. In this way, the project will not only support national biodiversity, LDN, and protected-area priorities, but also strengthen the institutional, technical, and site-level foundations needed for future compliance with EU restoration and conservation standards.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations:

Private Sector:

Provide a brief summary and list of names and dates of consultations

National authorities have been and will continue to be consulted in the design of the project through the MoEPP focal points for biodiversity and land degradation. Several meetings have been held between UNDP and MoEPP for aligning local needs with GEF programming. Representatives from national parks and protected areas have been consulted through official central channels with the Ministry.

- Betim Lamallari, GEF OFP North Macedonia (latest consultation 2025-10-14)
- Vlatko Trpetski – MoEPP biodiversity focal point (latest consultation 2025-10-14)
- Vesna Indova – MoEPP land degradation focal point (latest consultation 2025-10-14)

Teodora Obradovic Grncarovska – MoEPP climate cahnge focal point (latest consultation 2025-10-14)
(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNDP	GET	North Macedonia	Biodiversity	BD STAR Allocation: BD-1	Grant	1,528,694.00	145,225.00	1,673,919.00
UNDP	GET	North Macedonia	Land Degradation	LD STAR Allocation: LD-1	Grant	2,478,449.00	235,452.00	2,713,901.00
Total GEF Resources ($)						**4,007,143.00**	**380,677.00**	**4,387,820.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

136986

PPG Agency Fee ($)

13014

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
UNDP	GET	North Macedonia	Biodiversity	BD STAR Allocation: BD-1	Grant	60,347.00	5,733.00	66,080.00

UNDP	GET	North Macedonia	Land Degradation	LD STAR Allocation: LD-1	Grant	76,639.00	7,281.00	83,920.00
Total PPG Amount ($)						**136,986.00**	**13,014.00**	**150,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
UNDP	GET	North Macedonia	Climate Change	CC STAR Allocation	800,000.00
UNDP	GET	North Macedonia	Land Degradation	LD STAR Allocation	1,997,821.00
UNDP	GET	North Macedonia	Biodiversity	BD STAR Allocation	1,739,999.00
Total GEF Resources					**4,537,820.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
BD-1-1	GET	1,528,694.00	8000000
LD-1	GET	2,478,449.00	23400000
Total Project Cost		**4,007,143.00**	**31,400,000.00**

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Environment and Physical Planning	In-kind	Recurrent expenditures	20000000
Recipient Country Government	Ministry of Environment and Physical Planning	Public Investment	Investment mobilized	500000
Recipient Country Government	Ministry of Agriculture, Forestry, and Water Economy	In-kind	Recurrent expenditures	7500000
Recipient Country Government	Ministry of Agriculture, Forestry, and Water Economy	Public Investment	Investment mobilized	200000

Recipient Country Government	Municipalities (Ohrid, Struga, Strumica)	In-kind	Recurrent expenditures	200000
GEF Agency	UNDP	In-kind	Recurrent expenditures	2000000
GEF Agency	UNDP	Grant	Investment mobilized	100000
GEF Agency	UNDP	In-kind	Investment mobilized	100000
Civil Society Organization	IUCN	Grant	Investment mobilized	500000
Civil Society Organization	Macedonian Ecological Society; Ecologists Movement of Macedonia, Natyra, Nature Conservation Program in Northern Macedonia	In-kind	Investment mobilized	200000
Beneficiaries	Local Land Users	In-kind	Investment mobilized	100000
Total Co-financing				**31,400,000.00**

Describe how any "Investment Mobilized" was identified

The proposed project benefits from strong synergies and complementary co-financing from several ongoing initiatives supporting North Macedonia's land degradation issues, biodiversity conservation, climate resilience, and nature-based solutions. These initiatives are summarized below:

If the proposed project is approved, the Ministry of Environment and Physical Planning will direct $500,000 of in-kind resources over the life of the project as investment mobilized to support the project's objective and expected outcomes, including through support to the national protected area system, directly relating to the proposed project's work under Component 2. This will be fully elaborated and confirmed during the PPG phase

If the proposed project is approved, the Ministry of Agriculture, Forestry, and Water Economy will direct $200,000 of in-kind resources as investment mobilized to support the project's objective and expected outcomes, including through support to land and forest restoration, and flood risk management, directly related to the proposed project's work under Component 1. This will be fully elaborated and confirmed during the PPG phase

If the proposed project is approved, UNDP will mobilize $100,000 investment through grant financing over the life of the project to directly support all three expected project outcomes. An additional $100,000 of in-kind resources over the life of the project will be directed toward supporting achievement of the project objective. This will be fully elaborated and confirmed during the PPG phase

Additional co-financing is anticipated to be mobilized through the IUCN ADAPT 2.0 project, which has a total budget of $2.86 million USD, and is being implemented from 2024-2029. This project is supporting climate resilience and nature-based solutions in the Western Balkans, including North Macedonia, directly relating to the proposed project's work under Component 1. This will be fully elaborated and confirmed during the PPG phase

The project will also mobilize $300,000 of additional investment from partner civil society organizations and local land user beneficiaries, particularly in relation to the land and forest restoration pilot activities under Component 1. This will be fully elaborated and confirmed during the PPG phase.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	UNDP	2/20/2026	Ms. Nancy Bennet		nancy.bennet@undp.org
Project Coordinator	UNDP	2/20/2026	Ms. Monica Moldovan		monica.moldovan@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Mr. Betim Lamallari	State Advisor for Investments	Ministry of Environment and Physical Planning	5/18/2026

ANNEX C: PROJECT LOCATION

Please provide geo-referenced information and map where the project interventions will take place

Site	Geographic Coordinates
Monospitovo Bog	41°23'53.6'N 22°46'42.6'E
Katlanovo Marsh	41°53'50.6'N 21°39'08.6'E
Lake Ohrid and Lake Prespa basins	40°59'39.0'N 20°52'02.3'E
Jablanica Mountains	41°15'11.3'N 20°31'44.5'E

Monospitovo Bog is in a flat area of Stumica Valley between the villages of Monospitovo from North, Bansko from South and Koleshino from East. Centroid of bog is at X=648373.57, Y=4584169.13 at altitude 209m, with area 227.6ha. This is largest bog in Macedonia. It features a diverse fauna and flora with rare and relict plant communities and sits between large areas of agricultural land. (VGI 1970-1976; AKN, 2007-2010; Google earth; Author's measurements[11][1]).

Monospitovo Bog[1] is distinguished by an significant botanical richness and a tightly woven wetland fauna, and the site's conservation importance is made clearer when the observed species counts are stated alongside the notable threatened taxa it supports. The bog's flora includes a broad suite of helophytes, floating and submerged aquatics and several regionally rare taxa. Most prominent among these is the royal fern (Osmunda regalis), for which Monospitovo represents the only known locality in North Macedonia; the municipality of Strumica formally declared this population a Monument of Nature in 1987. The floating four-leaf fern Marsilea quadrifolia (cited under the Bern Convention) also occurs here, together with restricted occurrences of Thelypteris palustris, Tamarix smyrnensis, Sisyrinchium bermudiana, Orchis laxiflora, Isoetes phrygia, Amaranthus spinosus and Cladium mariscus, illustrating the site's botanical distinctiveness and its role as a refuge for taxa uncommon elsewhere in the country.

Faunal inventories record substantial herpetofaunal diversity: eleven amphibian species and sixteen reptile species have been documented in the bog and its immediate surroundings. Amphibians present include Lissotriton vulgaris, Triturus karelinii, Salamandra salamandra, Bombina variegata, Bufotes viridis, Bufo bufo, Hyla arborea, Pelobates syriacus, Rana dalmatina, Rana graeca and Pelophylax ridibundus. Reptiles include Mauremys rivulata, Emys orbicularis (listed as Lower Risk/near threatened in the source), Testudo hermanni (Near Threatened), multiple Lacertidae species, Anguis cephallonica (Near Threatened), Natrix spp., Dolichophis caspius, Elaphe quatuorlineata (Near Threatened), Zamenis longissimus, Platyceps najadum, Coronella austriaca and Vipera ammodytes. Mammal records note the presence of the otter (Lutra lutra; Near Threatened) and at least seven bat species — Rhinolophus mehelyi and Myotis capaccinii among them — two species currently assessed as

Vulnerable on the IUCN Red List. The assemblage of bats and the otter underline the bog's significance for mammals of conservation concern and its value as a functioning riparian ecosystem.

Invertebrate surveys remain incomplete but have yielded important finds: the fisher spider Dolomedes plantarius (Vulnerable) has been recorded here, and several spider taxa such as Mendoza canestrinii (not observed elsewhere in the country since 1929 until its rediscovery at Monospitovo) alongside Clubiona phragmitis and Hypsosinga heri, are known nationally only from this locality. Avifaunal data indicate at least 112 bird species recorded in the bog area (with suggestions the true number may exceed 130), of which 48 are directly associated with marsh habitats; nevertheless, abundance has declined, and many wetland specialists are now represented by only a few breeding pairs. Historically large stork colonies in neighboring villages are illustrative of the decline: estimates suggest more than 150 pairs in the past, at least 80 pairs in 1958, and only about 20 pairs by 2007. Breeding and foraging species currently recorded include little bittern, mallard, moorhen, water rail, marsh harrier and lapwing (the latter Near Threatened), with migratory and wintering species such as various ducks and terns also using the site.

Ichthyofaunal and fishery accounts emphasise the bog's former provisioning role: while contemporary conditions show a reduced fish community within the swamp itself, traditional use and local knowledge indicate it was historically an important fishery and remains an essential spawning ground for species such as pike (Esox lucius). The river system and adjacent canals support pike, Rhodeus amarus, endemic Strumica

taxa (Barbus strumicae, Cobitis strumicae), chub (Squalius spp.) and a suite of introduced species (Pseudorasbora parva, Carassius gibelio, Gambusia holbrooki), the latter being tolerant of degraded waters but posing invasive threats to native fishes.

The bog's ecological integrity has been severely undermined by hydrological alteration, pollution, habitat loss and unsustainable exploitation. Land-improvement works since 1947, notably the construction of the Monospitovo and Youth canals, reduced open water from around 500 ha to seasonal pools; subsequent canal burial, ad-hoc drains and irrigation works have further fragmented hydrological connectivity. Eutrophication and pollution from untreated municipal sewage and intensive agrochemical use, together with industrial discharges, have produced biologically degraded conditions (mesosaprobic indicators, dominance of tolerant introduced fishes). Habitat damage at the margins (reed cutting, burning and conversion to cropland) directly destroys nests and invertebrate prey, and poaching, indiscriminate hunting and targeted trapping (including for otters near fishponds) compound declines. Night-time poaching and inadequate enforcement have been repeatedly highlighted as immediate drivers of low bird abundances.

Local management structures include a Hunting Association watch service and a private fishpond (ca 1 ha) near Monospitovo that produces 6,000 to 8,000 fish annually (requiring about 1.4 tons of feed). The hunting ground has its own monitoring service (watchmen) and covers 13,990 ha with a 450-ha no-hunt zone, indicating some institutional capacity for regulated use and protection. Given the recorded species counts, the presence of Vulnerable and Near Threatened taxa, and the bog's historical socio-ecological role, Monospitovo retains strong restoration potential under this project proposal. Measures that restore hydrological regimes, reduce pollutant inflows, control invasive fishes, eliminate destructive harvesting and strengthen protection and community stewardship would rapidly recover biodiversity values and re-establish the bog's regulating, provisioning and cultural services for neighboring communities.

Given the richness of its flora and fauna, the presence of vulnerable and nationally unique species, and its historical role in supporting livelihoods, Monospitovo Bog is both a biodiversity stronghold and an ecosystem of high socio-ecological value. The combination of hydrological degradation, pollution, invasive species and unsustainable harvesting has driven declines, yet the site retains clear potential for recovery. Actions that restore natural water regimes, reduce pollutant inputs, control invasive fishes, halt destructive land uses and strengthen protection and community stewardship would rapidly enhance the bog's capacity to support biodiversity, reinstate important ecological functions and revive the provisioning, regulating and cultural services upon which neighboring communities depend.

Katlanovo Marsh is a main wetland hydrological object in the Skopje Plain, North Macedonia. It is located in the lowest, southeastern part of the plain, between the river Vardar on the west and the Pchinja River on the east, with the coordinates X=553115.30 Y=4639053.14 and elevation of 224 m above sea-level. with area of 198.6 ha. Near this natural feature, on the north side, is the main country motorway (E75) and on the west is flat irrigated part of the Skopje Plain (VGI 1970-1976; AKN, 2007-2010; Google earth; Author's measurements).

Katlanovo Marsh is the principal surviving wetland of the Skopje Plain and stands as a linchpin for both regional biodiversity and the suite of ecosystem services that sustain human communities in the Vardar catchment. Located in the southeastern sector of the Skopje basin at roughly 221 to 224 meters above sea-level, the marsh is a human-modified relic of the former Pliocene Skopje Lake and today exists under strong influence from groundwater dynamics, artificial drainage and seasonal evapotranspiration typical of the semi-arid valley. Morphometric assessments report a marsh surface on the order of 198.5 hectares, while statutory designations often focus on a 70-hectare core; a permanent Katlanovo Pond of about 0.513 ha lies within the complex, with a mean depth near 2.2 m. The site is bounded by agricultural land, transport infrastructure (including the E75 motorway) and the Rzhanichino channel that hydraulically links the marsh to the Vardar River, making its condition of direct consequence to downstream hydrology and human uses.

Biologically, Katlanovo concentrates a remarkably rich and locally distinct assemblage of wetland habitats. Extensive reedbeds, Typha stands, Juncus marshes and damp meadows intergrade with submerged and floating aquatics such as Potamogeton, Salvinia and Hydrocharis, supporting near-100 plant taxa and a suite of relict and regionally rare species including notable endemics in the surrounding landscape. Hydrobiological inventories record a diverse diatom flora and the marsh is exceptional for odonates (24 species recorded), a substantial amphibian and reptile assemblage, and a bird community exceeding seventy species that use the site for breeding, foraging, wintering and migration staging. Mammal and fish records indicate reduced but still important populations, evidence of both long-term value and recent degradation.

Beyond species richness, the marsh delivers critical ecological functions that underpin tangible ecosystem services. As a groundwater-fed wetland, Katlanovo plays a central role in aquifer recharge and groundwater maintenance for the Skopje valley; it attenuates flood peaks and buffers seasonal water shortages through storage and slow release. Vegetation and sediment trapping functions contribute to water purification, reducing nutrient and particulate loads entering the Vardar system; reedbeds and wet soils also sequester carbon and moderate local microclimate extremes. The marsh supports provisioning services - traditional fisheries, forage and reed harvests - and cultural services in the form of recreation, environmental education and a living connection to the region's palaeolake heritage. Its role as a migratory staging and breeding site further links local conservation to international biodiversity commitments.

Hydrologically, groundwater inputs dominate the pond's inflow regime and evapotranspiration greatly exceeds local precipitation, making subsurface flows essential to the marsh's persistence. Consequently, subsurface abstraction, channel modifications and drainage infrastructure have outsized ecological effects. The marsh's long-recognized conservation value is matched by persistent threats: drainage and water extraction, pollution and air-quality pressures of the Skopje basin, land-use conversion, channel degradation and infrastructure encroachment have all driven habitat fragmentation and declines in fish and mammal assemblages.

Restoration that prioritizes rewetting, controlled hydrological reconnection to the Rzhanichino-Vardar corridor, rehabilitation of spawning and nursery habitats, and integrated catchment measures would rapidly amplify both biodiversity outcomes and the suite of ecosystem services: improving water security, flood resilience, water quality, carbon storage and local livelihoods. Given the marsh's outsized functional importance for the Skopje Plain and downstream systems, urgent, coordinated action is required to secure its ecological integrity and the human well-being it supports.

Lake Ohrid sub-basin: Lake Ohrid is a transboundary watershed between North Macedonia and Albania, called Ohridsko Ezero in North Macedonia and Liqeni i Ohrit in Albania. It is a tectonic lake with an average depth of 155 m and a maximum depth of 289 m. The average water residence time is 70-85 years. Lake Ohrid is hydrogeologically connected to Lake Prespa, which sits around 150 m higher than Lake Ohrid (depending on water level variations). The hydraulic connection between Lake Prespa and Lake Ohrid, through the karstic massif, makes Lake Prespa its most important source of water, contributing over 40 percent of its water. It only takes six hours for the water to travel through the karstic system from Zavir/Zaveri to Tushemisht, which means that any change in the quality of Lake Prespa's waters would also affect - almost immediately - Lake Ohrid.

Ohrid Lake is the biggest lake of FYR Macedonia, with a total surface area of 348.8 km² (FYR Macedonian part

229.9 km²), a total catchment of 2,340 km² (including underground flow from lake Prespa), and a maximum depth of 285 m (average 164 m). It drains into Crn Drim river (regulated outflow in Struga at ca. 22 m³/sec, according to the needs of the river power plants). The main economic activities in this region are tourism (very important for FYR Macedonia and Albania) and fruit production. The population in the Ohrid and

Struga municipalities is over 100,000; and including the people across the borders to Greece and Albania it amounted over the last decades to some 200,000 people.

Lake Ohrid is located at 695 m asl. and isolated by surrounding hills and mountains (exceeding 2,000 m). It is one of the oldest lakes world-wide (2-3 million years). Many of its plants and animals are endemic (e.g. 10 of its 17 fish species) or "living fossils". Its reed belt is an important spawning place and a wintering site for birds. It is a very old cultural center of the Balkan and became a UNESCO World Heritage Site in 1980. Climate is both Mediterranean and continental, with more than 700 mm of annual precipitation. Numerous pressures on fisheries (over-harvested), the littoral zones (losses in the native reed zone) and the oligotroph water quality (eutrophication and fecal contamination due to communes like Pogradec on Albanian side and agriculture; the Macedonian Ohrid bay has a sewage collection) have started to alter the sensitive character and uniqueness of the lake.[1]

The Jablanica Mountain is in the southwestern part of North Macedonia and eastern part of Albania. Jablanica Mountain is found on the border between Macedonia and Albania, the eastern slope of the mountain is located in the southwestern part of Macedonia, between the valleys of Debar and Ohrid - Struga, west of the river Black Drim and the shore of the Ohrid Lake. The lake has influence on the local climate of the mountain with its moderating effects, it creates a unique microclimate characterized by high humidity and mild temperatures, conditions that are particularly favorable for fungal growth, and there are more than 314 fungal species [12][2]. Due to its specific geographical location, but also climatic, geological, geomorphologic, hydrographic and pedological features, Jablanica is characterized by great biological diversity. Moreover, the region constitutes an important corridor for large carnivores.

The mountain has a geological importance, consisting of a complex of limestone and silicate ranges, as well as karstic areas. One great example is the Kosharishti cave. In addition, the mountain includes four major glacial lakes in the central part of the mountain range, particularly Lake Shebenik and Lake Rrajca. The highest peak (Maja e Rreshpës) is at 2,260 m of altitude. Furthermore, a virgin beech forest area still exists within the Shebenik-Jablanica National Park in Albania, which is declared as an UNESCO World Nature Heritage Site. In this area, many natural and cultural monuments may be found, namely: Studna Spring, The ice cave, Meshtekna Qarishtes, Rrapi Taksimit and Gurra Karajt. Thermophile oak forests, beech forest, alpine pastures and meadows are the main biotope types.

Species:

· Mammals: Brown bear (*Ursus arctos*), Grey wolf (*Canis lupus*), Balkan chamois (*Rupicapra rupicapra balkanica*), Balkan lynx (*Lynx lynx balcanicus*), Wild cat (*Felis silvestris*)

· Birds: Golden eagle (*Aquila chrysaetos*), Short-toed eagle (*Circaetus gallicus*), White backed woodpecker (*Dendrocopos leucotos*), European green woodpecker (*Picus viridis*)

· Amphibians: Fire salamander (*Salamandra salamandra*)

· Plants: Virgin beech (*Fagus sylvatica*), Balkan endemic pine (*Pinus peuce*), Winter heath (*Erica herbacea*), Albanian tulip (*Tulipa albanica*)

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[1] https://www.inweb.gr/workshops2/sub_basins/18_Ohrid.html

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[2] Kutanoski, S. et. al. (2024) Mycodiversity in the Southwestern part of Jablanica Mountain. **Acta Musei Macedonici Scientiarum Naturalium**, [S.l.], v. 27, n. 1, p. 41-52, dec. 2024. ISSN 2545-4587.

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[1] Municipality of Bosilovo (2018) Improvement of the conditions for development of alternative tourism at the locality – Monospitovsko Blato: https://opstinabosilovo.gov.mk/wp-content/uploads/2018/05/%D0%9F%D0%A3%D0%96%D0%A1-%D0%90%D0%BD%D0%B3%D0%BB%D0%B8%D1%81%D0%BA%D0%B8-%D1%98%D0%B0%D0%B7%D0%B8%D0%BA-1.pdf

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[1] ibid

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title
1_SESP Offline Tool_ NMK GEF 8_06March2026

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	Significant Objective 1	Principal Objective 2	Principal Objective 2

ANNEX F: TAXONOMY WORKSHEET

Level 1	Level 2	Level 3	Level 4
X Influencing models			
	Transform policy and regulatory environments		
	X Strengthen institutional capacity and decision-making		
	XConvene multi-stakeholder alliances		
	XDemonstrate innovative approaches		
	Deploy innovative financial instruments		
XStakeholders			
	Indigenous Peoples		
	X Private Sector		
		X Capital providers	

Financial intermediaries and market facilitators
X Large corporations
X SMEs
X Individuals/Entrepreneurs
Non-Grant Pilot
Project Reflow

X Beneficiaries
X Local Communities
X Civil Society

X Community Based Organization
X Non-Governmental Organization
X Academia
Trade Unions and Workers Unions

X Type of Engagement

X Information Dissemination
X Partnership
X Consultation
X Participation

X Communications

X Awareness Raising
X Education
X Public Campaigns
X Behavior Change

X Capacity, Knowledge and Research

Enabling Activities
X Capacity Development
X Knowledge Generation and Exchange
Targeted Research
X Learning

X Theory of Change
X Adaptive Management
X Indicators to Measure Change

Innovation
X Knowledge and Learning

X Knowledge Management Innovation
X Capacity Development
X Learning

X Stakeholder Engagement Plan

X Gender Equality

X Gender Mainstreaming

X Beneficiaries
X Women groups
X Sex-disaggregated indicators
X Gender-sensitive indicators

Gender results areas

X Access and control over natural resources
X Participation and leadership
X Access to benefits and services

		X Capacity development X Awareness raising X Knowledge generation	
X Focal Areas/Theme			
	Integrated Programs		
		Commodity Supply Chains ([1][13]Good Growth Partnership)	
			Sustainable Commodities Production Deforestation-free Sourcing Financial Screening Tools High Conservation Value Forests High Carbon Stocks Forests Soybean Supply Chain Oil Palm Supply Chain Beef Supply Chain Smallholder Farmers Adaptive Management
		Food Security in Sub-Sahara Africa	
			Resilience (climate and shocks) Sustainable Production Systems Agroecosystems Land and Soil Health Diversified Farming Integrated Land and Water Management Smallholder Farming Small and Medium Enterprises Crop Genetic Diversity Food Value Chains Gender Dimensions Multi-stakeholder Platforms
		Food Systems, Land Use and Restoration	
			Sustainable Food Systems Landscape Restoration Sustainable Commodity Production Comprehensive Land Use Planning Integrated Landscapes Food Value Chains Deforestation-free Sourcing Smallholder Farmers
		Sustainable Cities	
			Integrated urban planning Urban sustainability framework Transport and Mobility Buildings Municipal waste management Green space Urban Biodiversity Urban Food Systems Energy efficiency Municipal Financing Global Platform for Sustainable Cities Urban Resilience

X Biodiversity			
	X Protected Areas and Landscapes		
		X Terrestrial Protected Areas	
		Coastal and Marine Protected Areas	
		X Productive Landscapes	
		Productive Seascapes	
		X Community Based Natural Resource Management	
	X Mainstreaming		
		Extractive Industries (oil, gas, mining)	
		Forestry (Including HCVF and REDD+)	
		X Tourism	
		X Agriculture & agrobiodiversity	
		Fisheries	
		Infrastructure	
		Certification (National Standards)	
		Certification (International Standards)	
	Species		
		Illegal Wildlife Trade	
		Threatened Species	
		Wildlife for Sustainable Development	
		Crop Wild Relatives	
		Plant Genetic Resources	
		Animal Genetic Resources	
		Livestock Wild Relatives	
		Invasive Alien Species (IAS)	
	X Biomes		
		Mangroves	
		Coral Reefs	
		Sea Grasses	
		Wetlands	
		X Rivers	
		Lakes	
		Tropical Rain Forests	
		Tropical Dry Forests	
		X Temperate Forests	
		X Grasslands	
		Paramo	
		Desert	
	Financial and Accounting		
		Payment for Ecosystem Services	
		Natural Capital Assessment and Accounting	
		Conservation Trust Funds	
		Conservation Finance	
	Supplementary Protocol to the CBD		
		Biosafety	
		Access to Genetic Resources Benefit Sharing	
Forests			
	Forest and Landscape Restoration		
		REDD/REDD+	
	Forest		
		Amazon	
		Congo	
		Drylands	

X Land Degradation

X Sustainable Land Management

X Restoration and Rehabilitation of Degraded Lands
X Ecosystem Approach
X Integrated and Cross-sectoral approach
Community-Based NRM
X Sustainable Livelihoods
X Income Generating Activities
X Sustainable Agriculture
X Sustainable Pasture Management
X Sustainable Forest/Woodland Management
X Improved Soil and Water Management Techniques
Sustainable Fire Management
Drought Mitigation/Early Warning

Land Degradation Neutrality

Land Productivity
Land Cover and Land cover change
Carbon stocks above or below ground

Food Security

International Waters

Ship
Coastal
Freshwater

Aquifer
River Basin
Lake Basin

Learning
Fisheries
Persistent toxic substances
SIDS: Small Island Dev States
Targeted Research
Pollution

Persistent toxic substances
Plastics
Nutrient pollution from all sectors except wastewater
Nutrient pollution from Wastewater

Transboundary Diagnostic Analysis and Strategic Action Plan preparation
Strategic Action Plan Implementation
Areas Beyond National Jurisdiction
Large Marine Ecosystems
Private Sector
Aquaculture
Marine Protected Area
Biomes

Mangrove
Coral Reefs
Seagrasses
Polar Ecosystems
Constructed Wetlands

Chemicals and Waste

Mercury

	Artisanal and Scale Gold Mining	
	Coal Fired Power Plants	
	Coal Fired Industrial Boilers	
	Cement	
	Non-Ferrous Metals Production	
	Ozone	
	Persistent Organic Pollutants	
	Unintentional Persistent Organic Pollutants	
	Sound Management of chemicals and Waste	
	Waste Management	
		Hazardous Waste Management
		Industrial Waste
		e-Waste
	Emissions	
	Disposal	
	New Persistent Organic Pollutants	
	Polychlorinated Biphenyls	
	Plastics	
	Eco-Efficiency	
	Pesticides	
	DDT - Vector Management	
	DDT - Other	
	Industrial Emissions	
	Open Burning	
	Best Available Technology / Best Environmental Practices	
	Green Chemistry	
Climate Change		
	Climate Change Adaptation	
		Climate Finance
		Least Developed Countries
		Small Island Developing States
		Disaster Risk Management
		Sea-level rise
		Climate Resilience
		Climate information
		Ecosystem-based Adaptation
		Adaptation Tech Transfer
		National Adaptation Programme of Action
		National Adaptation Plan
		Mainstreaming Adaptation
		Private Sector
		Innovation
		Complementarity
		Community-based Adaptation
		Livelihoods
	Climate Change Mitigation	
		Agriculture, Forestry, and other Land Use
		Energy Efficiency
		Sustainable Urban Systems and Transport
		Technology Transfer
		Renewable Energy
		Financing
		Enabling Activities
	Technology Transfer	
		Poznan Strategic Programme on Technology Transfer
		Climate Technology Centre & Network (CTCN)
		Endogenous technology
		Technology Needs Assessment
		Adaptation Tech Transfer

[1]