

GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

Introducing Nature Based Solutions to Ensure Resilient Ecosystems, Green Recovery and Sustainable Livelihoods

Region

Bosnia-Herzegovina

GEF Project ID

11335

Country(ies)

Bosnia-Herzegovina

Type of Project

FSP

GEF Agency(ies):

UNDP

FAO

GEF Agency ID

9726

EP/BiH/021/GEF

Executing Partner

Executing Partner Type

Government

GEF Focal Area (s)

Multi Focal Area

Submission Date

10/13/2023

Project Sector (CCM Only)

AFOLU

Taxonomy

Climate Change, Focal Areas, Climate Change Adaptation, Ecosystem-based Adaptation, Private sector, Climate resilience, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Biodiversity, Mainstreaming, Agriculture and agrobiodiversity, Forestry - Including HCVF and REDD+, Tourism, Infrastructure, Biomes, Wetlands, Rivers, Temperate Forests, Grasslands, Financial and Accounting, Protected Areas and Landscapes, Terrestrial Protected Areas, Productive Landscapes, Community Based Natural Resource Mngt, Species, Invasive Alien Species, Threatened Species, Land Degradation, Land Degradation Neutrality, Land Productivity, Carbon stocks above or below ground, Land Cover and Land cover change, Sustainable Land Management, Sustainable Livelihoods, Integrated and Cross-sectoral approach, Sustainable Fire Management, Ecosystem Approach, Community-Based Natural Resource Management, Income Generating Activities, Improved Soil and Water Management Techniques, Sustainable Agriculture, Restoration and Rehabilitation of Degraded Lands, Sustainable Forest, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Deploy innovative financial instruments, Demonstrate innovative approach, Transform policy and regulatory environments, Stakeholders, Communications, Education, Public Campaigns, Behavior change, Awareness Raising, Type of Engagement, Information Dissemination, Partnership, Consultation, Participation, Private Sector, Individuals/Entrepreneurs, SMEs, Financial intermediaries and market facilitators, Local Communities, Beneficiaries, Civil Society, Non-Governmental Organization, Academia, Community Based Organization, Gender Equality, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Access and control over natural resources, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Access to benefits and services, Capacity, Knowledge and Research, Targeted Research, Enabling Activities, Learning, Indicators to measure change, Adaptive management, Knowledge Generation, Innovation, Knowledge Exchange

Type of Trust Fund

GET

Project Duration (Months)

60

GEF Project Grant: (a)

GEF Project Non-Grant: (b)

4,834,530.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
459,280.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
5,293,810.00	40,150,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
150,000.00	14,250.00
PPG total amount: (e+f)	Total GEF Resources: (a+b+c+d+e+f)
164,250.00	5,458,060.00
Project Tags	
CBIT: No NGI: No SGP: No Innovation: 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)

The project aims to enhance biodiversity and ecosystem conservation and improve the productivity of landscapes of Bosnia and Herzegovina (BiH) to make them more resilient and efficient while achieving land degradation neutrality (LDN) targets. This will be achieved by improving the management of Protected Areas (PAs), Key Biodiversity Areas (KBAs), Other Effective Area-based Conservation Measures (OECMs) and the intervening land degradation hot spots^[1] that support agriculture, forestry, animal-husbandry and other economic activities. The project’s intervention pathways entails improved governance, policies and capacities of institutions, promotion of biodiversity sensitive LDN-based Integrated Spatial and Land Use Planning (ISLUP) to resource management; improved financing and incentives for nature-positive practices; and replication/up-scaling. Through this integrated approach, the project aims to: (i) improved management effectiveness of 42,714.32 hectares in fifteen terrestrial protected areas; (ii) improved management effectiveness of 151,061.6 hectares of KBAs and identified OECMs through national policies and practices and 1,000 hectares of degraded lands under SLM practice to benefit biodiversity; (iii) restoration of 500 hectares of degraded forest, agriculture and pasture lands; (iv) stabilized populations of globally important species (CR, EN, VU on IUCN Red List) through improved protection, habitat restoration, monitoring and enforcement; (v) reduced threats and enhance protection of threatened biodiversity, including endangered species; (vi) mitigate 2,064,990 mt.CO₂e over a 20-year period; and (vii) directly benefit 100,000 people (50,000 men and 50,000 women) through improved natural resource management, sustainable agricultural, grazing and forest practices, livelihood improvement, small scale enterprises and climate mitigation measures.

^[1] As identified in the PRAIS 4 report

Indicative Project Overview

Project Objective

Integrated management of multiple use landscapes to promote biodiversity conservation, improved land productivity and economic benefits to local communities

Project Components

Component 1. Enabling framework strengthened for safeguarding biodiversity and combating land degradation in Bosnia and Herzegovina

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
900,000.00	6,709,000.00

Outcome:

Outcome 1: Enabling conditions created for LDN and biodiversity conservation compliant Integrated natural resource management planning. This will be measured by:

- (i) Draft SEA developed including guidelines for policy making and monitoring; baseline for environment established; and decision-making and governance processes and procedures to track and record impacts from development.
- (ii) ISLUPs developed and agreed for four pilot landscapes.
- (iii) Policy papers and legislative recommendations developed on reforms needed to provide an effective framework for implementation of ISLUPs
- (iv) SLM/BD Commission/ Committee for target landscapes fully operational and functional and actively support mainstreaming SLM/BD across key sectors
- (v) At least 20 points increase in national capacity for INRM/LDN/SLM/BD as measured by UNDP capacity development scorecard

Output:

- Output 1.1.** Strategic environmental assessment (SEA), legislative provisions and methodologies established with clear environmental and social baselines to guide policy and integrate LDN, biodiversity conservation, OECM, Climate Change and socio-economic development in decision-making.
- Output 1.2:** Outcome of SEA and assessments integrated in land use and spatial planning to develop practical gender sensitive integrated spatial land use plans (ISLUPs) for the four pilot landscapes that mainstreams SLM, LDN, CC and biodiversity conservation principles.
- Output 1.3:** Policy and regulatory amendments and Decision Support System (DSS) for implementation of ISLUPs developed and approved.
- Output 1.4:** Inter-sectoral coordination strengthened to oversee regional implementation of ISLUPs and strengthen environmental governance.
- Output 1.5** Roll out of gender focused capacity building program for government officers, extension staff, community groups, NGOs, and technology transfer and equipment for LDN monitoring and mainstreaming of SLM/BD

Component 2: Promotion of enhanced ecological, biological and social benefits from landscape management

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)

1,600,000.00	13,700,000.00
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Outcome:

Outcome 2: Ecosystem and nature-based solutions that generate global environmental benefits and livelihoods developed and implemented for PAs, KBAs and OECMs. This will be measured by:

- (i) OECM policy and guidelines for BiH developed.
- (ii) At least 2 new gender-sensitive nature-friendly financial instruments developed.
- (iii) At least 42,714.32 ha of Protected areas under improved management
- (iv) At least 151,061.6 ha of OECMs/KBAs/IFLs under improved management to benefit biodiversity.
- (v) At least 20% increase in private-public sector funding for nature-positive activities that focus on nature-based economic solutions for OECMs, PAs and KBAs, with strong emphasis on gender considerations
- (viii) At least 10 Nature-based solutions implemented in cooperation with the private sector, with at least 3 specifically focusing on women groups.
- (ix) Improved capacity of canton/municipal and community organizations for financial management as measured through capacity development scorecard

Output:

Output 2.1: Feasibility assessment to expand the biodiversity conservation estate through re-assessing KBAs and identification and introduction of other effective area-based conservation measures (OECM) area (in coordination with Output 1.1)

Output 2.2. Development of a common policy and regulatory framework for KBAs and OECMs to create a nationally expanded conservation area network to improve conservation outcomes and enhance habitat connectivity.

Output 2.3: Resource gap assessed, financial solutions, resource mobilisation and gender-sensitive strategies developed and tested for ensuring sustainability of 5 PAs, KBAs and OECMs in cooperation with private sector.

Output 2.4: Gender-sensitive nature-based solutions demonstrated in and around KBAs and OECMs in collaboration with farmers, pastoralists, entrepreneurs, women and private owners to incentivize and enhance support for conservation and resilient livelihoods

Component 3. Strengthening the national capacity for monitoring LDN indicators at national level

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
1,400,000.00	12,300,000.00

Outcome:

Outcome 3: Agriculture, pastoral and forest lands under SLM practices that integrate new approaches with traditional practices. This will be measured by:

- (I) Weighted vulnerability analysis completed to identify /rank vulnerability and practical measures to control and manage land degradation in the pilot landscapes
- (ii) At least 500 ha of degraded forest, grazing and agricultural land under SLM practices
- (iii) At least 1,000 ha of agricultural land under SLM in production systems
- (iv) 350 number of community members, staff and stakeholders trained in SLM practice

(v) At least two (2) viable agri- and dairy food value chains, one targeting women - that avoid and/or reduce land degradation supported

Output:

Output 3.1. Protocols for soil carbon content, land productive dynamic and land use change monitoring as main indicators for land degradation and practical guidelines developed and approved, based on SEA and LDN assessments (Output 1.1) for promoting/mainstreaming SLM/BD in the agriculture, forestry, pastoral and infrastructure sectors.

Output 3.2: Traditional land use practices for croplands, bare land suitable for afforestation and pasture lands that cause reduced harm to soil and increasing resilience against floods are identified with a specific focus on women farmers and women-led households.

Output 3.3. ISLUPs developed and gender sensitive LDN/SLM practices for forests, agricultural and pastoral lands implemented in 4 (four) identified landscapes (based on assessment under Output 1.1, 2.1 and 3.2)

Output 3.4. Gender sensitive training and peer to peer knowledge sharing activities rolled out to enhance capacities of forest managers, local farmers, pastoralists, and farmer associations to promote LDN/SLM in around PAs/KBAs at pilot landscapes.

Output 3.5. Resilience-building and gender sensitive income-generating models for sustainable value chains for main forest, agricultural and dairy products are identified and implemented

Component 4: Knowledge management and replication

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
478,000.00	3,746,338.00

Outcome:

Outcome 4: Enhanced gender-sensitive learning, and knowledge-sharing on SLM and biodiversity conservation practices for agriculture, forest and pasture lands and community infrastructure. This will be measured by:

- (i) Increased percentage of sampled project stakeholders aware of potential threats and adverse impacts of unsustainable natural resource management practices, disaggregated by gender.
- (ii) Number of best practices for sustainable land management and biodiversity conservation documented and disseminated nationally.

Number of gender-sensitive communication products developed and shared with the stakeholders in BiH and reaching up to 50,000 individuals

Output:

Output 4.1. Knowledge management on Nature-based Solutions (NbS) for SLM, flood resilience and biodiversity conservation for landscapes promote learning and replication.

Output 4.2: Best practices and lessons learned for addressing land and ecosystem degradation exchanged through regional and global cooperation using FAO networks, WOCAT, etc.)

M&E

Component Type	Trust Fund
Technical Assistance	GET

GEF Project Financing (\$)	Co-financing (\$)
226,314.00	1,584,662.00

Outcome:

Outcome 5: Impact monitoring to promote adaptive management

Output:

Output 5.1. Monitoring and evaluating project impacts, including those related to environmental, social and gender safeguards

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1. Enabling framework strengthened for safeguarding biodiversity and combating land degradation in Bosnia and Herzegovina	900,000.00	6,709,000.00
Component 2: Promotion of enhanced ecological, biological and social benefits from landscape management	1,600,000.00	13,700,000.00
Component 3. Strengthening the national capacity for monitoring LDN indicators at national level	1,400,000.00	12,300,000.00
Component 4: Knowledge management and replication	478,000.00	3,746,338.00
M&E	226,314.00	1,584,662.00
Subtotal	4,604,314.00	38,040,000.00
Project Management Cost	230,216.00	2,110,000.00
Total Project Cost (\$)	4,834,530.00	40,150,000.00

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

Bosnia and Herzegovina (BiH) is characterized by an uniquely wide range of biological and landscape diversity resulting from the specific geomorphology and soils, in terms of permeation among the climate regions of continental, Mountain and Mediterranean climates and the geographical position in the area of the northern plains along the Sava River, across the massif of the Dinaric Arc, down to the Adriatic Sea in the south. It is home to numerous endemic, relict species and habitats and is among the top five countries in Europe in terms of its rich biodiversity with 3,882 species of vascular plants, 20 species of amphibians, 38 species of reptiles, 119 fish species, 326 species of birds and 85 species of mammals. Some taxa are largely underexplored. It is estimated that 15% of Bosnia and Herzegovina's flora and fauna have endemic character.^{[1]²} With responsible and sustainable management, its biological and physical-geographical diversity in their interaction provides Bosnia and Herzegovina with a good basis for human life and prosperity. The rich biological diversity and habitats of Bosnia and Herzegovina are being lost due to a wide range of anthropogenic factors. The conversion of habitat is recognized as one of the major drivers of biological diversity loss. Pressures and ^{[2]³}threats by anthropogenic activities on the primary types of habitats (forests, vegetation habitats in the crevices of rocks, dominantly represented in relict-refugial ecosystems of canyons and gorges, wetland vegetation types - alpine mires, alluvium and estuaries of rivers, karst fields) transform them into secondary or tertiary type habitats. For example, the construction of infrastructure, roads, quarries, water reservoirs, irrigation, affect the fragmentation, alteration and irreversible loss of habitats, which directly affects the populations of certain species. Excessive and uncontrolled exploitation of sand, gravel and other river materials has led to changes in the regime of surface and ground water, resulting in the destruction of habitats of plant and animal species in lower river courses, primarily of Rivers Bosna and Drina, and in some parts of the Rivers Sava, Vrbas and other rivers. Overexploitation of certain species of plants and animals stands out as one of the main reasons for the loss of biological diversity in general. Exploitation of freshwater resources in BiH primarily refers to the fishing of economically important fish species. Overexploitation of natural resources in this sense implies both uncontrolled overfishing and the degradation of aquatic habitats themselves, which results in a lower rate of natural reproduction and renewal of populations, as well as potential impoverishment and destabilization of ecosystems.

In terms of land resources, it is estimated that 1.2 million people were living on degrading agricultural land in 2010, bringing the share of rural residents who inhabit degraded agricultural land up to 52% of the total rural population^{[3]⁴}. The annual cost of land degradation in BiH was estimated at USD\$99 million, which is equal to 8.2% of the country's agricultural GDP leading to reduction in provision of ecosystem services that takes different forms – deterioration in food availability, soil fertility, carbon sequestration capacity, wood production, ground water recharge, etc. with significant social and economic costs to the country.^{[4]⁵} In BiH, land is under constant anthropogenic pressure. The key drivers of land degradation in BiH are: (i) floods, droughts and torrents; (ii) wildfires and overexploitation of forests; (iii) non-existence of SOC monitoring^{[5]⁶}; (iv) population migration and rural depopulation leading to increase in urbanization and illegal landfills; (v) non-implementation of legal regulations and measures for land protection; (vi) industrialization and expansion of areas for mineral exploitation, (vii) illegal felling of forests; and (viii) pollution and soil contamination.^{[6]⁷} Frequent floods and torrents, jointly with wildfires and bare land expansion upstream additionally degrade soils, cause soil erosion and water contamination, burn carbon from soils and decrease productivity, and finally contaminate fertile agricultural land. Change in land use in general and depopulation of rural areas, coupled with the destruction of the agrarian landscape that has taken years to take shape,^{[7]⁸} has enhanced erosion and land

degradation and expansion of invasive species. Climate Changes is further accelerating these processes. The above referenced challenges, provides an opportunity to invest in sustainable development that respects the natural environment, while supporting local economic development and livelihoods. Without the project, it is envisaged, given the current development pressures, that without the development of sustainable economic pathways, the threats to these ecosystems will only increase resulting in the loss of biodiversity, land and its economic potential.

Project Areas

The two selected landscapes clusters are the following:

Southern Landscape cluster: This landscape cluster spans an area of 320,719 hectares and encompasses 8 municipalities. This landscape holds particular significance in the realm of biodiversity preservation, largely attributed to the presence of five KBAs covering 38,004 hectares, namely Trebinjsko Lake, Orjen and Bijela Gora, Trebiža River, Hutovo Blato, and Dabarsko and Fatničko Karstic Field. In addition to these KBAs, this landscape cluster has four protected areas, namely the Hutovo Blato National Park, Popovo Poltje – Vjetrenica landscape of outstanding features, Orjen National Park and Pavlova Cave Nature Monument, collectively encompassing an area of 32,995.76 hectares. Within the Herzegovina region, particularly in the Republika Srpska, the publicly managed forest company, Sume Repulike Srpske has obtained Forest Stewardship Council (FSC) certification. This certification extends the area of HCVFs in this landscape cluster to 100,561.10 hectares. The presence of these forests holds significant potential for establishing OECMs. This landscape cluster comprises out of two landscapes, divided for administrative reasons as one is within the borders of the Republika Srpska and the other is within the borders of the Federation of BiH.

Wider Sarajevo landscape cluster: This landscape cluster boasts of a rich and invaluable fusion of cultural, historical and natural heritage. The diversity of its natural values, encompassing flora and fauna, landscapes, hydrological features and geological treasures, positions this landscape as remarkable hub of biodiversity. It is an area renowned for its multifaceted ecosystems, including montane forests, wetlands, rivers and grasslands that offer a haven for diverse array of plant and animal species. The landscape cluster spans an area of 335,269 hectares and encompasses fifteen municipalities, seven within Republike Srpske. The area is offers a range of recreational and sports activities on the surrounding mountains throughout the year along with the immense historical and cultural heritage of the region, including agricultural production. By being a mountainous region, area is under significant threat of landslides, erosions, torrents. This area is depicted by significant endeavors for the proclamation of PAs – it includes 11 PAs most of which are recently proclaimed (PL Bijambare, NM Skakavac, NM Vrelo Bosne, PL Trebević, PL Bentbaša, NP Trebević, NM Girska pećina, NM Pećina pod lipom, NM Pećina Mokranjska Miljacka, NM Crvene stijene, NM Orlovača collectively covering 8,391.96 hectares. In addition, there are 14,496.56 hectares of HCVFs, of which, around 10,829.56 hectares lie within the public forest company, Sume Republike Srpske. There are no identified KBAs within this landscape cluster. This landscape cluster comprises out of two landscapes, divided for administrative reasons as one is within the borders of the Republika Srpska and the other is within the borders of the Federation of BiH.

Threats

The primary factors endangering natural resources in BiH in general, and the four target landscapes specifically is transformation of natural habitats, excessive utilization of precious biological resources, deterioration of forests and agricultural lands and the hazards posed by climate change, which impact valuable and/or vulnerable forests, freshwater ecosystems, wetlands, karst fields, productive agricultural and pasture lands and natural caves^{[8]9}. The key threats are discussed below, but only those that are relevant to the project will be addressed and specifically at the project sites.

Illegal logging and deforestation: Unregulated and illegal logging practices, including in officially proclaimed PAs contribute to habitat destruction, loss of biodiversity, and degradation of forest ecosystems. The government authorities recognize illegal logging as a profoundly grave menace to valuable forests. Individuals engage in illegal logging for personal subsistence purposes, particularly for firewood, while organized groups partake in harvesting, transportation, and processing activities without the necessary permits. Forests in the region suffer significantly from forest fires and destructive attacks by pathogens and insect pests. These latter threats are closely interconnected with and worsened by the effects of climate change.^{[9]10} Deforestation has significant consequences for ecosystems that are already affected by climate change.

Unsustainable agricultural practices: One of the main unsustainable practices in agriculture is the excessive use of chemical fertilizers, pesticides, and herbicides. Farmers often apply these inputs without proper consideration of dosage, timing, or environmental impacts. This can lead to soil degradation, water pollution, and negative effects on biodiversity,

including the decline of beneficial insects and soil microorganisms. It also contributes to environmental pollution, including the contamination of soil, groundwater, waterways, rivers and lakes.

Overexploitation of resources: Overexploitation of resources is prevalent in the most productive ecosystems of BiH, particularly in easily accessible landscapes. In particular, over-exploitation is more common in ecosystems of oak forests within continental landscapes, of Pannonia oak forests, of upland's beech-fir forests, of upland's deciduous forests, of arable land, of fresh waters^{[10][11]} etc. Coal mining operations in BiH cover an extensive area of 18,000 hectares, while the disposal of waste materials occupies nearly 6,000 hectares of land. The open-pit mining or surface extraction of mineral resources, such as coal, iron ore, bauxite, and clay, has resulted in approximately 15,000 hectares of land being adversely affected. The primary consequences of these mining activities include the direct loss of land and rendering it unusable in areas where waste materials are deposited. Additionally, the contamination of soil with heavy metals often leads to permanent alterations in the physical characteristics of the land. Excessive and uncontrolled exploitation of sand, gravel and other river materials leads to changes in the regime of surface and ground water, resulting in the destruction of habitats of plant and animal species in lower river courses. These interventions have a large impact on the environment in general, while in terms of habitat destruction, river sandbanks, steep banks, river islands, river branches and other river flow elements are lost^{[11][12]}.

Conversion of habitats: This is a significant threat to biodiversity loss in BiH. This process involves the transformation of natural habitats, such as forests, wetlands, and grasslands, into other land uses, primarily for agricultural expansion, infrastructure development, and urbanization. The ecosystems under serious threat of conversion are the sub-alpine grassland on carbonate, sub-alpine grassland on acid ground, meadows on karst fields, Sub-Mediterranean rocky-grasslands and karst, marshes and wetlands, fresh waters, poly-dominant refugial communities, endemic pine forests etc. Pressures and threats by anthropogenic activities on the primary types of habitats (forests, vegetation habitats in the crevices of rocks, dominantly represented in relict-refugial ecosystems of canyons and gorges, wetland vegetation types - alpine mires, alluvium and estuaries of rivers, karst fields) transform them into secondary or tertiary type habitats. For example, construction of infrastructure, roads, quarries, water reservoirs, irrigation, results in fragmentation, alteration and irreversible loss of habitats, which directly affects the populations of certain species^{[12][13]}.

Pollution: Industrial activities contribute to land contamination through the release of toxic pollutants into the environment, both directly through air emissions and indirectly through deposition processes. Aero-pollutants emitted by industries eventually settle on the ground, either in their original form or in altered states. Moreover, pollutants can permeate through soil, leading to contamination of groundwater. Specifically, thermal power plants and cement production facilities are significant sources of dust and ash, which are major contributors to the contamination of arable land that is in close proximity to these industrial sites. The country also has abundant hydroelectric potential, leading to a rapid increase in the construction of small-scale hydro power plants. Unfortunately, some of these plants are in areas with high natural value, posing a threat to the environment. In terms of road transport, vehicle emissions are a major contributor to air pollution, accounting for over 90% of the pollution in urban areas of BiH. Overall, the energy sector, particularly coal and hydroelectric power, along with road transportation, are the key drivers of air and water pollution in BiH.

Climate change: The economic importance of agriculture, water, land and forestry sectors, coupled with the limited capacity for climate change adaptation, puts BiH in a vulnerable position towards the impacts of climate change. The sectors that are most vulnerable to climate change in BiH include: agriculture, water resources, forestry, energy, tourism, biodiversity and human health^{[13][14]}. The biggest impacts are reflected in the risks of drought, floods and wildfires. Extremely high temperatures and heat stress are some of the biggest problems in agriculture and forestry, especially in the sub-Mediterranean part of Bosnia and Herzegovina. This problem has been particularly present in the last two decades, with the major impact on species with narrow ecological amplitude as well as fruit, vegetable and wine production. In 2012, BiH experienced a prolonged period of severe drought, causing losses in agricultural production of about BAM 1.65 billion, grain and vegetable yields were reduced by about 70%, and energy production was reduced by about 25%^{[14][15]}. Changes can be expected in terms of time of occurrence, frequency and intensity of extreme events – floods and droughts. A significant increase in air temperature during the winter season (December, January and February)

will result in a decrease in snowfall and thus a decrease in flow in most watercourses during spring months. On the other hand, the expected more frequent precipitation of higher intensity will cause more intense runoff, often followed by floods.

Baseline

The project is thus timely in that it helps address these threats through a holistic and multi-disciplinary effort that will build on the current baseline and take into consideration lessons learned from previous projects. The baseline investments, initiatives, projects and commitments including key MEAs such as Nationally Determined Contributions 2020-2030, National Adaptation Plan (2021), National Biodiversity Strategy and Action Plan, Environmental Strategy of Federation of BiH (2022-2032), Environmental Strategy for Republika Srpska (2022-2032) and Climate Change Adaptation Strategy 2020-2030). The Land Degradation targets include the following: For the Federation of BiH to (a) improve land quality and protection and restore degraded land functions in specific ecosystems or minimize adverse environmental impacts.; (b) land management in support of environmental protection and spatial planning system; and (c) establish a basis for harmonious and spatially balanced socio-economic development, with a focus on marginalized and degraded areas. For the Republika of Srpska (i) Increased land productivity on 7% of the territory by 2030; (b) area of forests and forest lands to reach 53% by 2030; (c) increased productivity of forests and forest lands to 5.50% of total territory by 2030; (d) increased productivity of agricultural land to 1.50% of the total territory by 2030; (e) soil erosion remains at zero level until 2030; (f) increased percentage of protected areas in the Republic of Srpska by 2030; (g) reduction of mined areas for 25% compared to the total mined area; and (h) rehabilitation of fire-affected sites. In terms of Brcko district (a) increase of afforested areas by 2030; (b) increase productivity of agricultural land through measures to combat drought and floods by 2030; and (c) decrease of mined areas (80% by 2030). The NBSAP calls for (i) integration of biological diversity values into development strategies and strategic plans, with an emphasis on rural development; (ii) reduce negative and increase positive incentives and subsidies in order to conserve biological diversity; (c) . prepare and implement strategies for development of aquaculture and ranching of commercially significant fish species (for water ecosystems that are not habitats for rare and endemic species; (d) certification of all state-owned forests in BiH; (e) establish and develop a system for sustainable agricultural production, especially organic and integral production, and conservation and breeding of indigenous species ; (f) map and urgently protect the specific biological diversity of BiH (canyon, mountain, alpine and wetland ecosystems, karst fields and alluvial plains) in compliance with the applicable spatial planning documents; (g) complete the inventory of flora, fauna and fungi in BiH; (ii) ecosystems and types of habitats in BiH; (h) map and evaluate the benefits from forest, agricultural and water ecosystems, and strengthen the environmental permit mechanism and supervisory inspection within protected areas, areas of special interest and areas from the Natura 2000 ecological network plan; and (i) prepare and adopt the strategy for mobilization of financial resources for conservation of biological diversity. Without the project, it is likely that extraction and habitat and land degradation would continue unabated, and these habitats would continue to decline. The skills, capacities and competencies among local administrators and managers, ecosystem-related knowledge and skills and strategic skills development in relation to the ecosystems will remain low. Similarly, without integrated and comprehensive responses to deal with climate risks, there will be limited actions to restore impacted habitats, conserve important species and improve productivity of land, conduct timely monitoring and assessment of vulnerable ecosystems and thus prevent the provision of enhanced protection for impacted ecosystems with key stakeholder participation.

Other relevant baseline investments and projects include: *GEF/World Bank – ‘Sustainable Forest and Landscape Management Project’ (2014-2019)* to build capacity of forestry sector stakeholders and to demonstrate approaches for sustainable forest and land management through integrated management of vulnerable forest, scrub and pasture landscapes that will a core tenet of the GEF 8 project. The GEF/UNEP *‘Achieving Biodiversity Conservation through Creation, Effective Management and Spatial Designation of Protected Areas and Capacity Building Project’ (2022-2027)* will provide lessons on practical measures to improve protected area management effectiveness, adaptation and resilience solutions for target species and ecosystems, restoration and rehabilitation of key ecosystems, sustainable tourism products and services and promotion of products and services. The GEF/UNEP *‘Creating an Enabling Environment to support LDN Target Implementation through Strengthened Capacities and Monitoring and Reporting Systems project’ (2022-2024)* will provide valuable learning relating to capacity for LDN monitoring, land cover, land productivity and carbon stocks, SLM and SFM practice. In particular, this project brings lessons in terms of integration of LDN targets into existing land-use planning that can be applied to the GEF 8 target landscapes. Specifically, the project will incorporate the lessons learned and best practices from these projects to identify and support communities to strengthen biodiversity conservation, improve sustainable land use, and promote nature-based initiatives and biodiversity-friendly business enterprises to address biodiversity and ecosystem loss and land degradation.

Key Barrier to the effective management of terrestrial ecosystems

Barrier 1: Complex administrative structures constrain the implementation of comprehensive mechanisms for improving natural resources management for economic development.

The complex administrative organization of the country poses a significant challenge to achieving coordination and effectiveness in the institutions responsible for nature and land conservation and biodiversity protection in BiH. This is primarily due to the highly decentralized political and administrative structure of the country, which includes the following administrative levels: state level, two entities (FBiH and RS) and Brčko District (BD). At the state level, there is no centralized institution dedicated to environmental matters, including biodiversity or land conservation. The Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (MoFTER) primarily focuses on aligning and coordinating the plans of environmental and biodiversity authorities in the Entities and Brčko District (BD) and managing the country's international obligations. The constitutional responsibilities for natural resources management, environmental protection and nature conservation are vested in the Entities. Within the FBiH, the Federal Ministry of Environment and Tourism assumes responsibility for formulating strategies and policies, as well as addressing air protection, water and soil conservation, and environmental standards. The Federal Ministry of Physical Planning and the Ministry of Agriculture, Water Management and Forestry of FBiH also have certain environmental competencies, such as spatial planning for protected areas, forests, land and water protection. In the Republika Srpska (RS), the Ministry for Spatial Planning, Construction, and Ecology of the RS is assigned with the task of environmental protection encompassing air, water, and waste management. The Ministry of Agriculture, Forestry, and Water Management of the RS deals with related land, forest and water related jurisdictions, strategies, policies, standards, and regulations. The RS hosts the sole government expert institution dedicated to nature conservation in the country, namely the Institute for the Protection of Cultural, Historical, and Natural Heritage of the RS. This institution operates under the Ministry of Education and focuses exclusively on nature conservation within RS. To achieve a transformative shift towards an integrated and coordinated approach to the planning and management of terrestrial ecosystems, effective coordination and collaboration among stakeholders is crucial. This entails ensuring that economic, environmental, and administrative institutions plan and manage their activities in an integrated manner, considering the social, economic, environmental, and developmental factors that shape the ecology and functioning of these interconnected ecosystems. Specifically, in the Federation of Bosnia and Herzegovina (FBiH), the Ministry of Environment and Tourism and the Ministry of Agriculture, Forestry, and Water Management, along with their counterparts in the Republika Srpska (RS), the Ministry of Spatial Planning, Construction, and Ecology and the Ministry of Agriculture, Forestry, and Water Management, will play key roles in ensuring that agriculture, forestry, and terrestrial conservation activities are planned and managed in line with sound ecological practices. Importantly, collaboration among state, entities with local administrative levels such as cantons, and municipalities is essential so that can serve as critical partners in ensuring that economic and developmental activities are planned and coordinated with other key stakeholders, facilitating a complementary and harmonized approach to conservation efforts.

Barrier 2: Limited financial and human resources for the implementation of biodiversity conservation and LDN Targets

BiH's attempts at ecosystem and land conservation is hampered by a lack of human resources, capacity and funding for that purpose. Addressing urgent challenges to habitat deterioration, deforestation, land degradation and the protection of endangered species becomes difficult without sufficient financing. Another significant obstacle to efficient ecosystem and land management is the lack of technically qualified workers. Currently, BiH lacks comprehensive guidelines for rehabilitating degraded land and best practices for achieving land degradation neutrality, as outlined in their LDN Reports. In the Federation of BiH, the implementation of strategic documents and legal acts is further complicated by the presence of ten cantons, each with its own responsibilities for land management, environmental matters, and spatial planning. The cooperation between relevant ministries is not at a satisfactory level, and there is a lack of harmonization among the strategies of various sectors.

Barrier 3: Limited harmonization of environmental legislation with international frameworks

In order to align with the international climate framework, and effectively implement it, BiH must reaffirm its political commitment and establish the required administrative capacities at all levels of government. It is crucial for the country to ensure a consistent and harmonized approach to strategic planning countrywide. While there is some alignment between the horizontal environmental legislation and the international framework, it is limited in scope. The sub-sector strategies and legislative framework across various levels of government lack harmonization, resulting in uneven regulation of the environment sector throughout BiH. To address this, the environment approximation strategy needs to be fully harmonized and implemented, necessitating a comprehensive integrated action plan. BiH should enhance its legal framework, strengthen administrative capacity and monitoring systems, and improve inter-institutional coordination in line with the Green Agenda for the Western Balkans and the goal of achieving climate neutrality by 2050. The provisions of environmental impact assessment (EIA) and strategic environmental assessment (SEA) are not fully aligned across all levels of government and relevant sectors.

Barrier 4: Lack of spatial planning for infrastructure development, urbanization, and land conversion results in fragmentation of terrestrial ecosystems

Natural habitats are frequently lost or deteriorated as a result of infrastructure development, urbanization, and land change. Roads, structures, agricultural fields, and industrial zones need the clearing or fragmentation of forests, wetlands, and other important ecosystems. The natural connection and operation of ecosystems are thus disrupted by this habitat loss. To continue operating and being resilient, terrestrial ecosystems depend on intricate biological processes like nutrient cycling, pollination, connectivity and stability, however, spatial layout and fragmentation impede these processes on account of a lack of spatial planning approaches. Landscape-scale conservation planning and implementation are lacking further accelerating fragmentation. The absence of preservation and restoration of interconnected habitats is lacking resulting in limited viability for large-scale conservation initiatives like the creation of protected areas and ecological corridors. As a result, conservation initiatives targeted at sustaining healthy populations, encouraging genetic variety, and allowing species movement over the landscape are less effective.

Barrier 5: Inadequate awareness and knowledge exchange to conserve natural resources and achieve environmentally sensitive development of terrestrial ecosystems.

The global importance of the terrestrial ecosystem in BiH, along with the threats it faces and the diverse range of ecosystem services it provides, remains largely underappreciated by majority of the people. Currently, there is limited communication aimed at raising awareness about the benefits and necessity of conserving globally threatened and endemic species, managing ecosystems, sustainable use of land and water and reducing threats. Furthermore, there is limited understanding of how men and women utilize ecosystem and land resources differently due to gendered roles and responsibilities. The changes in natural resources also impact workloads and relationships, but these effects are not widely comprehended. The lack of awareness regarding these risks leads to minimal investment in the conservation and management of these ecosystems. The underlying challenge is the absence of suitable and sustainable solutions for effective management of terrestrial ecosystems and their productive resources, including inadequate involvement of the private sector. The lack of regular review processes that engage community organizations, non-governmental and environmental organizations, and research agencies further limits the opportunities for replicating and scaling up best practices.

System drivers, future trends, development scenarios and transformative actions:

The description of the problems, threats and barriers related to conservation and sustainable use of coastal, marine and terrestrial ecosystems is outlined in previous sections of the PIF. It must be specifically noted the management of these threats and barriers can be constrained by national policies and complex administrative structures that operate in the country and challenges to promotion of an integrated and coordinated approach to the planning and management of terrestrial (as well as marine and coastal) ecosystems. At the same time, development and administrative entities do not plan and manage their activities in an integrated and harmonized manner. Similarly, canton and municipal government undertake development activities with little consideration of ecology, ecosystems and environmental principles. Given the above baseline factors, the probability of further loss and degradation of biodiversity and ecological services forecast across the country can be considered to be **high**, particularly in urban and semi urban areas, where there is potential and demand for new infrastructure and agriculture. Based on the above, different baseline/external drivers are being presented below with and without GEF intervention, though generalizations pose challenges due to gaps in comparable baseline data across the two target areas that will have to be further elaborated further during the PPG stage. In the effort to assess the project's robustness, the project team has developed simple narratives that explore potential changes in key drivers beyond the project's scope. These scenarios are not centred on varying degrees of integrated landscape management or biodiversity mainstreaming, which the project already addresses. Instead, they focus on external factors. Three key narrative scenarios are outlined below, which are now supporting the proposed project in better assessing its resilience to external factors and uncertainties:

External Driver 1 – Growing economic demands and needs: The general outlook is that resource consumption (including use of land and forest resources) is expected to continue, raising concerns about primary and secondary raw materials posing a challenge to economies that are dependent on the export of materials to international markets. The value of timber and timber products from BiH was valued at around USD 1 billion in 2021^[15]¹⁶. However, there is uncertainty to what extent the country recognizes the need for sustainability that would be dependent on improving resource efficiency, consumption patterns and production policies that promote stronger production policies and reduced unsustainable resource use. Further, changes in lifestyles and affluence can contribute significantly for increased demand for land for

infrastructure and export-oriented agriculture (estimated at around USD 0.5 billion in 2021^[16]^[17]) can be expected to increase compromised by the combined effects of climate change and soil degradation. Such expansion is likely to occur at the expense of natural ecosystems (including forests) and biodiversity hotspots. The demand for water is also expected to rise, assuming current policies and socio-economic trends that could also impact BiH. As a consequence pressure on ecosystems may escalate, causing higher biodiversity loss and ecological service degradation. The project's resilience would be tested by this external driver, requiring adaptation to unforeseen developmental impacts. However, this approach also offers opportunities to ensure that development is undertaken in an ecologically and socially acceptable manner that addresses issues related to sustainability and maintenance of the ecological base on which development can take place. The project through the work done by Component 1 (enabling framework that strengthens measures to safeguard biodiversity and combat land degradation), Component 2 (improving ecological biological and social benefits) through improved policies, regulations and practices for creation of OECMs and Component 3 (improved SLM practices) will add value in future economic development investments.

External Driver 2 - Climate Crisis: This scenario envisions a future where climate change effects intensify beyond current projections. Extreme weather events can become more severe. The Earth is experiencing an exceptionally rapid loss of biodiversity, and more species are threatened with extinction now than at any other point in human history. Anthropogenic activities have unleashed a mass extinction. Climate change, loss of natural capital and biodiversity, and pollution are highly interconnected and mutually reinforcing. For example, climate change and growing pollution are likely to further increase the loss of natural capital and biodiversity; in turn, the loss of natural capital and related carbon stocks increases greenhouse gas emissions leading to climate change. While tipping points are fundamentally uncertain, environmental degradation worldwide creates social and economic impacts and contributes to increasing inequalities. The project's capacity to withstand and respond to heightened climate impacts becomes critical. Adaptation strategies for more dire climate-related challenges will need to be explored. However, the project due to its nature of interventions in the areas of biodiversity and governance will produce results that enhance the resilience of ecosystems to climate change but also provide the BiH with mechanisms that can be utilized and provide support even within the context of severe Climate impacts. In this regard, Components 2 and 3 are aimed at identification of specific management measures to ensure that activities are environmentally sustainable and supporting best practices managed for their climate risks, including protection and management of critical ecosystems (including forests and production landscapes) to help increase the overall resistance of the natural systems to climate risks in the target areas compared to business as usual. At PPG stage, further assessment will be undertaken of potential future climate projections and risks to help design management intervention to manage and mitigate these risks.

External Driver 3 – Increasing demands for harmonization of environmental legislation and practice with international frameworks: In this scenario, international policies and collaborations prioritize biodiversity conservation that require the harmonization with BiH legal frameworks and strengthening of its capacity and monitoring systems. Global agreements and partnerships result in increased funding and support for conservation efforts. To this end, project Interventions that aligned with such initiatives, including to draft a SEA in keeping with BiH's Environment Strategy and Action Plan 2030+, enhances its impact, but also necessitates careful coordination to leverage external resources effectively. It also includes the development of protocols for soil carbon content monitoring, decision support system, tools and capacity for addressing land degradation (Component 3). The project is already aligned with the current international and national frameworks (please see respective section on the PIF – Table 2) and more work will be done during the PPG stage to catch up on the developments in the biodiversity arena and generate and maintain specific linkages.

Based on the above-referenced plausible changes in key drivers, which are outside the scope/control of the project, we suggest the following possible scenarios, with the aim to defining the desired scope of the project.

Scenario 1 - Business-as-Usual i.e. without the project intervention: This scenario envisions a slower transition characterized by business-as-usual practices. Terrestrial (and coastal and marine ecosystems) and their attendant biodiversity will largely continue to be lost (on account of the growing economic demands and needs and increased impacts of climate change) and remain largely confined to the most inaccessible areas, within the legally defined protected areas and remote locations. Key species, with narrow niche requirements are likely to be lost or under severe strain. Similarly, loss of productive forest and land resources will likely create food security and food deficits for the most vulnerable rural communities. Conservation of species and ecosystems takes a back seat and minimal priority is given by the government, private sector and communities to safeguarding species and ecosystems. Adaptation cannot buffer impacts and climate change will likely disrupt social-ecological systems in more vulnerable communities.

Scenario 2 - Project-Based reality i.e. with project intervention: Acceptable transformative changes brought by interventions that focus on a broader inter-sectoral and integrated planning approach across would likely be recognized

leading to reduced fragmentation and less diffused impacts of interventions. In this situation, terrestrial ecosystems may likely be conserved, not only with protected areas, but in intervening natural habitats. Biodiversity and ecosystem service losses may be reduced. Remaining forests outside protected areas would likely benefit from conservation actions, including promotion of efforts to protect HCVMs through enhanced and expanded FSC certification. Production landscapes may be improved and less likely to be degraded on account of enhanced community actions to promote improved and more sustainable forestry, agriculture, pastoral and other economic activities opportunities. Climate change risk will be reduced or better managed.

Scenario 3 – In an ‘ideal world’ scenario, i.e. the theoretical optimum, the project catalyses a rapid and comprehensive shift towards a full integrated and inclusive planning and management of terrestrial, coastal, and marine ecosystems. This transformation would likely address the full threats to biodiversity and ecosystems, including those intensified by climate change. It hinges on acknowledging the intricate interplay between geological, geomorphological, and climatic factors within the landscape. It also calls for an enabling policy, regulatory, financial and institutional framework that integrates conservation outcomes into local and municipal planning and budget allocation, while promoting blue/green economic pathways, sustainable land management and landscape connectivity.

Scenario 2 will be the most likely scenario. It would promote a gradual shift to innovative approaches to integrated and area-based conservation, that collectively include protected areas, forest reserves, HCVMs, KBAs and intervening production areas (that are under agriculture, forest production and pastoralism) that are commensurate with sound ecological principles. It would need a collective and coordinated approach to economic development based on sound ecological principles. Stakeholder engagement, including of women and marginalized groups, the private sector, public sector forest and agricultural entities and NGOs needs to be substantially enhanced through promotion of the voice, participation and empowerment of communities by ensuring that they have access to information, gender sensitization and have equal representation in technical and decision-making arrangements. Potential opportunities include community involvement in project governance and staffing, targeted capacity building and support from extension services so that they are ‘central’ to change. It would be also critical to restore and protect degraded ecosystems and production areas, build habitat connectivity and increase the health and quality of the landscape, along with monitoring that informs adaptive management and development of sustainable financing for these priority ecosystems. To achieve the above, the project will seek to work with key stakeholders, in particular government institutions, such as the canton and municipal governments and local community entities to promote responsibility for local economic planning and decision-making, budgetary allocations and investment. The basic assumptions underlying this feasibility is the potential to reverse, or at least, not accelerate the ongoing process of environmental degradation in the four target landscapes, so as to serve as a model for replication. It is also premised on the commitment of the key stakeholders to actions in achieving this overall objective through the potential and sustainable uses of available forest, pastoral and agricultural resources. Most importantly, it is also dependent on the commitment of institutions (public and private) collective agreement to an integrated and inclusive approach to planning and management of landscapes within existing democratic governance structures with the participation of community organizations (farmers, pastoralists, forest dependents and other economic players) that take into active consideration the role of women, youth and ethnic minorities. Best management practices, new and innovative technologies for management of PAs, forests and OECMs, improved and sustainable production systems, and financial solutions are factors that would help catalyze change and bring about a more nature-positive development scenario decisions.

While scenario 2 depicts the most anticipated outcome of the project, scenario 3 is presented as an ideal case scenario, is what the project will look up to and aspire to achieve by enhanced design during PPG and by robust implementation. Nevertheless, the project will strive to approach scenario 3 as much as possible and, based on its overall purpose, the project's outputs are designed based on the following premises: (a) if policy, planning and regulatory incentives are in place and capacity is enhanced, then biodiversity restoration and conservation in the target landscapes will be more effective, contributing to developing a desired socio-economic status that is more resilient to increasingly frequent climate uncertainties, (b) If financial resources are forthcoming from public and private investments, then sustainability of interventions is achievable, and if the key stakeholders are willing to accept enhancement of the conservation estate, improve land productivity and nature-based economic development as an alternate approach and recognize the value in working together across sectors and individual interests then there will be adequate incentives for promoting conservation outcomes. In addition (c), expanding the value chain for forest, agricultural, pastoral and other economic products can support improved, sustainable and environmental-friendly use of land and nature's resources and services. During the PPG stage the project will work to incorporate robustly in its design exactly the augmentation of these above-mentioned dimensions.

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- [13] Bosnia and Herzegovina National Adaptation Plan – NAP, 2021 <https://unfccc.int/sites/default/files/resource/NAP-Bosnia-and-Herzegovina%20.pdf>
- [14] “Drought Conditions and Management Strategies in Bosnia and Herzegovina - Concise Country Report”, 2013,
- [15] Foreign trade chamber of Bosnia and Herzegovina 2022: Analysis of foreign trade exchange of the wood industry and forestry for 2021 and 2020
- [16] Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina 2022: Analysis of trade exchange of agricultural and food products for the period 2019-2021

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 GEF alternative scenario 2 above, thus, seeks to identify and take necessary actions to address this situation that will focus on the means to transform systems to achieve the project objective to support: ‘integrated management of multiple use landscapes to promote biodiversity conservation, improved land productivity and economic benefits to local communities.’ Since the economy of the four project landscapes is based on agriculture, forestry and related economic activities, the project’s vision is to make a transformational change in incorporating the value of nature into decision-making and using innovative nature-based solutions across landscape to achieve sustainable development and MEA goals. This approach would require recognition of the: (i) critical importance of PAs, HCVPs and KBAs in maintenance of ecosystem services on which sustainable economic development can be achieved and sustained; (ii) complexity of the geological, geomorphological and climatic reality of the landscape inter-relationships and the spatial dimensions in which these interactions take place in a connectivity context; (iii) importance of maintaining habitat connectivity for retaining biodiversity in fragmented landscapes, in particularly to ensure that intervening production areas are managed sustainability to enhance productivity gains and protect and manage the land resources on which this productivity is dependent on; (iv) importance of ecosystem goods and services for producers and society as a whole; and (v) engagement of protected area practitioners, forest managers, business operators and community groups) in collective and coordinated actions. As part of this effort, the project aims to promote sustainable agriculture, pastoral and forest systems, reduce impact of infrastructure development and thereby sustain activities that are vital for the local economy and economic development in large. The integration of biodiversity conservation, SLM and SFM principles in economic development planning in the four landscapes will contribute to the protection and restoration of ecosystems and the preservation of ecosystems, species and habitats. Introduction of nature-based forest, agriculture, pastoral and related business opportunities will help to reduce threats and demands on natural resources, enhance ecosystem services and improve local incomes. To achieve these goals, the project will ensure that economic and social development plans are undertaken in an integrated and coordinated manner that engages all sector to ensure that such development integrates biodiversity, climate risks, ecosystem services and local economy outcomes in a sustainable manner. Through this approach, the project will identify what is needed to build resilience of local communities, prevent further degradation of natural resources and ecosystems to buffer future climate risks associated with land productivity loss, erosion, flooding, drought and fire risks posed to these multiple-use ecosystems. Overall, on the long run, the intent is to catalyze work on innovative financial instruments that can be piloted to test their viability and thus promote some level of financial sustainability to continue to buttress against threats.

The Theory of Change is presented in Figure 1. The basic assumptions underlying the project’s feasibility is indicative of the potential to reverse, or at least, not accelerate the ongoing process of environmental degradation in the target landscapes. It is also premised on the commitment of the key stakeholders to actions in achieving this overall objective through the potential and sustainable uses of available land, forest and productive economic resources. Most importantly, it is also dependent on the commitment of institutions (public and private) collective agreement to an integrated and inclusive approach to planning and management of landscapes within existing democratic governance structures (e.g., at canton, municipal or local government level), with the participation of community organizations (farmers, forest dependents, pastoralists and other economic users) that take into active consideration the role of women, youth and

ethnic minorities. Best management practices, new and innovative technologies, improved and sustainable production systems, and financial solutions are factors that will help catalyze change and bring about a more nature-positive development scenario. The project's logical pathways are summarized below:

Pathway 1: This logical pathway sets a route to arrive at an agreed 'enabling framework for action' under which functional governance, policies, institutions and regulations can purposefully and strategically be managed to promote an integrated and inclusive approach to planning and management of multiple use landscapes. It proposes that if mutually agreed understanding and co-constructed strategies for inter-sectoral collaboration is established in target areas through collective decision-making processes, then effective bridges between traditional and sector-specific approaches can lead to collective actions that will be built, leading to innovations and new approaches that recognize the linkages between ecological, social and economic dimensions that operate in these areas.

Pathway 2: This pathway advocates that if the assessment of financing needs to develop appropriate financial solutions to sustain investments in multiple use landscapes with active participation the private sector, as a means to supplement the limited financing available through the public sector. It is premised on working with canton and municipal entities and private forest and economic development entities to promote new models of private and public investments at the local level.

Pathway 3: Will be dependent on the demonstration of appropriate and validated land use practices and innovative solutions to productive resource use that will based on the premise that if local communities receive adequate benefits from environmentally positive practices, that this will result in behavioral changes that encourage sustainable land and natural resource uses.

Pathway 4: This pathway proposes that if the knowledge, data and information collected by this project is duly captured and made publicly available, with dedicated webpages and access to information, fa huge contribution to promoting knowledge and adequate sharing of benefits from the use of coastal and marine resources will have been made as well.

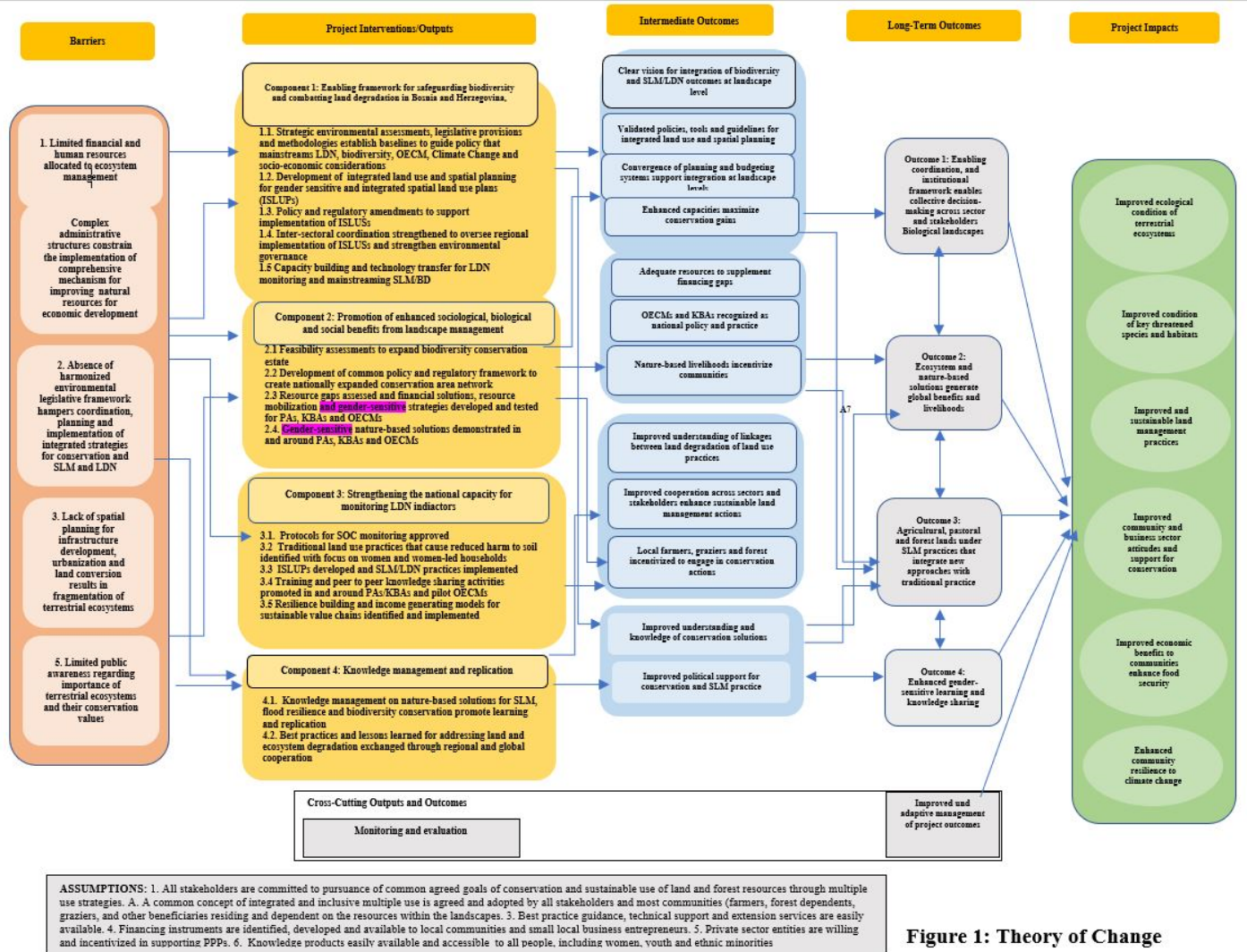


Figure 1: Theory of Change

Project Components

Based on the Theory of Change (above), the proposed alternative scenario involves the following Components, Outcomes and Outputs:

Component 1: Enabling framework strengthened for safeguarding biodiversity and combating land degradation in Bosnia and Herzegovina

The promotion of an inclusive and integrated approach to natural resources management requires the strengthening of institutional frameworks to enable the participation of all relevant public, NGOs, community and private stakeholders in order to ensure that strategies for conservation of biodiversity and sustainable land management are developed in consonance with sustainable and environmentally friendly economic development. A common framework will help integrate protected areas, biodiversity rich habitats and ecosystems and the intervening productive landscapes that are used for agriculture, animal husbandry, forestry and other community uses. The strengthening of existing multi-level governance frameworks and capacities for management of the landscapes will enable the convergence of planning and human and financial resources among the different development sectors. Strategic environmental assessments will be applied to facilitate the generation of site-specific participatory and gender sensitive integrated spatial land use strategies (ISLUS) that would focus on interventions that mainstream LDN, SLM, SFM and biodiversity conservation principles, generate critical environmental services and promote sustainable and productive use of land and natural resources and livelihoods in tandem. This Component has five Outputs:

Output 1.1: Strategic environmental assessment (SEA), legislative provisions and methodologies established with clear environmental and social baselines to guide policy that mainstreams LDN, biodiversity conservation, OECM, Climate Change and socio-economic considerations.

Interventions to draft a SEA (SEA is an essential part of BiH's new Environment Strategy and Action Plan 2030+), including guidelines for legislative and policy making, and development of a diagnostic assessment of the baseline for the current situation in BiH, with special emphasis on the landscapes will be addressed under this component. The intent is to identify and assess the impacts of land degradation, climate risks and other anthropogenic factors on sensitive conservation and natural forest areas and on the economic potentials of community use productive areas. The establishment of a baseline for the target landscapes will be undertaken through an understanding of the potentially affected environment and social systems from existing productive activities (e.g., agriculture, animal-husbandry, forestry and other economic uses), on terrestrial and aquatic biodiversity and ecosystems, their resilience and vulnerability and their significance for the economic well-being of resource dependents, and the regional economy at large. The end result, would be a document that: (i) describes the landscape environment, including ecologically sensitive hot-spots, biodiversity resources and stocks; (ii) livelihood and dependencies, including identification of local resources and the links between livelihoods and the condition of its land, forest and other natural resources; (iii) direct and indirect impacts of the unsustainable resource use and the productivity of the soil and water and on biodiversity and ecosystems; (iv) direct and indirect impacts of plans, policies, legislation, regulation and decision-making processes on natural and human-use landscape elements; etc. Based on the above, the analysis will identify deficiencies in decision-making and planning processes that can be addressed through improved governance and coordination in collective decision-making. This will lead to identification of alternatives or set of development options that are available and the environmental advantages and disadvantages of the different alternatives that can bring about positive change. The aim to look for alternative options that can collectively help strengthen the natural resource base for improving productivity, provide equitable conditions for all and at the same time protect and enhance the environment.

Output 1.2: Outcome of SEA and assessments integrated in land use and spatial planning to develop practical gender sensitive integrated spatial land use strategies (ISLUS) for four pilot landscapes that mainstreams SLM, LDN, CC and biodiversity conservation principles.

Building on the outcome of Output 1.1, this Output will facilitate a multi-sectoral, integrated natural resource management planning process that will result in the development of gender-sensitive and participatory integrated spatial land-use strategies (ISLUS) for the target landscapes. Within, the landscapes, the ISLUS will focus on the following strategies for: (a) improved protected area management practices, (b) improved sustainable forest management, biodiversity conservation and SLM outcomes in forest management planning, particularly in areas adjacent to PAs and forest corridors; (b) sustainably managed practices on agricultural, pastoral and forestry lands and watercourses that reduce risks and damage from floods, landslides, torrents, fires and droughts; (c) sustainable land management practices in production landscapes and properly managed permanent vegetation cover that promote nitrogen fixation processes strongly contributing to combating soil erosion and maintaining soil health and fertility; (d) environmentally-friendly rural infrastructure developments that stabilize soils, watercourses and vulnerable lands and (e) traditional land-use practices for croplands and nature-positive livelihood opportunities. The ISLUS will be based on the following key principles: (a) treat underlying causes (not just symptoms); (b) dependent on scientific evidence; (c) adoption of an integrated approach (multi-sector, multi-stakeholder and multi-scale) to land and forest management; (d) ensure a holistic planning and implementation approach; (e) seek innovative low-cost solutions options and co-financing; (f) ensure that institutional arrangements are in place for coordination of effective plan implementation; (g) combine bottom-up and top-down processes; (h) incorporate traditional knowledge; (i) reflect on upstream–downstream linkages and compensation of off-site effects.; (j) ensure a gender balance in decision-making; (k) Include capacity development at all levels and (l) support a flexible, adaptive long-term approach to planning and financing. The ISLUPs intent to balance at a landscape scale, the economic, social, gender, cultural and environmental objectives, to achieve a mosaic of land uses across the landscape such that land is used for the purposes to which it is best suited and considers climate change as a driver of land degradation^{[11]¹⁸}. The ISLUPs will integrate biodiversity conservation, enhance water retention capacity, improve soil and forest productivity, and overall ensure the environmental conditions required to support and safeguard sustainable livelihoods for local population and stakeholders.

Output 1.3: Policy and regulatory amendments and Decision Support System (DSS) to support implementation of the ISLUPs that mainstream KBAs, OECMs and LDN compliant SLM measures developed and approved.

While, BiH has adopted several effective laws and strategic plans (e.g., protected area, nature protection, forest land, agriculture, spatial planning, economic development, etc.) to support sustainable land use and natural resource

management, there is no single legislative mechanism to implement an ISLUP plans, and thus its implementation will likely have to be undertaken through one or more of the existing sector legislation that operates in the region. However, there are overlaps and gaps in institutional legislation and mandates, in addition to existing ones that can act as impediments to effectively implement an integrated plan. A policy and legislative review will assess options for implementing the ISLUPs, given the need to coordinate across many sectors and stakeholder and legislative and policy tools. The analysis will help identify, the best option(s) for implementation of the ISLUPs, either through tweaking one or more of the existing sector legislation and policy that is best suited for the purpose or making recommendations for creating new ones.

Output 1.4: Inter-sectoral coordination strengthened to oversee regional implementation of ISLUPs and strengthened environmental governance.

Under this Output, the project will support the enhancement of existing multi-stakeholder platforms at the canton and/or municipal levels for ensuring coordination, convergence and synergy across the public and private sector development planning and budgetary processes to facilitate integrated and coordinated development and economic planning. The platforms will bring together a range of stakeholders across government, industry, NGOs, private sector and community into a common platform for dialogue on the biodiversity and natural resource assets and approaches for their long-term management and sustainable economic use that would build lessons and experiences for replication and scaling up beyond the project-supported landscapes. At PPG stage an assessment will be made of the best possible options to ensure coordination/convergence at the landscape level, using existing institutional coordination structures to the extent feasible to also ensure synergy with the other ongoing development projects and processes in the area. It will also identify at PPG stage, appropriate community/municipal systems/institutions to coordinate on-the-ground development investments.

Output 1.5 Roll out of gender focused capacity building program for government officers, extension staff, community groups, NGOs, and technology transfer and equipment for LDN monitoring and mainstreaming of SLM/BD

Informed by ISLUP planning (Output 1.2), policy and regulatory review (Output 1.3) and SLM/BD mainstreaming (Component 2 and 3), a targeted multi-sectoral institutional capacity needs assessment in science and technology capacity transfer across government, sub-government and private sector is required. From the needs assessment the existing constraints for promulgation and implementation of ISLUPs and related mainstreaming actions will be identified and targeted collaborative interventions of science and technology transfer will be identified at key leverage points. Tasks will likely involve capacity building in areas such as spatial planning, PA and forest management planning, SLM and SFM, livelihood improvements, climate adaptation planning at the sectoral, national, canton and municipality levels, local-scale participatory SLM planning, climate change projection and impact assessment and economic assessment of resources. Moreover, selected through these activities, the development of a cadre of trainers through a Training-of-Trainer program will include national entities and canton/municipal level trainers. The successful elements of the approach and upscaling methodologies will be disseminated, with targeted capacity building in challenged areas, as well as across-government in relevant Ministries. Indicative activities under this output will include: (i) national capacity needs assessment to specify existing gaps in capacity cross government, non-government and private sector and propose targeted collaborative interventions of capacity transfer in science and technology. (ii) based on the assessment above, the development and undertaking of a comprehensive capacity building partnerships in identified scientific approaches, innovation, technology transfer, sustainable practices and spatial planning, SLM, SFM and climate risk management processes, including in particular targeted training to build capacity of communities/municipalities, government and land owners in agriculture, forestry, animal-husbandry and rural infrastructure to implement SLM; (iii) institutionalization of the training within an appropriate institution (to be identified at PPG stage) to develop and sustain institutional human capital on spatial planning, SLM and SFM, as well as to support higher-level education programs and continuous professional development, among others that will be initiated by the project; and (iv) support on-the-job training to update and improve technical knowledge and professional qualifications of staff in key sectors and fields, in particular for key decision makers and technical staff.

Component 2: Promotion of enhanced ecological, biological and social benefits from landscape management

This Component will support an integral component of the ISLUPs, namely the improved management effectiveness of ecosystems, including protected areas, key biodiversity areas (KBAs) and assess the potential for introduction of the concept of Other Effective Area-based Conservation Measures (OECMs) as part of a broader national effort to manage and protect BiH's biodiversity and critical ecosystems and support the government's international obligations. The OECM concept will be initially tested within the framework of the landscape approach promoted through ISLUPs, to closely integrate different conservation outcomes within a multiple use landscape. The intent of this Component is to mainstream biodiversity conservation objectives within a broader social and economic development landscape complex

that aims to minimize impacts; identify and address the conflicts and drivers to achieve conservation goals; promote a diverse set of incentives, that when used in combination, can be applied to bring a conservation focus on the landscape level, rather than look at PAs and KBAs in isolation of influencing socio-economic factors. This Component will be achieved through four outputs:

Output 2.1: Feasibility assessment to expand the biodiversity conservation estate through re-assessing KBAs and introduction of other effective area-based conservation measures (OECM)

As part of a holistic and comprehensive effort to support its conservation agenda, the project will seek to introduce the concept of Other Effective Area-based Conservation Measures (OECMs) as part of a larger international and national effort to improve the management of biological resources. In the context of BiH, it would seek to introduce, and then promote OECMs through a range of institutional and management mechanisms that are commensurate with the socio-cultural and political structures that operate in the country. The intent through this approach is to assess the feasibility and interests for introduction of OECMs to sites outside protected areas that can deliver effective and long-term in situ conservation of biodiversity, support associated ecosystem functions and services, and promote cultural, spiritual, socio-economic and other locally relevant values. OECMs will provide a flexible approach that can be governed by a variety of rights holders and actors, including local communities, government institutions, as well as sectoral actors, private organizations, and individuals. It will introduce a new model for conservation for BiH that can foster inclusive approaches and equitably govern land, forests and water resources to achieve long-term conservation, as well as social, economic, and cultural wellbeing. To facilitate this process, the project will promote in-country dialogue to agree on the introduction of the OECM concept to BiH. This concept will be piloted within the ISLUPs for the demonstration landscapes, where OECMs will be identified and managed (using prevailing management arrangements or introduction of other means such as development of management prescriptions/plans for the individual areas) to test, validate and **promote the replication of this approach.**

Output 2.2. Development of a common policy and regulatory framework for OECMs to create a nationally expanded conservation area network to improve conservation outcomes and enhance habitat connectivity.

The results from pilot of the OECM concept within the target landscapes will serve as the basis for developing national policy and regulatory framework (to extent feasible using existing institutional and regulatory frameworks or alternate management systems/practices) for integration of OECMs within the broader conservation estate. It will prepare a manual/resource book that defines mandatory criteria and guidelines and procedures/protocols for identifying OECMs, finalize broad categories of OECMs that can be reported for the country and introduce appropriate institutional/management mechanisms to recognize the concept within BiH. The manual /resource book would also provide guidance on how each of the areas are governed and managed, either within existing governance norms the currently operate in these areas as well as recommendations for management of these areas to achieve positive and sustained long-term biodiversity conservation or sustainable outcomes. It will also define approaches to integrate OECMs within the broader national biodiversity conservation agendas to achieve long-term sustained in-situ conservation of biodiversity, ecosystem services or other sustainable natural resources outcomes.

Output 2.3: Resource gap assessed, financial solutions, resource mobilisation and **gender-sensitive strategies** developed and tested for ensuring sustainability of 5 PAs, KBAs and OECMs in cooperation with private sector.

Under this output, the project will undertake resource gap assessment at the landscape levels. The gap assessment will define biodiversity goals and targets that are aligned to the new NBSAP. This will be backed by assessment of relevant institutional structures, processes and ability for mobilizing new resources. Output 2.3 will identify appropriate and innovative financial instruments and their implementation mechanisms for the project landscapes that could be applied at the local canton or municipality levels, to ensure that there is a clear mandate on biodiversity and a demonstrable role in biodiversity finance at these levels. Sustainability of such initiatives will be based on the capacity of the respective canton and municipalities' potential to mobilize resources, potential for private sector involvement, and availability of mechanisms to ensure accountability and transparency. This outcome will assist in supporting the implementation of key elements of the **gender-sensitive** conservation plans to demonstrate scalable financial solutions for implementation of priority conservation action. **Special efforts will be made to identify specific financial solutions and resource mobilization strategies to promote business and livelihood for women, youth and disadvantaged groups so as to ensure that they share in the benefits and participate in decision-making and have access to financial resources.** Screening and prioritisation of finance solutions and most suited finance solutions will be chosen for implementation in consultation with the relevant institutions.

Output 2.4: **Gender-sensitive** nature-based solutions demonstrated in and around KBAs and OECMs in collaboration with farmers, pastoralists, entrepreneurs, **women** and private owners to incentivize and enhance support for conservation and resilient livelihoods.

Building on the results of Output 2.3, this Output is aimed at supporting nature-positive improvements within PAs, KBAs and OECMs using financial instruments (particularly those developed under Output 2.3). A few options will be evaluated, including innovation in new conservation management actions and diversification of community livelihoods to support the emergence of new business opportunities (e.g., sustainable agriculture, sustainable forestry, ecotourism, etc.), organic farming, NTFP and land and natural resource-based enterprises, forest-based livelihoods, particularly within KBAs, OECMs and buffer zones of PAs to build community support for conservation. To ensure that biological and other risks of selected value chains are managed, an assessment will be undertaken for each proposed enterprise, including value chain feasibility, supply and demand, availability of raw materials and the feasibility of the intermediary processes, marketing and linkages with service providers, as well as their environmental and social impacts. Capacity building and skills development for a selected number of small-scale community enterprises will support this effort. The feasibility of these enterprises, the interest of the community, capacity needs and availability of service providers will be assessed during the PPG stage and a few value chains identified and tested under the project. The intent of this Output is to introduce sustainable low impact nature-positive livelihood activities based on assessment of their economic feasibility. A strong focus will be given to women, unemployed persons and youth as drivers of change and community participation in development, with the aim of strengthening their morale and leadership role. Sustainable financing mechanisms to livelihoods aligned with results of the analysis done under Output 2.3 will be established, and in particular those that benefit women, youth and disadvantaged groups. These may include blended financing solutions supported via private sector (e.g., by working with agricultural and forest businesses, food retailers or processors, tourism operators and hoteliers, etc.), training, capacity development and market/value chain assessments to support community business development. The identification of specific business opportunities for women, youth and vulnerable groups, will ensure that they are not left out of the benefits. This would specifically help in reducing the burden of work on women and improving their livelihood opportunities through improved access to financial resources and services. Training and extension services with focus on promoting nature-based solutions with the aim of increasing profitability and creating jobs (particularly for women and youth) focusing on value-added marketable products from sustainable agriculture, forestry and agroforestry. Activities under this Output will be carried out in a coordinated approach with key public and private entities. The project will also provide technical training to rural communities' groups, and relevant partners so they have the relevant skills and knowledge and the appropriate procedures and processes in place to implement these activities, including support for feasibility studies, extension, marketing and demonstration that can have potential for scaling up and replication. The value chain analysis will require the mapping of the market potential of the product/service, customer requirements and the challenges faced by marketers/customers, and viability, including cost/benefit analysis.

Component 3: Strengthening the national capacity for monitoring LDN indicators.

An important aspect of the ISLUPs, would be to manage the interspaces and buffer zones between the biological components of the landscape, related to use of land and related resources. Addressing land degradation requires an in-depth overview of the nation's land resources where geology, landforms, soils, climate and vegetation are emphasized. Some of these elements remain, but many need update, thus new surveys may be needed to provide the baseline and monitoring mechanisms for land productivity dynamics, land use and SOC. In addition, the collation and application of remote sensing and other data on soils, climate change and biodiversity associated land degradation status will help assess land use changes and threats to inform priorities for achieving LDN and biological conservation. This will also require development and testing (in the demonstration landscapes under protocols for LDN monitoring). An appropriate information system structure once established will then help to populate over the remainder of the project and should be fully operational by the end of the project, inclusive of the establishment of appropriate mechanisms for long-term updating and maintenance of this system beyond the life of the GEF project. Additionally, this information system will be regularly reviewed, and types and levels of information entered modified to best support the needs of end users of the system i.e., the relevant stakeholders within BiH. The information system once established and populated should permit a detailed understanding of key established drivers and threats of LD, improved priority setting for interventions, informed decision-making on sectoral policies and investments, and easy access to information for decision makers and other users.

Output 3.1. Protocols for monitoring soil carbon content, Land productive dynamic and land use and practical guidelines developed and approved for promoting/ mainstreaming SLM/BD in the agriculture, forestry and pastoral sectors.

This Output will address the absence of protocols for SOC that will significantly contribute to identification of hot spots of land degradation in BiH, particularly because SOC monitoring and thus land degradation and practical guidelines can be used by sector, canton and municipal entities to plan, create and implement different SLM and biodiversity activities for integration in key sectors, in particular agriculture, pastoralism, forestry and rural infrastructure, which are the likely sectors to have the greatest impact on land degradation. It will support the following indicative activities: (i) reviews at national, entity and landscape levels of key sectors regarding existing data about land degradation with particular

attention to SOC (ii) practices and how they pertain to SLM and SFM to provide prioritized recommendations for strengthening each sectors capacity to support SLM and SFM. The Output might support but be not limited to the following: (a) Protocol: Protocol for SOC monitoring for assessing and monitoring LD and LDN based on global best practices including identification of existing institutional framework and existing data sources, frequency of SOC monitoring (b) Institutional support: Identification of key institutions that will leed development of SOC monitoring protocol and establishment of monitoring system. (c) Guidebooks: Guidebook for farmers on SLM, traditional forestry and climate-smart practices, and (d) establishment of inter-institutional cooperation and joint approach toward SOC protocol.

Output 3.2: Traditional land use practices for croplands, bare land forest and pasture lands that cause reduced harm to soil and that are increasing resilience against floods, torrents and drought are identified with a specific focus on women farmers and women-led households.

The Balkan region has diverse cultures and traditions, as a result, the region has many examples of traditional and interesting SLM technologies, as well as other interesting European technologies that are registered in the WOCAT database that could be applicable to BiH. Although, relatively small-scale land use practices, these include fish-bone technologies for erosion, torrents and surface landslide control, etc. Most of these traditional practices are gradually being lost due to the outward migration of people. The identification and documentation of traditional practices will be guided by the following activities: (i) The identification and documentation of traditional sustainable land use practices that can serve as a cost-effective and easy to establish land use practices in BiH; and (ii) Based on activity (i) above, the production of a manual on traditional sustainable land-use implementation practices with recommended SLM practices from European countries that can be applied in BiH. This manual will detail the following: (a) SLM practices that are appropriate for the region; (b) the importance and benefits that farmers can derive from such practices; (c) the specific abiotic and biotic conditions that are appropriate for each practice; (d) issues and challenges that farmers and extension personnel may encounter when adopting such practices; and (e) step by step process for implementing such practices. The manual will be supplemented by a short-film and podcast that will be available for dissemination through local TV and radio stations, as well as pamphlets in local languages explaining the SLM practices. The manual can also be used as a training guide; etc. The dissemination of these methods will enable their potential integration into development and sector plans and programs in an attempt to foster promotion of innovative SLM programs in line with the respective agency mandates and investment plans and programs to further support SLM initiatives throughout the region for scaling up and sustainability purposes; etc.

Output 3.3. ISLUPs developed and gender sensitive LDN/SLM practices for forests, agricultural and pastoral lands implemented in identified hot spots within 4 pilot landscapes (based on assessment under Output 1.1, 2.1 and 3.2)

This Output will focus on the demonstration, skills development, awareness raising and sharing of best practices priorities defined in the integrated spatial land use strategies (ISLUS) developed for the pilot landscapes under Output 1.2. It will be selective in promoting critical recommendations of the ISLUS, such as to integrate biodiversity and SLM practices in forest management planning to conserve and protect watersheds; demonstrate SLM approaches in agricultural, pasture and forest lands to increase productivity while protecting the soil and water, promotion of traditional land use practices that stabilize land for house construction, farming and drainage systems, techniques for the efficient use of water, etc. This output will be an integrated spatial land plan (ISLUP) based on lessons and best practices from several other projects in the region and from WOCAT database and outcomes of Output 3.2 to bring awareness and improve skills in a gender inclusive way for new and innovative approaches on improving the conservation value and productivity of forest lands, best agricultural practices, improved fertilizer management, efficient and effective use of water, prevention of water and soil pollution, climate change adaptation and disaster management. The project will provide cost-effective support for demonstration of selective SLM agricultural, pastoral and forestry activities through the provision of technical support, planning and extension support, training and small demonstration in farmer fields in selective parts of the landscapes that will be defined through a mapping process to prioritize locations for interventions. The planning, demonstration and implementation of SLM practices will be guided by the following activities: Joint mapping and selection of all the best cost-effective implementation methods and tools based on natural materials and methods that BiH and countries with similar conditions have implemented. Selection of best agricultural and pastoral production and forestry practices will involve key institutions. Methods and tools will be selected for restoring and sustainably managing ecosystems that provide resources for income generation to local communities and critical services of soil retention and water regulation that contribute to buffering against landslides and floods and regulating the flow and quality of water. The most cost-effective actions will be prioritized for demonstration and enhancing skills of technical staff and local communities, including for integration of biodiversity, SLM and water retention practices in forest management planning, planning for sustainable agricultural and land practices and design and capacity development for stabilization of small-scale village infrastructure. The project will not physically invest in these activities, but will provide training, technical support, practical guidelines, demonstration, awareness and tools for

promoting these activities on the longer-term through either government or private sector investments in the future. It is anticipated that project support for mainstreaming biodiversity conservation and SLM practices in forestry, pastoral lands and agriculture will be facilitated (to be further defined at PPG stage).

Output 3.4. Gender sensitive training activities and peer to peer knowledge sharing activities promoted to enhance the capacities of forest managers, local farmers, pastoralists, and farmer associations to promote LDN/SLM in around PAs/KBAs and OECMs.

To implement the proposed SLM activities, capacity development activities will be supported by the project and will ensure: (i) increased knowledge about the drivers for land degradation; the link between climate change, land-use methods, disasters and land degradation; benefits of moving from conventional methods of local people and actors such as forest managers, agriculturists, graziers and land owners to sustainable production methods; and (ii) increased capacity to improve the economic and welfare level of the region and local people through sustainable practices with a gender perspective. The aim is to ensure that institutions and people include the concept of SLM and LDN in their production actions/plans/programs/monitoring. Training and capacity building will be guided by the following activities: (i) Undertake of a gender sensitive rapid training needs assessment to assess current capacity gaps of key institutions and stakeholders to implement SLM; (ii) Based on the assessment above, identify key agencies and institutions in agriculture, forestry, animal husbandry and other relevant sector and municipalities that can organize training activities for selected leading/pioneering farmers/graziers on a full package of sustainable production methods; (iii) Support key institutions to build their capacity and be able to conduct training sessions for local decision-makers (local community leaders, mayors, politicians, opinion-makers) on SLM, climate change, ecosystem services, traditional land use practices and the integration of these concepts into land-use decisions via integrated, participatory and gender inclusive management; (iv) Organize meetings, field days, and visits to demonstration sites for farmers/graziers for hands-on learning about best-practice examples; (v) Organize a study visit to neighboring countries with similar climate, ecology and topography to gain and share knowledge and experience and (vi) Undertake general awareness-raising activities about SLM practices. This will also include working with local media channels to provide more effective farmer extension and awareness raising services, including specific targeting of women and disadvantaged groups.

Output 3.5. Resilience-building and gender sensitive income-generating models for sustainable value chains for main agricultural and dairy products are identified and implemented.

There seems to be considerable room for improvement of agriculture, grazing and forest management practices, specifically from the perspective of climate change and ongoing land degradation associated with changes in land use. There is a need to bring this new perspective in the analysis of market and value chains of key products, in collaboration with key public and private entities to devise resilient income generation models for implementation also considering gender perspectives in line with the gender action plan within the pilot landscapes. The project will identify two value chains (one focusing on women) in the target landscapes based on their potential to develop new products and services or scale up existing products and services for the benefit of a larger group of people. In this regard the GEF project will support the design and implementation of interventions to pilot and scale-up products and services having commercial potential, promote credit, marketing and cooperative agreements. This will be done in partnership with specialized private sector agencies. Wherever needed, the project will strengthen existing community-based organizations and village level entrepreneurs to address gaps in the value chain. New and improved value chain products and services are implemented by local communities to increase incomes and reduce unsustainable resource uses. A strong focus will be given to women, unemployed persons and youth as drivers of change and community participation in development, with the aim of strengthening their morale and leadership role. Sustainable financing mechanisms to incentivize value-added livelihoods will be established. These may include blended financing solutions, or the development of local funds supported by the private sector (e.g., by working with businesses companies, food retailers or processors to implement these activities or public forest companies for forest-based opportunities) operating within the landscapes. Training, capacity development and market/value chain assessments will support value-chain business development. The project will also provide technical training to rural communities' groups, and relevant partners so they have the relevant skills and knowledge and the appropriate procedures and processes in place to implement these activities.

Component 4: Knowledge management and replication

This Component will seek to improve awareness and communication and ensure that the Project's innovative practices, lessons and knowledge generated are identified, documented and disseminated under Output 4.2 that will contribute to learning and facilitate replication and scaling up in other parts of the country. This Component will support: (i) promotion of awareness and communication of NbS; (ii) documentation and dissemination of best practices and enhanced communication; (ii) preparation of guidance notes to address current gaps in integrated planning, policy and legislation; (iii) technical reports, publications and other knowledge management products; (iv) national and sub-national workshops

to facilitate dissemination and promote replication; and (v) preparation of replication and scaling up strategy. This Component will have two outputs.

Output 4.1. Knowledge management on Nature-based Solutions (NbS) for SLM, flood resilience and biodiversity conservation for landscapes promote learning and replication.

As a means of replication regionally and nationally, the project will support the following actions: (i) institutionalization of best practices through promotion of sectoral and canton level planning instruments in order to secure replication; (ii) replication/up-scaling strategy developed based on lessons and experiences from the project. The replication strategy will provide guidance on key factors that define the successes (institutional, planning, financial solutions and decision-making), planning and consultative practices (including participatory methodology), capacity assessment and skills development, tools for adaptive management and monitoring, technical and extension support, etc. This will be further defined under the project and support provided to enable uptake through training, technical support, identification of financial mechanisms, etc.; (iii) regional and national workshops and support to site visits from other municipalities to build learning and capacity for replication; (vi) identify a 1-2 other landscapes clusters for potential replication, and provide technical support and training to initiate such replication; etc.

Output 4.2: Best practices and lessons learned for addressing land and ecosystem degradation exchanged through regional and global cooperation using FAO networks, WOCAT, etc.

This Output will ensure that the successes (and failures) from project target clusters will be documented and disseminated, learning and experiences shared in regional, national and international fora. As part of an effort to promote scaling up, this output will support the following activities: (i) documentation and dissemination of case studies, best practices and experiences emanating from the project to be used for targeted decision-making bodies at the entity, cantonal and municipal levels; (ii) development of policy guidance notes to address gaps and constraints of existing planning and policies that favor mainstreaming; (iii) technical reports, publications and other knowledge management products in English and local languages; (iv) documentation of traditional knowledge related to biodiversity conservation and natural resources management; (v) national and entity level workshops to facilitate dissemination of field lessons; and (vi) inter-canton and inter-municipality site visits to share lessons.

Component 5: Monitoring and Evaluation

Output 5.1. Monitoring and evaluating project impacts, including those related to environmental, social and gender safeguards.

This output will establish an effective M&E system that adheres to GEF requirements, enables effective monitoring and evaluation of project progress and impact, and that is inclusive of the needs of women and opportunities to strengthen gender mainstreaming through project activities.

Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF):

The landscapes in BiH are highly valuable ecosystems because of their wide range of genetic, species, habitat and ecosystems diversity. They contribute to the overall productivity in terms of harbouring a variety of habitats and human-induced systems. Forest ecosystems, vary from productive and low productive forests that include alpine forests and riparian forests have an essential role, but both are under severe pressure due to urbanization and road construction along rivers. Other, no less important benefits of forests are reduced flooding risks, absorption of CO₂, climate regulation, air purification, and regulation of soil erosion. Freshwater ecosystems or ecosystems of rivers, mountain streams, glaciers, lakes and wetland habitats, where moorland ecosystems are particularly valuable, as well as marine ecosystems. Some of these ecosystems are threatened by negative effects of HPPs, which is the cause of one of the major conflicts in sustainable water management in the country's policy and environmental community. On the other hand, the agricultural ecosystems in BiH are very important for food production and ecosystem services derived from agro-biological diversity. Food production in agro-biological systems is an ecosystem service whose potential is underused, which indicates the need for serious and organized rehabilitation of neglected agro-ecosystems. While there are several government programs are being implemented in this area, these programs are conducted in an isolated sectoral manner, thus resulting in a series of disjointed, and often contradictory fashion resulting in harm to these ecosystems. The intent of the project is to generate incremental benefits by piloting a few innovative and integrated activities for improving conservation and management of terrestrial landscapes and their attendant ecosystems and biodiversity through a multi-sectoral and multi-stakeholder approach. This is expected to generate an integrated and novel approach to economic development in the selected landscapes that is carried out within the carrying capacity of these ecological systems to protect their ecological functions, protect important biodiversity and provide sustainable economic returns to local communities and business interest. In addition, the project will build capacities of local

communities for undertaking inclusive conservation measures within their respective local development planning process. This collective action in many communities will help populate conservation action through significant parts of the selected landscapes, particularly in areas of high ecological and economic value to enhance their ecological value. The project will also leverage financial resources for biodiversity at the sub-national level through various innovative financial instruments, which would contribute to the achievement of national and global targets for biodiversity conservation and management. The anticipated global benefits, including meeting priorities established through the NBSAP and the Post 2020 Global Biodiversity Framework are the following:

- At least 42,714.32 hectares of terrestrial protected areas under improved management effectiveness to conserve key ecosystems and threatened and endangered species, while correspondingly enhancing environmentally friendly economic opportunities (Core Indicator 1.2)
- At least 151,061.6 hectares of terrestrial areas (outside protected areas), including KBAs and HCVMs under improved management to benefit biodiversity, enhance connectivity and support sustainable agricultural, forestry, animal-husbandry and ecotourism practices (to be further assessed at PPG stage) (Core Indicator 4.4)
- Improved management of 1,000 hectares of agricultural lands to benefit biodiversity and enhance sustainable productive practices (to be further assessed at PPG stage) (Core Indicator 4.3)
- At least 500 hectares of degraded habitats under restoration (forests, grazing lands, wetlands and agricultural lands) (Core Indicators 3, namely 3.1, 3.2 and 3.3)
- Populations of globally important species (CR, EN, VU on IUCN Red List) at landscape sites are stable or show improvement (3-4 target species will be identified during the PPG)
- Reduced threats and enhanced protection of threatened biodiversity and other endangered species (to be defined at PPG stage) (to be further assessed at PPG stage)
- 2,064,990 metric tons of CO₂e mitigated over a 20-year period. (Core Indicator 6)
- At least 100,000 people with 50,000 men and 50,000 women (to be further assessed at PPG stage) directly benefiting from improved natural resources, forest and grazing resource management practices, community-based livelihood improvement and small-scale enterprises and ecotourism practices. (Core Indicator 11)

Stakeholder engagement:

The project provides the opportunity for partnerships with a range of stakeholders, including key national, canton, municipality and sector agencies with mandate for biodiversity and sustainable land development; communities living in these areas; and key sector agencies that benefit and/or impact on biodiversity and land productivity. During the PPG phase and implementation, a broad approach to stakeholder engagement will be continued, as strong partnerships across government and with the private sector and local communities are needed to achieve sustainable biodiversity-related natural resources and economic development.

Table 1: Stakeholder Engagement

Stakeholder	Proposed engagement in the project
Ministry of Foreign Trade and Economic Relations (MoFTER) of Bosnia and Herzegovina	The Ministry establishes policies, fundamental principles, coordinates activities, and aligns the plans of the Entity's authorities and institutions on an international scale. At the state level, the Ministry will assume the role of coordinating the project. It will be actively involved in joint decision-making for the project and be represented in the Project Steering Committee.

Ministry of Environment and Tourism, Federation of Bosnia and Herzegovina	The Ministry is responsible for funding the ongoing operational expenses of the national parks in FBiH and distributing grants for the purpose of sustainable tourism development. Additionally, the Ministry will offer strategic guidance, validate project outcomes and reports, coordinate project activities within its jurisdiction, and serve as a liaison to federal-level project partners. The Ministry will contribute technical expertise, facilitate access to sites, handle logistical matters such as organizing meetings and providing necessary facilities, and support for project management and regular reporting. The Ministry will actively participate in the Project Steering Committee.
Federal Ministry of Spatial Planning	The Federal Ministry of Spatial Planning focuses on the basic activities related to spatial planning of the Federation, land use at the federal level, long-term planning for the exploitation of natural resources, and the protection of national monuments and areas of distinct natural architectural and cultural-historical importance.
Ministry of Spatial Planning, Construction and Ecology of the Republika Srpska	The Ministry is responsible for funding the ongoing operational expenses of the existing national parks in Republika Srpska. The Ministry will offer strategic guidance, validate project outcomes and reports, coordinate project activities within its authorized scope, and maintain communication with project partners at the RS level. The Ministry will contribute technical expertise through its staff and networks, facilitate access to sites and locations, address logistical concerns such as organizing meetings and providing necessary facilities, and provide support for project management and regular reporting. As the primary development partner, the Ministry will play a direct role in Project Steering Committee.
Ministry of Trade and Tourism of Republika Srpska	The Ministry distributes grants aimed at fostering sustainable tourism development. It will serve as a member of the Project Steering Committee, overseeing the coordination of project activities.
Ministry of Agriculture, Forestry and Water Management of Republic of Srpska	The Ministry of Agriculture, Forestry and Water Management of Republic of Srpska will be involved since the OCEMs/HCVFs will be on forest area and their role must be defined with FAO and UNDP. The Ministry will actively participate in the Project Steering Committee.
Ministry of Agriculture, Water Management and Forestry of the Federation of Bosnia and Herzegovina	Ministry of Agriculture, Water Management and Forestry of the Federation of Bosnia and Herzegovina will be involved since the OCEMs/HCVFs will be on forest area and their role must be defined with FAO and UNDP. The Ministry will actively participate in the Project Steering Committee.
Public forest companies (Šume Republike Srpske in RS and XY cantonal forest company in FBiH)	The main task of public forest companies in Bosnia and Herzegovina is the management of public forests within their respective jurisdictions. This includes responsibilities for sustainable forest management, timber production, reforestation, forest protection, and conservation. Public forest companies are responsible for implementing forest policies, ensuring proper utilization of forest resources, promoting environmental sustainability, and generating revenue from timber sales or other forest-related activities. They play a crucial role in maintaining the health and productivity of public forests while balancing economic, social, and environmental aspects of forest management.
Cantonal forest offices	Cantonal forest offices are part of cantonal ministries responsible for forestry and carries out various administrative and professional tasks related to forest management. These tasks include data collection and database maintenance for forest condition and development, managing the cadastre of forests and forest land in the canton, preparing the cantonal forest development plan, monitoring the implementation of forest management principles, maintaining records of seed facilities, providing reporting services, monitoring forest damage, assigning tasks to the Cantonal Forest Company for managing state-owned forests. The Cantonal Forest office performs the management of private forests.
Institute for the Protection of the Cultural, Historical and Natural Heritage of Republika Srpska	The Institute is an administrative body operating under the Ministry of Education and Culture in the Republic of Srpska. It has actively engaged in numerous projects centered around environmental conservation and restoration, as well as conducting analyses and studies to designate protected areas of natural and cultural significance.

Environmental Protection Fund of FBiH	The Fund is responsible for fundraising efforts aimed at conservation, as well as the planning, execution, and advancement of programs, projects, and practical initiatives that promote the sustainable utilization of natural resources and environmental protection. Through annual grant calls, the Fund offers financial opportunities to support various activities in protected areas such as tourism development, biodiversity conservation, research, promotion, and more.
Environmental Protection and Energy Efficiency Fund of Republika Srpska	The Fund is responsible for raising funds for conservation efforts and overseeing the planning, implementation, and development of programs, projects, and on-site activities that promote the sustainable utilization of natural resources and the protection of the environment.
Brcko District Government	Brcko District Government via its Department for Agriculture, Forestry and Water Management and Department for Spatial Planning and Property Legal Affairs is responsible for policy framework and execution of initiatives that promote the sustainable utilization of natural resources and environmental protection in Brcko District.
Cantonal ministries and other institutions for environmental protection and tourism	Some of the cantonal ministries provide funding for the construction of tourism infrastructure and the packaging of tourism goods and services through yearly requests for projects.
Chambers of economy: Chamber of the economy of the Federation of Bosnia and Herzegovina Chamber of commerce and industry of Republic of Srpska	Non-governmental, professional-business organizations, with main goals to represent the interests of their members and the economy before the legislative and executive branches of government, to connect businesspeople within and outside of BiH, to strengthen ties between the BiH economy and those of other nations, to provide professional development opportunities for their members, and to provide all necessary information and advisory services.
Private sector stakeholders: Tourism clusters at cantonal level	The Tourism clusters are engaged in initiatives to promote improved commercial circumstances for the growth of the sustainable tourism industry. Incorporating protected areas into the tourism product is one of their key responsibilities, and they also address the demands of the development, maintenance, and protection of tourist and cultural resources in BiH.
Ministry of Human Rights and Refugees of BiH Agency for Gender Equality of BiH	The scope of competence of the Ministry of Human Rights and Refugees of BiH include following: monitoring and implementation of international conventions and other documents in the field of human rights and fundamental freedoms; promotion and protection of individual and collective human rights and freedoms; collaboration with national minorities and their associations. The BiH Agency for Gender Equality within the Ministry of Human Rights and Refugees of BiH. Agency monitors and analyses the state of gender equality and the reports of entity gender centers and annually reports to the Council of Ministers of Bosnia and Herzegovina
Ministry of Finance and Treasury of Bosnia and Herzegovina	The Ministry of Finance and Treasury of Bosnia and Herzegovina is responsible for managing the finances of Bosnia and Herzegovina. The Ministry will be informed about the implementation of the project activities and possible options for financing of project activities and asked for feedback.
NGOs and CSOs: Society for Research and Protection of Biodiversity Banjaluka; Association 'Aarhus Center; Society for Biological Research and Protection of Nature "Bio. Log"; Center for Environment, Banjaluka; Ornithological Society "Naše Ptice", Sarajevo, Center for Civil Society Promotion	The non-governmental organizations (NGOs) have necessary abilities and expertise in scientific research, species assessments and conservation, capacity building, awareness-raising, and environmental education. They also have a network of local community partners who are linked to protected areas and municipalities.
Protected areas (Public enterprises)	The management of protected areas, which should serve as the project's pilot protected area, is the responsibility of the public companies, who are also the project's intended beneficiaries. To ensure ownership of the project results and capacity building for the use of tourist development and instruments produced within the project, the public companies will collaborate closely with the project implementation team.

Municipalities	In order to ensure ownership of the project findings and capacity building for the use of management and planning tools produced within the project, the Municipalities will engage closely with the project implementation team.
Community based organizations (CBOs): Tourist organizations Cultural and environmental NGOs	Tourist organization at municipality level cooperate with PAs offering tours in rafting, mountain climbing, hiking, cycling, canoeing, camping etc. Cultural and environmental NGOs with environmental conservation, cultural amenity enhancement, field research, education, and public awareness of biodiversity values and protection as goals.
Local communities	Local communities and community organizations will be directly involved in decision-making, planning, and implementation of project-related activities. They will directly be involved in decision-support systems, multi-sectoral and multi-stakeholder coordination platforms, feasibility assessments for OECMs and development of ISLUPs. Community members will directly benefit from capacity building and training activities, NbS investments, SLM, livelihood and value chain investments. The awareness and KM programs will also be directed at local communities so that they can become active partners in conservation and sustainable resource management activities.

Knowledge Management:

Knowledge will be generated and disseminated through output 4.2 that aims to ensure that lessons and learning from the project will be documented and shared in regional, national and international fora. This will facilitate scaling up and replication, including via targeting events with decision-makers at the municipal, canton, entity and national level. Based on the lessons from the project, policy guidance notes will be developed to address gaps and constraints of existing integrated planning and policies that favor mainstreaming. In addition, Output 4.2 will produce technical reports, publications and use a range of media to promote the integrated approach to resource management, including T.V. radio and conduct national and entity, cantonal, municipality workshops to facilitate dissemination of field lessons. Based on the knowledge and learning, the project will support the preparation of a replication/up-scaling strategy to provide guidance on key factors that define the successes (institutional, planning, financial solutions and decision-making), planning and consultative practices (including participatory methodology), capacity assessment and skills development, tools for adaptive management and monitoring, technical and extension support, etc. The project will make a valuable contribution to relevant scientific, policy-oriented, or other networks, as deemed appropriate. This could involve providing content and facilitating the participation of stakeholders or beneficiaries.

Conformity with national strategies and plans:

The proposed project is in conformity with the NBSAP, NAP, and other national instruments as discussed in Table 2 below:

Table 2: Conformity with Existing National Strategies and plans

Strategy/Plan	Conformity with the proposed project	Focus of project
Climate Change Adaptation and Low Emission Development Strategy for BiH	The climate change adaptation strategy defines seven priority sectors, which are: agriculture, biodiversity and sensitive ecosystems, energy (hydropower), forestry, human health, tourism and water resources/water management.	Increasing resilience on climate change
Environmental Strategy and Action Plan of Bosnia and Herzegovina (BiH ESAP 2030+)	The BiH ESAP 2030+ is a policy document that establishes the environmental policy goals and key activities up to 2032 in Bosnia and Herzegovina. It strengthens the environmental frameworks within BiH and it is one important step for BiH to align with relevant international frameworks, including EU laws and procedures. The content of the BiH Environmental Strategy includes seven environmental policy areas: water management, waste management,	Improvement of environment Identification of priorities for domestic financial allocations as well as

	biodiversity and nature conservation, air quality, climate and energy, chemical safety and noise, sustainable resource management and environmental management.	assist BiH in accessing international financing
Bosnia and Herzegovina National Adaptation Plan – NAP	The NAP development process resulted with an assessment of vulnerabilities and risks arising from climate change and climate extremes and it displays possible adaptation options, in particular measures to address short-term (2020–2023), medium-term (2023–2027) and long-term needs (2025–2030). The BiH National Adaptation Plan aims to improve existing reporting on the development and implementation of adaptation measures and flow of information as well as contribute to the integration of climate change adaptation into relevant social, economic and environmental policies and actions.	Climate change adaptation planning
Green Agenda for the Western Balkan	The Western Balkans' Green Agenda calls on the region to move toward a sustainable economic structure. In this context, it offers specific suggestions for five development sectors where the EU will keep assisting nations in the region: climate, energy and mobility – achieving climate neutrality by 2050 as the most important priority, circular economy – introducing the circular economy into all production chains and connecting the countries of the region with industrial chains in the EU; removal of air, water and soil pollution - harmonization with EU standards on air quality, water and waste water management, modernization of monitoring, management of their quality and promotion of water reuse in agriculture; sustainable agriculture and food production for the Western Balkans until 2030 and the Plan for restoration of forest potential.	Climate change mitigation Biodiversity protection Sustainable agricultural production and removal of soil pollution
Strategy and Action Plan for Protection of Biological Diversity of Bosnia and Herzegovina 2015-2020	The initial BiH biological diversity protection strategy and action plan was created for the years 2008 to 2015 and was then extended to 2015 to 2020. As a signatory to the Convention on Biological Diversity (CBD), BiH has taken action to uphold its commitments under the international agreement and throughout the integration process into Europe. This plan, which offers direction to organizations and decision-makers, is a crucial document for action on biodiversity challenges.	Biodiversity protection
Environmental approximation strategy of Bosnia and Herzegovina EAS - BiH	Environmental Approximation Strategy comprises different aspects of eight environmental sub-sectors of the EU environmental acquis. For each of the analyzed sub-sectors all relevant legal, institutional, economic and financial issues in BiH (i.e., on the BiH, FBiH, RS and BD of BiH levels) were analyzed, gaps identified and recommendations made for short-term and mid-term measures (priorities). Those sub-sectors are: Horizontal (cross-cutting) issues; Water Management; Waste Management; Air Quality and Climate Change; Industrial Pollution; Chemicals; Nature Protection; and Environmental Noise.	Climate change, nature protection
Nationally Determined Contribution (NDC) of Bosnia and Herzegovina	According to the provisions of the Agreement, states have the obligation to submit updated documents on climate change mitigation activities every five years. For this reason, BiH has prepared the Determined Contribution of BiH for the period 2020-2030.	Climate change mitigation
The SDGs Framework in Bosnia and Herzegovina	Agenda 2030 consists of three sustainable development directions, which reflect the development situation and priorities of BiH: good governance and management of the public sector; smart growth; a society of equal opportunities. Each development direction consists of the so-called 'accelerators', which clearly prescribe the priorities that would enable the fulfillment of the goals of an individual development direction and themes: Human Capital for the Future and “Leave no one behind” Principle.	Sustainable development goals

Table 3: Contribution to key Global Programs

Program	Project Conformity
Strategic Development Goals	SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture SDG 5: Gender Equality: SDG 13: Climate Action:

	<p>SDG 14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development</p> <p>SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,</p>
<p>Global Biodiversity Framework (GBF)</p>	<p>The project will contribute to the following goals and targets:</p> <p>GOAL A: Maintain ecosystem integrity, connectivity, resilience; halt extinctions; maintain genetic diversity by 2050.</p> <p>GOAL B: Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.</p> <p>Goal D: Ensure adequate implementation means, including finance, capacity, technology and science.</p> <p>Target 1: Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change.</p> <p>Target 2: At least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration.</p> <p>Target 3: At least 30 per cent of terrestrial, inland water, and of coastal and marine areas effectively conserved and managed including over their traditional territories.</p> <p>Target 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.</p> <p>Target 11: Restore, maintain and enhance nature's contributions to people.</p> <p>Target 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes.</p> <p>Target 19: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner,</p> <p>Target 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity,</p> <p>Target 22: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity</p>

Transformative, innovation and scaling-up:

The proposed project is transformative in that it intends to take into full consideration and cognizance the complexity of the geological and geomorphological reality of the landscape (including the various ecological and production systems within them) inter-relationships and the spatial dimensions in which these interactions take place. It is innovative in that the proposed integrated approach to planning and management of these inter-related resources and the social, economic, environmental and development conditions that influence and shape the ecology and functioning of these inter-related ecosystems is aimed at promoting the most cost-effective and sustainable approach to development of multiple use landscapes in BiH. It is innovative and transformational for BiH in that it will promote innovative financial instruments that can be piloted to test their viability in BiH through a financial gap analysis to identify and implement at

least a few financing mechanisms to enhance current funding mechanisms, and to provide additional resources for integration of biodiversity and resource management outcomes at the broader landscape level. It is envisioned that the success of this approach would be documented and disseminated, learning and experiences shared to promote scaling up (as discussed under Output 4.2).

[1] Using guidance provided by the GEF-STAP in Appendix 3 of https://stapgef.org/sites/default/files/publications/LDN%20Technical%20Report_web%20version.pdf

Coordination and Cooperation with Ongoing Initiatives and Project.

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

Yes

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

The GEF project will cooperate with ongoing initiatives as described in the Table 3 below:

Table 4: Complementarity with Existing Projects and Programs

Ongoing Initiatives	Complementarity with GEF 8 project
ADRILINK -Adriatic Landscape Interpretation Network (2020-2022)	The project is aimed to provide new models of sustainable tourism management aimed at reducing tourism seasonality through the valorization of natural and cultural landscapes as common assets that can be visited throughout the year. The project offers a system of new Adriatic itineraries and tourist roots based on landscape continuity, and connects them through a digital platform. The project supports the organization of 'Landscape days' as a circuit event along the Adriatic region.
DINALPCONNECT - Transboundary ecological connectivity of Alps and Dinaric Mountains (2020-2022)	The project intervention objective is to strengthen transnational and sectoral cooperation to improve EC (ecological connectivity), throughout Dinaric Mountains, connecting them with the Alps enabling long term protection of biodiversity in view of current and future climatic changes. Pilot Project area in BiH is NP Una.
Disaster Risk Reduction for Sustainable Development in Bosnia and Herzegovina (2018-2022)	The Program will be expanding the previously developed Disaster Risk Analysis System (DRAS) software for local level risk assessments and development of risk mitigation measures, and specifically for climate risk management and climate resilience measure development. The joint UN Program will also support disaster risk reduction (DRR) programs to include fire and flood protection in protected areas.
EU4AGRI – EU support for to Agriculture Competitiveness and Rural Development in BiH (2020-2024)	Raising investment in the agri-food sector and increasing the knowledge and skills level of agricultural producers and other participants in the value chains through the expanded provision of advisory services, as well as by improving economic opportunities in rural areas
BEAR in Mind: Bringing environmental actions for the biodiversity protection across the borders (2019-2022)	Decreasing biodiversity threats within protected areas across borders of Bosnia and Herzegovina and Montenegro. The part of the project in BiH is implemented in PAs Sutjeska and Blidinje and includes strengthening the capacities of park managers to better manage bird and mammal species; development of species management plans and better communicating biodiversity values of the pilot areas.
USAID's Developing sustainable Tourism in BiH- Turizam (2020-2025)	The purpose of the project is to accelerate economic growth in the tourism sector, which will lead to more jobs, provide sustainable income for producer organizations and tourism-related companies, help to change the "BiH brand", and have a positive spill-over effect to other sectors; such as agriculture, transportation, and environmental protection. An entire component of the project will relate to the development of tourism in protected areas. Project Turizam will work with NP Una to develop their sustainable visitor management and community engagement plan, weaving in GSTC and Green Destinations criteria.
"Feel Kozara" Project under EU4Business Project (2020-2021)	The project will support the connection of functional tourist content and experiences in nature. The end users are micro, small and medium enterprises, including tour operators, tourist agencies, local restaurants, hotels, motels, sports clubs and associations. NP Kozara is pilot area of the Project.

<p>GEF -FAO: Creating an Enabling Environment to Support LDN Target Implementation Through Strengthening Capacities and Establishing an LDN Monitoring and Reporting System in Bosnia and Herzegovina (2022-2024)</p>	<p>The proposed project foresees the strengthening of institutional capacities and involves the establishment and functioning of an LDN Monitoring and Reporting System able to monitor the UNCCD three global indicators for LDN, land cover, land productivity and carbon stocks. SLM and SFM practices aimed at LDN will be integrated into existing land-use planning in the selected project area so that targets can be set in the demonstration area and are apt to be upscaled.</p>
<p>GEF-7 Sustainability of Protected Areas (2022 – 2027)</p>	<p>The goal of the project is to achieve practical improvement in the management of protected areas in BiH, ensure a better status of biodiversity through strengthening resilience to the climate change impact and financial sustainability of protected areas. This will be achieved via; management plans; adaptation and resilience solutions for targeted species and ecosystems; restoration and rehabilitation of protected wetland habitats; sustainable tourism products; eco-tourism concession models; participation of PAs in government grant programs; promotion of natural values, products, and services and communication, promotion and building marketing capacity.</p>

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)
42714.32	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)
42714.32	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)
NM Crvene stijene (RS)	NA	Others	15.10						
NM Girska pećina (RS)	555698337	Natural Monument or Feature	25.37						
NM Orlovača (RS)	555698333	Natural Monument or Feature	27.01						

NM Pavlova cave (RS)	555593978	Natural Monument or Feature	1,340.00						
NM Pećina Mokranjska Miljacka (RS)	555737295	Natural Monument or Feature	190.40						
NM Pećina pod lipom (RS)	5555983985	Natural Monument or Feature	6.10						
NM Skakavac (FBiH)	179494	Natural Monument or Feature	1,430.07						
NM Vrelo Bosne (FBiH)	341998	Natural Monument or Feature	603.44						
NP Hutovo blato (FBiH)	145443	Natural Monument or Feature	11,556.36						
NP Orjen (RS)	555701531	Protected Landscape/Seascape	16,715.83						
NP Trebević (RS)	NA		5,036.37						
PL Bentbaša (FBiH)	555698346	Protected Landscape/Seascape	160.90						
PL Bijambare (FBiH)	179411	Protected Landscape/Seascape	497.00						
PL Trebević (FBiH)	179504	Protected Landscape/Seascape	400.20						
PL Vjetrenica-Popovo polje (FBiH)	555698351	Natural Monument or Feature	4,710.17						

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)
500	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)
Cropland	200.00			

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)
200.00			

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	100.00			

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)

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)
152061.6	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)
1,000.00			

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)
High Conservation Value Forest	151,061.60			

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)
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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 CO₂e (direct)	2064990	0	0	0
Expected metric tons of CO₂e (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 CO₂e (direct)	2,064,990			
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting	2026			
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 CO₂e (direct)				
Expected metric tons of CO₂e (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)
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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	50,000			
Male	50,000			
Total	100,000		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)

CI 1: Terrestrial protected areas created or under improved management (42,714.32 hectares): Improved management effectiveness of Hutovo Blato National Park, Popovo Poltje – Vjetrenica landscape of outstanding features, Orjen National Park and Pavlova Cave Nature Monument, collectively encompassing an area of 32,995.76 hectares in Southern Landscape and 11 PAs most of which are recently proclaimed (PL Bijambare, NM Skakavac, NM Vrelo Bosne, PL Trebević, PL Bentbaša, NP Trebević, NM Girska pećina, NM Pećina pod lipom, NM Pećina Mokranjska Miljacka, NM Crvene stijene, NM Orlovača collectively covering 8,391.96 hectares in Wider Sarajevo landscape covering 8,391.96 hectares. Proposal to add Kravice waterfall (1.75 ha) into Southern landscape cluster. The intent is to reducing fires, encroachments, vegetation damage and disturbances to wildlife, timber poaching and livestock grazing etc. as well as support management planning SMART patrols, community engagement, blue/green economic activities, monitoring, etc.

CI 3: Area of land and ecosystem under restoration (500 hectares): restoration of 500 hectares of degraded forest, agriculture and pasture lands;

CI 4: Area of landscape under improved practices (152,061.6 hectares): This includes 1,000 hectares of agricultural lands under improved SLM practices to benefit biodiversity (CI 4.3) and 151,061.6 hectares of HCVFs and KBAs under improved management (CI 4.4) or avoided deforestation that includes five KBAs covering 38,004 hectares, namely Trebinjsko Lake, Orjen and Bijela Gora, Trebiža River, Hutovo Blato, Dabarsko and Fatničko Karstic Field and publicly managed forest company, Sume Repulike Srpske that has obtained Forest Stewardship Council (FSC) certification for 100,561.10 hectares of HCVFs. In addition, in the Wider Sarajevo landscape cluster there is 14,496.56 hectares of HCVFs, of which, around 10,829.56 hectares lie within the public forest company, Sume Repulike Srpske.

CI 6: Greenhouse Gas Emissions Mitigated (metric tons of CO₂e): 2,064,990 tons of CO₂e mitigated over a 20-year period (5-year implementation and 15-year capitalization period). This includes management of 5 terrestrial PAs covering 38,004 ha within Southern landscape cluster and 11 protected areas covering 8,392 hectares in Wider Sarajevo landscape cluster through prevention/reduction of fires, encroachments as follows: (i) 10% (3,800 ha) within Southern landscape cluster of sub-tropical dry forests and 5% (420 ha) in Wider Sarajevo landscape cluster of sub-tropical mountain systems within PA peripheries from low to very low degradation and (ii) 20% (6,600 ha) within HCVFs and 10% (10,050 ha) within HCVF under FSC certification in sub-tropical dry forests in Southern landscape from moderate to low degradation status. (iii) 10% (1,450 ha) within Wider Sarajevo landscape cluster of sub-tropical mountain systems from low to very low degradation status. (iv) restoration of 200 ha of degraded forests, 100 ha of degraded grasslands and 200 ha of degraded agricultural lands. This estimate considers the uncertainty of the restoration practices. Refer Annex H (GHG estimate using Ex-Ante Carbon-balance Tool).

CI 11: People benefiting from GEF-financed investments disaggregated by sex: Around 100,000 people (50,00 men and 50,000 women) through opportunities for new and improved livelihoods in forestry, ecotourism, small-medium enterprise development, and improved and regulated water flow and environmental services, etc.

Risks to Project Preparation and Implementation

Summarize risks that might affect the project preparation and implementation phases and what are the mitigation strategies the project preparation process will undertake to address these (e.g. what alternatives may be considered during project preparation- such as in terms of consultations, role and choice of counterparts, delivery mechanisms, locations in country, flexible design

elements, etc.). Identify any of the risks listed below that would call in question the viability of the project during its implementation. Please describe any possible mitigation measures needed. (The risks associated with project design and Theory of Change should be described in the “Project description” section above). The risk rating should reflect the overall risk to project outcomes considering the country setting and ambition of the project. The rating scale is: High, Substantial, Moderate, Low.

Risk Categories	Rating	Comments
Climate	Moderate	Please see pre-SESP (Annex D)
Environment and Social	Moderate	Please see pre-SESP (Annex D)
Political and Governance	Moderate	<p>The potential difficulties arise when the complex institutional structure and division of authorities and responsibilities between the state government, the two entities in BiH, the line ministries of both entities, and the municipal authorities show a limited inclination to cooperate and coordinate, hindering the alignment of economic development plans with ecological and community requirements. This is due to the tendency of political priorities to override other considerations. As the project progresses, the risks will be carefully evaluated to determine the need for additional consultations, dialogues, and planning processes that can effectively engage various administrative levels such as the state, entities, cantons, and municipalities. The effectiveness of this governance structure is crucial in promoting improved planning and integration of sector mandates and priorities.</p>
Macro-economic	Moderate	<p>The prevailing economic circumstances in the country pose difficulties regarding inflation, government resources, staff availability, and co-financing. To address institutional and capacity limitations, the need for extra technical expertise and national consultants will be evaluated during project preparation. As for co-financing, viable options have been identified and will be verified to</p>

		secure substantial co-financing through existing externally mobilized investments. This approach aims to alleviate the burden of government financing.
Strategies and Policies	Moderate	The project may be affected by government policies aimed at promoting economic development, especially concerning their potential impacts on terrestrial ecosystems. To address this concern, the project design will showcase how economic development can be effectively pursued through sustainable approaches. Access to exemplary practices, technical expertise, and planning support will be utilized to effectively manage this potential risk.
Technical design of project or program	Moderate	Considering the potential impact of insufficient technical expertise on the attainment of desired results, the project design will incorporate an evaluation of capacity requirements. Where feasible, activities will be tailored to accommodate existing institutional capabilities while also addressing the additional capacity-building, training, and technical support needed to overcome any limitations that may hinder the promotion of integrated management approaches for terrestrial ecosystems and pilot landscapes.
Institutional capacity for implementation and sustainability	Moderate	The project implementation may be hindered by the inadequate capacity of government administrative bodies to effectively integrate economic and ecological considerations into development planning. To address this issue, a thorough assessment will be conducted, and in consultation with the IP and the UNDP CO, arrangements will be made. UNDP and FAO will execute the project.

Fiduciary: Financial Management and Procurement	Moderate	To address this issue, UNDP and FAO will be responsible for procurement and financial management support and training, to enhance local capabilities and overcome these constraints.
Stakeholder Engagement	Low	Initially, stakeholders may not readily perceive the advantages of adopting sustainable nature-positive approaches for tourism and livelihood enhancement, leading to hesitancy in their involvement with the project. To address this, the project will identify the necessary capacity development and training requirements. Additionally, it will explore methods to showcase nature-based activities that can serve as incentives for community and stakeholder engagement, thereby addressing any reservations or reluctance and promoting their active participation in the project.
Other		NA
Financial Risks for NGI projects	High	NA
Overall Risk Rating	Moderate	The overall risk is rated as 'Moderate' that can negate and/or delay project implementation. Overall project design will assess needs for improved capacity, coordination and collective decision-making to be promoted through the project. The above rated risks are not expected to undermine the viability 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)

The project is consistent with *BD-1-1: Financial sustainability, effective management, and ecosystem coverage of protected area systems*. Relevant project components include identification and implementation of blended/innovative/incentive-based finance solutions to bridge the finance gap in short, medium and long term at the local levels (Outputs 2.3 and 2.4). It will also demonstrate implementation of locally based financial solutions, such as linking with government sector financing, generating revenues from conservation-related forestry, natural resource use and tourism activities and supporting biodiversity-friendly small-scale enterprises that will build community support for conservation. The project is also supporting the improved management effectiveness of a number of PAs through management planning, ecological restoration demonstration, enhance the viability of the PA network by collaborative efforts with local communities in PA buffers and natural corridors, enhance management of HCVMs and KBAs through policy and management in relation of enhancing the conservation estate via OECMs (Output 2.1 and 2.2), improve private sector support for supporting community engagement in nature-positive activities (Output 2.4). In terms of BD 1-4, the project will focus on mainstreaming biodiversity and sustainable natural resource use in the canton and municipal planning and development sectors (Component 1) in agriculture, forest, tourism, and other relevant disciplines and aim to improve/enhance positive environmental practices in these sectors. It would improve guidelines, protocols and planning strategies and build institutional capacities at the canton and municipal administrative levels and across key sectors to better integrate conservation outcomes. The intent is to use local community organization as the key vehicle for delivery of conservation actions, so that local communities and local business entities become agents of change. Without the GEF project, it is likely that there will be limited effort at strengthening the integration of biodiversity in local, canton and municipal developmental level planning that will likely result in further loss of biodiversity, associated habitats and ecosystem services. This will be corrected through improved decision making on the management and sustainable use resources (Output 1.1) and developing integrated planning approaches. Project components include improved planning processes that address direct threat to habitat loss by increasing habitats through conservation and restoration of key ecosystems (Component 2 overall), improved PA and OECM management effectiveness in combination with sustainable enterprise and business opportunities (Output 2.4); enhancing conservation in forests, and other natural and productive use areas; capacity building and improved community participation in sustainable resource use practices to reduce threats and community livelihood improvement to reduce unsustainable practices (Output 2.4). In terms of BD 3: *To increase mobilization of domestic resources for biodiversity* - the project aims to identify and mobilize domestic resources for investment in biodiversity conservation and NbS. In terms of BD 3-1, it would build on the proposed BIOFIN assessment, to undertake a limited assessment of financial needs and develop a domestic resource mobilization plan for application at the canton and municipal levels in the four landscapes, as well as for the PA network. This assessment and planning exercise will actively engage financial entities at various administrative levels at the national, canton and municipal levels and private sector actors. In terms of BD 3-2, the project will facilitate the implementation of the resource mobilization plan, working closely with the national park and forest entities to enhance their capacity for resource mobilization through targeted training programs and their capacity for making investments of NbS through development of guidelines and availability best practice examples.

In terms of the GEF-8 Land Degradation Focal Area, the project aligns with *Objective 1: Avoid and reduce land degradation through sustainable land management (SLM)*; and *objective 2: Reverse land degradation through landscape restoration (LD-1 & LD-2) of the programming directions*. In terms of LD 1, the project will aim to avoid and reduce degradation through promoting an integrated and collaborative planning and decision-making approach to reduce inherent conflicts to land and resource use. It will focus on best practices in forestry, grazing and agriculture to reduce harmful impacts and promote nature-friendly practices to reduce chemical usage, promote soil fertility improvements, reduce erosion, promote mixed cropping to conserve soil and improve habitat for species in cultivable areas. The overall goal is to promote the achievement of land degradation neutrality and no net loss of natural capital. Under Component 3 and supported by the enabling framework of Component 1, the project will focus on smallholder farms (production landscapes) that sustain a significant number of households, where agricultural management practices underpin the livelihoods of rural farmers. The project will include support for improved access to technical assistance and finance for smallholders to implement innovative agricultural practices (climate smart agriculture) for sustainable land management to achieve LDN, protect ecosystem services, and improve profitability (improved profitability will be used as an indicator of project success). Project SLM interventions will target the drivers of land degradation within a framework of integrated community planning, governance and management at landscape scale. It will provide technical support and training to restore and maintain functional landscapes to avoid and manage degradation through local government and community planning systems, enhanced technical knowledge, demonstration on the ground and other unsustainable activity and technical support for integration into canton and municipal level planning. These activities would be undertaken through active community mobilization and involvement, including men, women, youth and ethnic minorities. Upscaling will be achieved through extension programs and sharing of successful interventions through community exchanges and visits (Component 4). Strategies pursued with the private sector will target SMEs that are promoting innovations in agriculture, forestry and livestock production systems and improved access to markets including in the tourism sector, as well as improvements in the environmental performance of the infrastructure sector.

In terms of GEF CCM 1-4 Climate Change programming directions, '*enhance nature-based solutions with high mitigation potential*' the project will support mitigation actions in the agriculture sector to generate significant co-benefits, notably in terms of climate adaptation and improved livelihoods for large numbers of farmers and rural communities to enhance biodiversity outcomes and reduced land and forest degradation that is further threatened by unsustainable and increased exploitation as well as by the impacts of climate change, drought, flooding and erosion, In terms of the target landscapes, the project will work with communities to enhance protection and support natural regeneration of these ecosystems so as to reduce carbon losses. The design of the landscape activities to be defined through the ISLUP process will take into consideration gender-specific actions to enhance their more productive use of these resources and increase their resilience to climate change impacts through diversification of incomes, capacity building and enhanced awareness on managing climate risks.

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: Yes

Private Sector: Yes

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

Table 5: Consultations during PIF stage

Name of the expert/ institute	Description	Date
Ministry of Foreign Trade and Economic Relations (MoFTER) of Bosnia and Herzegovina – Ms. Rada Milislav	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
Ministry of Environment and Tourism, Federation of Bosnia and Herzegovina – MS. Zineta Mujaković	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
Ministry of Agriculture, Water Management and Forestry of the Federation of Bosnia and Herzegovina – Ms. Alma Imamović	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
Ministry of Spatial Planning, Construction and Ecology of Republika Srpska – Ms. Svjetlana Radusin, Mr. Miloš Jokić, Ms, Željka Stojičić	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
Ministry of Agriculture, Forestry and Water Management of Republika Srpska – Ms. Svjetlana Lazić	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
District Brčko, Department for agriculture, forestry and water management – Ms. Svjetlana Đukić	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023

Brčko District Department for Spatial Planning and Property and Legal Affairs – Ms. Nada Ljubojević	Presentation of the framework structure of the project and discussion about specific locations for implementation of project activities.	06 th July 2023
Ministry of Spatial Planning, Construction and Ecology of Republika Srpska – Ms. Svjetlana Radusin, Ms. Željka Stojičić	Acquaintance with project goals, project idea and discussion about specific locations for implementation of project activities.	12 th July 2023
Public forest company Šume Republike Srpske – Mr. Slaviša Opačić	Information about project idea and project activities with request for data on HCVF forests	21 st July and 15 th August 2023
Public forest company Sarajevo šume – Ms. Azra Muharemović	Information about project idea and project activities with request for data on HCVF forests	15 th August 2023
Institute for the Protection of the Cultural, Historical and Natural Heritage of Republika Srpska	Information about project idea and project activities with request for data on GIS data for protected areas	15 th August 2023
The Cantonal Public Institution for Protected Natural Areas in Canton Sarajevo	Information about project idea and project activities with request for data on GIS data for protected areas	15 th August 2023
Nature Park Hutovo blato -Mr. Nikola Zovko	Information about project idea and project activities with request for data on GIS data for protected areas	14 th and 17 th August 2023
BirdLife International- Mr. Thomas Lambert	Request for GIS data for Key Biodiversity areas in BiH	15 th August 2023

Implementation Arrangements

Based on consultations with the government, the Project will be co-implemented by UNDP and FAO. As the government's expressed intention to combine available GEF STAR allocation resources in one project to add value to activities, UNDP and FAO have been selected as implementing agencies. This selection was made based on UNDP extensive experience in climate change and biodiversity focal areas, while FAO has a leading role in land degradation field of work. UNDP and FAO will each be accountable for the implementation of their respective activities within this project, monitoring and management of risks in relation to such activities, and the use of resources. The two GEF agencies will divide outcomes/outputs of the project based on their respective expertise/comparative advantage. Each Agency will be responsible only for its own activities and only those activities that pertain to UNDP will be included in the UNDP Project Document and Results framework of UNDP. Both GEF agencies will be responsible for project level monitoring, reporting and evaluation of their respective activities to the GEF. UNDP as the Lead Agency will formally submit both reports to the GEF, provided however that the submission of the reports to the GEF by the Lead Agency in no way constitutes an assumption of liability or accountability over the results or activities of the other agency. The two GEF Agencies' roles and responsibilities and implementation arrangements will be discussed during PPG and detailed in the UNDP project document and FAO document.

Based on consultations with Government entities at the PIF development stage this project will be executed through the Direct Implementation Modality (DIM) and in co-implementation with FAO. The DIM implementation modality is considered as a risk mitigation measure given the complexity and specificity of the country's governance structure. This will be further discussed and agreed with GEFSEC at the PPG stage. UNDP Country Office (CO) in Bosnia and Herzegovina (BIH) has the required capacities to provide implementation/ execution support to national project partners in line with DIM rules. The CO is fully equipped to do so in full compliance with UNDP rules and regulations and GEF policies. The UNDP Country Office in Bosnia and Herzegovina has implemented USD 735 million worth of programmatic activities from 1996 to 2022, over 90% of which has been through DIM. There are four ongoing GEF projects (\$7,443,000), none of which have had issues with respect to execution. The current Internal Control Framework (ICF) for the CO fully complies with the Corporate Operational Guide of the Internal Control Framework for UNDP. The ICF ensures a clear distribution of roles and responsibilities between the Project Team, CO Program, and CO Operations. More information on the segregation of duties is provided under sections 3 and 8 of the UNDP Checklist (attached).

(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			
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	Bosnia- Herzegovina	Biodiversity	BD STAR Allocation: BD-1	Grant	2,257,279.00	214,442.00	2,471,721.00
UNDP	GET	Bosnia- Herzegovina	Biodiversity	BD STAR Allocation: BD-3	Grant	400,000.00	38,000.00	438,000.00
UNDP	GET	Bosnia- Herzegovina	Climate Change	CC STAR Allocation: CCM- 1-4	Grant	885,760.00	84,147.00	969,907.00
FAO	GET	Bosnia- Herzegovina	Land Degradation	LD STAR Allocation: LD-1	Grant	700,000.00	69,000.00	769,000.00

FAO	GET	Bosnia-Herzegovina	Land Degradation	LD STAR Allocation: LD-2	Grant	591,491.00	53,691.00	645,182.00
Total GEF Resources (\$)						4,834,530.00	459,280.00	5,293,810.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

150000

PPG Agency Fee (\$)

14250

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
UNDP	GET	Bosnia-Herzegovina	Biodiversity	BD STAR Allocation: BD-1	Grant	82,447.00	7,832.00	90,279.00
UNDP	GET	Bosnia-Herzegovina	Climate Change	CC STAR Allocation: CCM-1-4	Grant	27,482.00	2,611.00	30,093.00
FAO	GET	Bosnia-Herzegovina	Land Degradation	LD STAR Allocation: LD-1	Grant	40,071.00	3,807.00	43,878.00
Total PPG Amount (\$)						150,000.00	14,250.00	164,250.00

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	Bosnia-Herzegovina	Biodiversity	BD STAR Allocation	3,000,000.00
UNDP	GET	Bosnia-Herzegovina	Climate Change	CC STAR Allocation	1,000,000.00
FAO	GET	Bosnia-Herzegovina	Land Degradation	LD STAR Allocation	1,458,060.00
Total GEF Resources					5,458,060.00

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	1,300,000.00	11200000
BD-1-4	GET	957,279.00	6700000
BD-3-1	GET	200,000.00	1200000
BD-3-2	GET	200,000.00	1400000
LD-1	GET	700,000.00	6300000
LD-2	GET	591,491.00	5560000
CCM-1-4	GET	885,760.00	7790000
Total Project Cost		4,834,530.00	40,150,000.00

Indicative Co-financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Federal Ministry of Environment and Tourism	Public Investment	Investment mobilized	5000000
Recipient Country Government	Federal Ministry of Agriculture, Water Management and Forestry	Public Investment	Investment mobilized	12000000
Recipient Country Government	Ministry of Spatial Planning, Construction and Ecology of Republika Srpska	Public Investment	Investment mobilized	5000000
Recipient Country Government	Ministry of Agriculture, Forestry and Water Management of Republika Srpska	Public Investment	Investment mobilized	12000000
Recipient Country Government	Fund for Environmental Protection of Federation of Bosnia and Herzegovina	Public Investment	Investment mobilized	4000000
GEF Agency	UNDP	Grant	Investment mobilized	1000000
GEF Agency	UNDP - TRAC	Grant	Recurrent expenditures	150000
Civil Society Organization	Comitato Internazionale per lo Sviluppo dei Popoli, Rome, Italy (CISP)	Grant	Investment mobilized	1000000
Total Co-financing				40,150,000.00

Describe how any "Investment Mobilized" was identified

Clarification on the investment mobilized:

The Recipient Country Government (USD 38,000,000) of investment mobilized represents anticipated contribution by the:

(i) Ministry of Environment and Tourism (USD 5,000,000) to support management of national parks, flora and fauna inventories, ecological monitoring, management of cultural sites, climate adaptation, rural tourism development, etc.

(ii) Federal Ministry of Agriculture, Water Management and Forestry (USD 12,000,000) to support (a) crop protection, SLM, agricultural land management and integrated livestock management; (b) integrated water management, water resources planning, flood management, erosion control, etc. (c) management of forest enterprises, forest change monitoring, management of special purpose forests, technical support to cantonal and forest management enterprises

(iii) Ministry of Spatial Planning, Construction and Ecology of Republika Srpska (USD 5,000,000) to support spatial and land use planning, management of national parks, ecological monitoring and surveys, etc.

(iv) Ministry of Agriculture, Forestry and Water Management of Republika Srpska (USD 12,000,000) will support protection and utilization of agricultural land; weed control, improvement of forestry production; growing, protection, arrangement and improvement of forests; sustainable forest management, forestation of degraded forests, water management, etc.

(V) Fund for Environmental Protection of Federation of Bosnia and Herzegovina (USD 4,000,000) supports grants for environmental protection, sustainable waste management, energy efficiency, renewable energy, etc.

(vi) The NGO component of the investment mobilized represents anticipated contributions from respective projects, towards the improvement of conservation and sustainable use of natural resources.

(vii) The UNDP component of investment mobilized represents incremental investments in strengthening local livelihoods in the southern and central part of Bosnia and Herzegovina (covering the areas of the selected landscapes) through the portfolio of projects covering the fields of energy, environment protection, climate change mitigation and adaptation and sustainable growth. Anticipated cash contributions/TRAC financing to support key elements of the project implementation, including Project Management costs.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

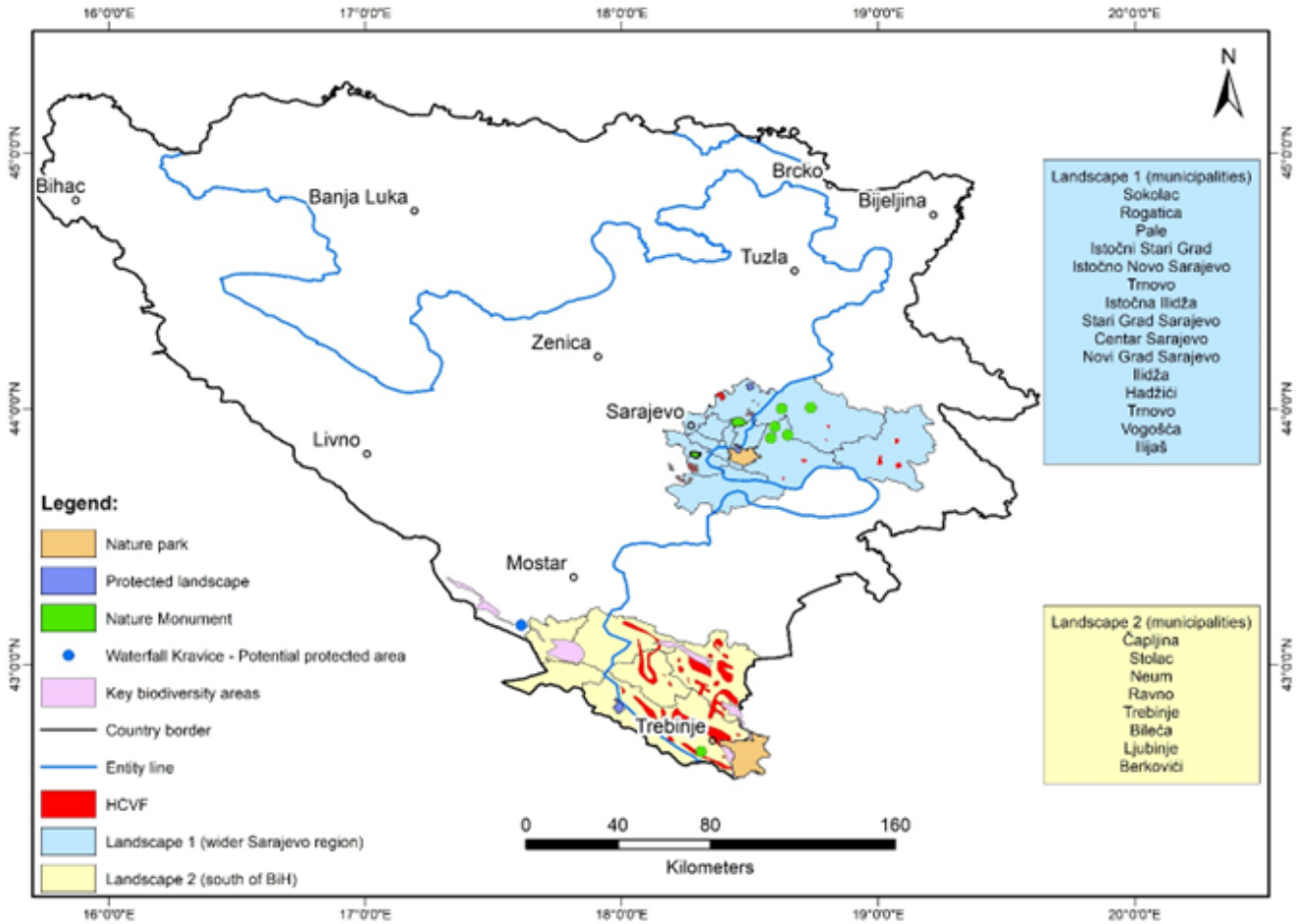
GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Mr. Pradeep Kurukulasuriya	10/11/2023	Executive Coordinator		pradeep.kurukulasuriya@undp.org
Project Coordinator	Ms. Monica Moldovan		Regional Technical Advisor		monica.moldovan@undp.org

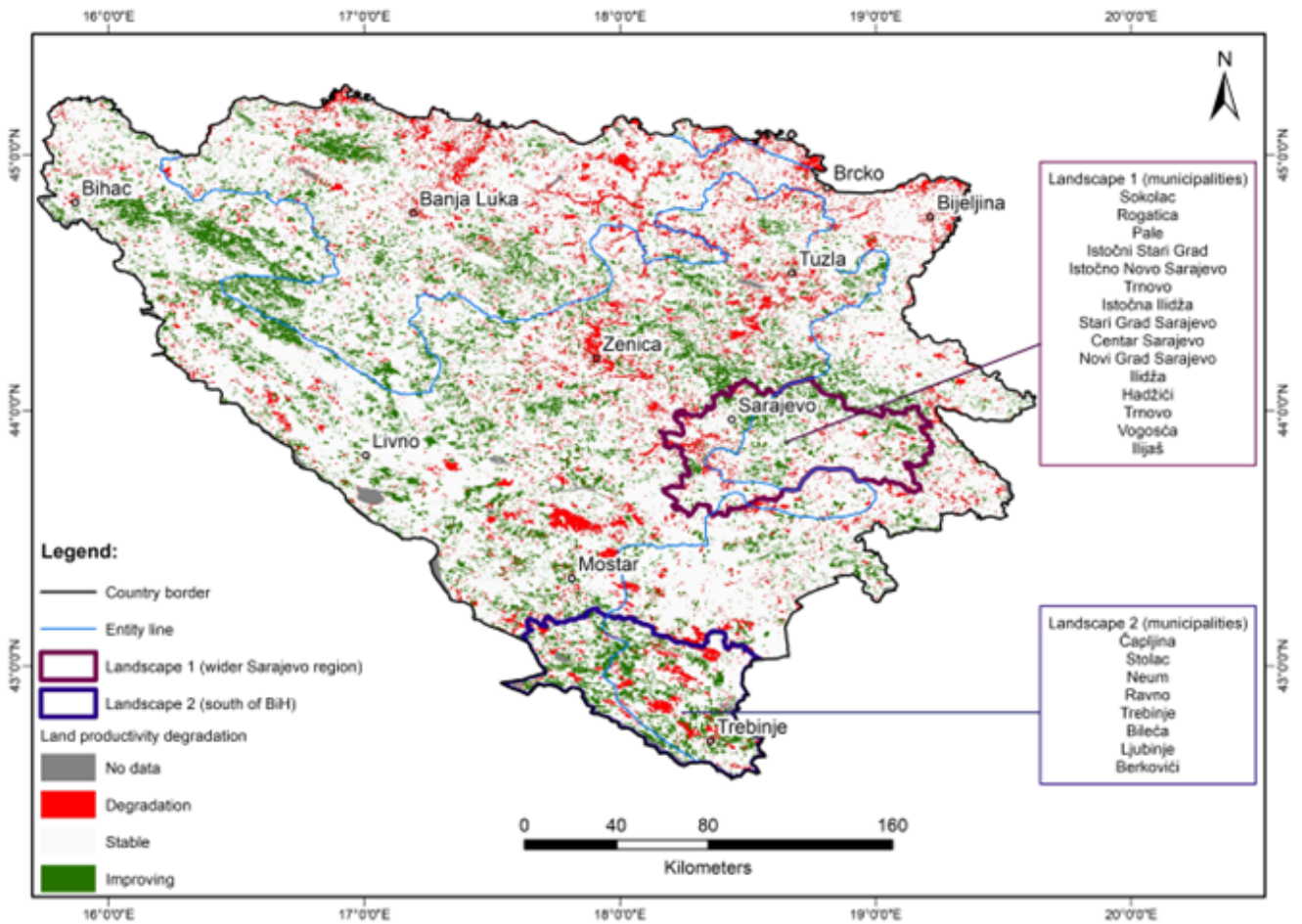
Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Rada Milisav	GEF OFF	Foreign Trade and Economic Relations	9/18/2023

ANNEX C: PROJECT LOCATION

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





Sources:

BirdLife International (2023) World Database of Key Biodiversity Areas. Developed by the KBA Partnership: BirdLife International, International Union for the Conservation of Nature, American Bird Conservancy, Amphibian Survival Alliance, Conservation International, Critical Ecosystem Partnership Fund, Global Environment Facility, Re:wild, NatureServe, Rainforest Trust, Royal Society for the Protection of Birds, Wildlife Conservation Society and World Wildlife Fund. March 2023 version. Available at <http://keybiodiversityareas.org/kba-data/request>

UNEP-WCMC and IUCN (2023), Protected Planet: [Protected Areas and OECMs for Bosnia and Herzegovina; The World Database on Protected Areas (WDPA)/Database on other effective area-based conservation measures] [On-line], [August/2023], Cambridge, UK: UNEP-WCMC and IUCN. Available at: www.protectedplanet.net.

Republic Institute for the Protection of Cultural, Historical and Natural Heritage of the Republic of Srpska Cantonal public institution for protected natural areas of Sarajevo Canton

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

Pre-SESP BiH Sept 20, 2023

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

Only relevant taxonomy tags appear in the below table. Full taxonomy worksheet can be found as Annex F of the PIF document uploaded in the Roadmap.

Level 1	Level 2	Level 3	Level 4
Influencing models			
	Transform policy and regulatory environments		
	Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	Demonstrate innovative approaches		
	Deploy innovative financial instruments		
Stakeholders			
	Private Sector		
		Financial intermediaries and market facilitators	
		SMEs	
		Individuals/Entrepreneurs	
	Beneficiaries		
	Local Communities		
	Civil Society		
		Community Based Organization	
		Non-Governmental Organization	
		Academia	
	Type of Engagement		
		Information Dissemination	
		Partnership	
		Consultation	
		Participation	
	Communications		
		Awareness Raising	
		Education	
		Public Campaigns	
		Behavior Change	
Capacity, Knowledge and Research			
	Enabling Activities		
	Capacity Development		
	Knowledge Generation and Exchange		
	Targeted Research		

	Learning		
		Adaptive Management	
		Indicators to Measure Change	
	Innovation		
	Knowledge and Learning		
		Knowledge Management	
		Innovation	
		Capacity Development	
		Learning	
	Stakeholder Engagement Plan		
Gender Equality			
	Gender Mainstreaming		
		Beneficiaries	
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Access and control over natural resources	
		Participation and leadership	
		Access to benefits and services	
		Capacity development	
		Awareness raising	
		Knowledge generation	
Focal Areas/Theme			
	Biodiversity		
		Protected Areas and Landscapes	
			Terrestrial Protected Areas
			Productive Landscapes
			Community Based Natural Resource Management
		Mainstreaming	
			Forestry (Including HCVF and REDD+)
			Tourism
			Agriculture & agrobiodiversity
			Infrastructure
		Species	
			Threatened Species
			Invasive Alien Species (IAS)
		Biomes	
			Wetlands
			Rivers
			Temperate Forests
			Grasslands
		Financial and Accounting	
	Land Degradation		
		Sustainable Land Management	

			Restoration and Rehabilitation of Degraded Lands
			Ecosystem Approach
			Integrated and Cross-sectoral approach
			Community-Based NRM
			Sustainable Livelihoods
			Income Generating Activities
			Sustainable Agriculture
			Sustainable Forest/Woodland Management
			Improved Soil and Water Management Techniques
			Sustainable Fire Management
		Land Degradation Neutrality	
			Land Productivity
			Land Cover and Land cover change
			Carbon stocks above or below ground
	Climate Change		
		Climate Change Adaptation	
			Climate Resilience
			Ecosystem-based Adaptation
			Private Sector
		Climate Change Mitigation	
			Agriculture, Forestry, and other Land Use
		United Nations Framework on Climate Change	
			Nationally Determined Contribution
			Sustainable Development Goals
		Climate Finance (Rio Markers)	
			Climate Change Mitigation 1
			Climate Change Adaptation 1