Conservation and Sustainable Management of Land Resources and High Value Ecosystems in Lake Sevan Basin for Multiple Benefits

Part I: Project Information

GEF ID
10854

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Conservation and Sustainable Management of Land Resources and High Value Ecosystems in Lake Sevan Basin for Multiple Benefits

Countries
Armenia

Agency(ies)
UNDP

Other Executing Partner(s)
Ministry of Environment

Executing Partner Type
CSO

GEF Focal Area
Multi Focal Area

Taxonomy
Forest, Focal Areas, Biodiversity, Protected Areas and Landscapes, Productive Landscapes, Terrestrial Protected Areas, Community Based Natural Resource Mngt, Mainstreaming, Forestry - Including HCVF and REDD+, Tourism, Agriculture and agrobiodiversity, Biomes, Lakes, Wetlands, Temperate Forests, Grasslands, Species, Threatened Species, Land Degradation, Sustainable Land Management, Sustainable Forest, Integrated and Cross-sectoral approach, Ecosystem Approach, Sustainable Pasture Management, Improved Soil and Water Management Techniques, Restoration and Rehabilitation of Degraded Lands, Income Generating Activities, Community-Based Natural Resource Management, Sustainable Agriculture, Sustainable Livelihoods, Land Degradation Neutrality, Land Productivity, Land Cover and Land cover change, Carbon stocks above or below ground, Forest and Landscape Restoration, Influencing models, Deploy innovative financial instruments, Demonstrate innovative approache, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Stakeholders, Local Communities, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Participation, Partnership, Consultation, Information Dissemination, Communications, Education, Awareness Raising, Public Campaigns, Beneficiaries, Private Sector, Individuals/Entrepreneurs, SMEs, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Sex-disaggregated indicators, Gender results areas, Access to benefits and services, Capacity Development, Capacity, Knowledge and Research, Targeted Research, Knowledge Generation, Innovation, Knowledge Exchange, Learning, Adaptive management, Theory of change, Indicators to measure change

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 1

Climate Change Adaptation
Climate Change Adaptation 1

Duration
60 In Months

Agency Fee($)
341,869.00

Submission Date
9/9/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-1-1	GET	1,088,288.00	8,000,000.00
BD-2-7	GET	1,088,288.00	10,275,000.00
LD-1-4	GET	1,422,055.00	8,200,000.00
	Total Project Cost ($)	**3,598,631.00**	**26,475,000.00**

B. Indicative Project description summary

Project Objective

To promote land degradation neutrality, restore and improve the use of land and water resources in Armenia's Lake Sevan Basin to enhance the sustainability and resilience of livelihoods and globally significant ecosystems

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount($)	Co-Fin Amount($)
Component 1: Promoting Land Degradation Neutrality in Lake Sevan Basin landscape to ensure productivity and ecological landscape resilience	Technical Assistance	**Outcome 1.1**: Land Degradation Neutrality in Ghegarkunik and Vayots Dzor provinces promoted through integrated multi-sectoral landscape approaches and sustainable Land Management (SLM) measures *Indicators*: • # of LDN compatible Spatial and Integrated Land Use Plans in targeted municipalities in Lake Sevan Basin *(to be selected at PPG)* • # of adopted methodologies for incorporation of biodiversity conservation requirements into spatial planning and management of land use in productive zones • Inter-sectoral coordination mechanism for LDN in Ghegarkunik and Vayots Dzor operational	**Output 1.1.1** Land Degradation trends assessed, LDN targets set-up and monitoring system developed for Ghegarkunik (534,900 ha) and Vayots Dzor (230,800 ha) provinces, providing a framework to avoid, reduce and restore degraded land through integrated landscape planning **Output 1.1.2** LDN compatible Integrated Spatial and Land-use Plans (ISLUPs) informed by climate change vulnerability, Economics of Land Degradation (ELD) and biodiversity values in prioritized municipalities **Output 1.1.3** Inter-sectoral coordination strengthened to oversee regional LDN target setting and implementation, integrated land use planning	GET	565,000.00	5,000,000.00

			and strengthened environmental governance in Lake Sevan Basin landscape **Output 1.1.4** Capacity building programme for regional and local authorities, natural resources users on LDN, SLM and methodologies for land use planning informed by ELD concept			
Component 2 Securing critical habitats for Biodiversity Services as a baseline for non-deterioration of ecosystem services within Lake Sevan Basin landscape	Investment	**Outcome 2.1** Capacity of Sevan National Park (147,456 ha) strengthened to better address the key threats to globally significant biodiversity. *Indicators:* • Stable population of globally threatened species including: Bezoar goat (*Capra aegagrus aegagrus*); Indian crested porcupine (*Hystrix indica*); European otter (*Lutra lutra*); Common pochard (*Aythya ferina*) VU; European turtle-dove (*Streptopelia turtur*) VU; Egyptian vulture (*Neophron percnopterus*) EN Saker falcon (*Falco cherrug*) EN; Armenian gull (*Larus armenicus*); Ferruginous duck (*Aythya nyroca*); Lesser white fronted goose (*Anser erythropus*) VU • Management effectiveness of Sevan National Park increased by 20%	**Output 2.1.1** Improved management effectiveness of Sevan National Park through PA regime compliance and enforcement, strengthened PA infrastructure, improved patrolling and enforcement capacity of environmental regulation, research and monitoring and species-focused conservation skills and capacities strengthened. **Output 2.1.2** Business Plan and strengthened tourism infrastructure at Sevan National Park; Innovative financing mechanism of the Park's biodiversity values; Public Private Partnerships for the valorization of Lake Sevan nature values. **Output 2.1.3** *Integrated Monitoring Data Base* developed to facilitate research and monitoring	GET	863,638.00	13,926,250.00

		• "Sevan Caretakers Network": Community based monitoring system of species and habitats • At least 2 Public-private partnerships promoting Lake Sevan natural values • Innovative PA financing mechanism identified and implemented **Outcome 2.2** Biodiversity conservation assessments and proposed arrangements in Lake Sevan landscape in place for the biodiversity hot-spots outside the PA. ***Indicators:*** • # of biodiversity conservation measures targeting biodiversity hotspots outside PAs identified, justified for protection. *(indicators validated and complemented at PPG stage)*	activities that reflects identified knowledge gaps and priority information needs for effective, participatory and science-based PA management. **Output 2.2.1** Key Biodiversity Areas (KBAs) and other biodiversity hotspots in Lake Sevan Basin landscape, outside PA identified, mapped, conservation status assessed, and climate sensitive conservation measures mainstreamed into Spatial Plans (used as input into Outputs 1.1.2, 3.1.1 and 3.1.3).			
Component 3: Promoting sustainable and biodiversity friendly economic development and incentives for local communities	Investment	**Outcome 3.1** Biodiversity friendly and LDN compatible SLM practices promoted in Lake Sevan production landscape. ***Indicators*** *(to be validated at PPG stage)* • 165,800 ha of sustainable natural resource management regimes (150,000 ha pastures;	**Output 3.1.1 S**ustainable pasture management plans at targeted village level, aligned with the LDN assessment and land use planning, including biodiversity measures for palearctic grasslands conservation; 10 Pasture Users Associations capacitated to apply	GET	1,353,887.00	5,000,000.00

5,800 ha forest; 10,000 ha of irrigated areas)
- 2,200 ha degraded forest restored
- 1,403,851 tCO2-eq sequestered
- 7,100 people benefit from sustainable natural resources regimes
- Eco-certification mechanism for tourism sector tested in Lake Sevan recreation zone (to be validated at PPG)

Outcome 3.2 Innovative financing and incentive mechanisms for integrated Sevan Lake Basin's landscape management, aligned with LDN principles, with demonstrated ecological and socio-economic benefits:

- ***Indicators***
- At least 10 farm enterprises are benefiting from performance based payments.
- 100 small and mid-size farmers grantees implementing SLM and benefiting from improved livelihoods.
- 10 small and mid-size farmers supported to obtain green certification (e.g. EcoGlobe Green Caucasus) *to be validated at PPG stage*
- 10 small scale tourist operators adhered to Green Key principles; biodiversity-sensitive nature based tourism products.

biodiversity friendly SLM measures to achieve LDN and resilient livelihoods.

Output 3.1.2 Climate sensitive and LDN compatible Integrated Water Management Plans in selected municipalities leading to soil improvement through innovative irrigation technologies and climate resilient crop farming aligned with LDN principles; strengthened capacity of WUAs to demonstrate sustainable crop farming and agroforestry measures.

Output 3.1.3 Sustainable Forest Management Plans addressing forest degradation and ecological connectivity through sustainable forestry measures and assisted regeneration.

Output 3.1.4 Best practice standards for nature-based biodiversity friendly tourism developed and endorsed.

Output 3.2.1 Pilot agri-environmental incentives scheme tested through performance based payments promoting biodiversity friendly agricultural practices and

- # of technically assisted[1] loan applications of local SMEs/CBOs for improved livelihoods.

[1] To support access to concessional loans under applicable State Programmes (the project will provide technical assistance for bank applications for SLM practices and agri-environmental subsidies for efficient equipment and machinery)

sustainable livelihoods in PAs, KBAs/IBAs buffer and production landscapes.

Output 3.2.2 Investments in community based biodiversity friendly sustainable use measures and support to small eco-tourism operators in the PA, KBAs buffer zones and corridors, aiming to provide alternative income to local communities.

Output 3.2.3 Strengthened Business management capacities[1] of producers (including women) to implement sustainable practices through targeted training and technical support for biodiversity friendly agribusiness (including green agriculture) and agri-eco-tourism development.

[1] Trainings on rural entrepreneurship, local eco-tourism, farm business planning; local handicrafts.

Component 4: Knowledge management and Learning	Technical Assistance	**Outcome 4.1** Best practices and lessons are accessed and applied in other production landscapes and micro-catchments in the country and in the region ***Indicators*** • # of events disseminated to share knowledge • # of communication products shared with the country stakeholders Existence of guidance, methodologies and tools for land use planning in targeted municipalities, informed by LDN principles; Biodiversity considerations; ELD concept.	**Output 4.1.1** Increased level of awareness among local communities and decision makers about LDN and key values of Lake Sevan Basin in connection with the use of water and biodiversity ecosystem services. **Output 4.1.2** Experience, best practices and lessons learned about LDN, SLM, biodiversity and water management, captured, systematized and made available through various platforms for public and private stakeholders for use in other production landscapes and catchment areas in the country and in the region.	GET	564,743.00	975,000.00
Component 5: Monitoring and Evaluation	Technical Assistance	**Output 5.1** Project results properly monitored and evaluated.	**Output 5.1.1** Set of monitoring and evaluation activities implemented Monitoring and evaluative knowledge systematically integrated into project management and planning.	GET	80,000.00	300,000.00
				Sub Total ($)	**3,427,268.00**	**25,201,250.00**
Project Management Cost (PMC)						
				GET	171,363.00	1,273,750.00
				Sub Total($)	**171,363.00**	**1,273,750.00**

	Total Project Cost($)	3,598,631.00	26,475,000.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Environment	Public Investment	Investment mobilized	22,440,000.00
GEF Agency	UNDP	Grant	Investment mobilized	3,000,000.00
Recipient Country Government	Ministry of Economy	Public Investment	Investment mobilized	500,000.00
Civil Society Organization	WWF Armenia	Grant	Investment mobilized	400,000.00
GEF Agency	UNDP - TRAC	Grant	Investment mobilized	100,000.00
Civil Society Organization	Caucasus Nature Fund	In-kind	Recurrent expenditures	35,000.00
			Total Project Cost($)	**26,475,000.00**

Describe how any "Investment Mobilized" was identified

Clarification on the investment mobilized: - The Government component of investment mobilized represents anticipated contribution towards (i) Sevan National Park restoration, preservation of forest ecosystem and management of freshwater resources; (ii) investment programme to support rural SMEs in agriculture sector under different programmes such as: “Construction or re-construction of small and medium “smart” cattle houses and state assistance for their technology and provision”; “Co-financing the introduction of modern irrigation systems” etc and other such targeted investments related to the Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia 2020-2030 - The UNDP component of the investment mobilized represents anticipated contribution towards enhancing environmental protection and resource efficiency in Lake Sevan watershed, under the programme EU4Sevan and support to sustainable agricultural practices under EU GAIA; as well as 100,000 USD from TRAC resources expected to support the project management. - The NGO component of the investment mobilized represents anticipated contribution towards improved conservation and sustainable use of natural resources within the eco-corridors in Vayots Dzor region.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNDP	GET	Armenia	Biodiversity	BD STAR Allocation	2,176,576	206,774	2,383,350.00
UNDP	GET	Armenia	Land Degradation	LD STAR Allocation	1,422,055	135,095	1,557,150.00
				Total GEF Resources($)	**3,598,631.00**	**341,869.00**	**3,940,500.00**

E. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)	PPG Agency Fee ($)
100,000	9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNDP	GET	Armenia	Biodiversity	BD STAR Allocation	70,000	6,650	**76,650.00**
UNDP	GET	Armenia	Land Degradation	LD STAR Allocation	30,000	2,850	**32,850.00**
				Total Project Costs($)	**100,000.00**	**9,500.00**	**109,500.00**

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
147,456.00	0.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

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)
147,456.00	0.00	0.00	0.00

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)
Sevan National Park		National Park	147,456.00						

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2200.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

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

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
2,200.00			

Indicator 3.3 Area of natural grass and shrublands restored

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

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

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)
165800.00	0.00	0.00	0.00

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)
150,000.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

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)
15,800.00			

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

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

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	1403851	0	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	1,403,851			
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting	2021			
Duration of accounting	20			

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

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

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

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

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

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

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,130			
Male	4,970			
Total	7100	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

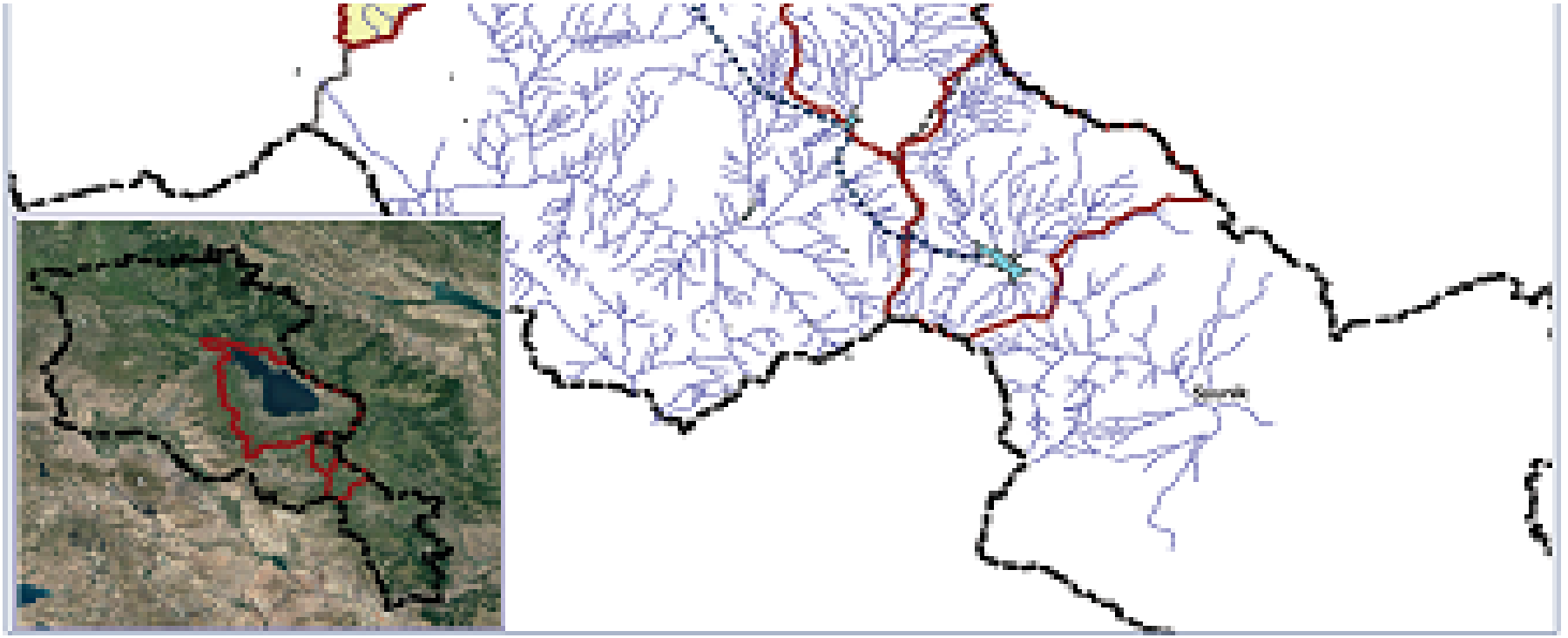
1a. Project Description

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Target Landscape and basic economic, environmental and climate context The project area includes the two regions (marzes) Ghegarkunik and Vayots Dzor, encompassing the Lake Sevan watershed (including area of water transfer) and surrounding landscape.

Fig 1: Watershed area of Lake Sevan (including water transfer area)





The map under Fig.1 also shows the 22 km long Vorotan-Arpa tunnel which brings additional water from Spandaryan Reservoir to Arpa and from there to Lake Sevan. According to the *Law on Lake Sevan*, the catchment basins of Arpa and Vorotan rivers are also considered part of Lake Sevan watershed areas, as the water reaches Lake Sevan through the Arpa-Sevan tunnel[1].

-

Gegharkunik region (marz) covers 5,349 km2 (including 1,270 km2 of lake Sevan). It is situated in the eastern part of the country at an altitude ranging from 2,000 to 3,500 m. It has population of 235,078 as of 2011 Census, of which 84% lives in rural areas, with a poverty incidence higher than national average. Migration, especially of youth and seasonal labor migrants is high due to the lack of job opportunities. The region encompasses 81,545 ha of arable land, 9730 ha of irrigated area, as well as 177,541 ha of pastures and 11,985 ha forest ecosystems. The majority of the population is involved in agriculture activities such as growing cereal and potato crops, vegetable production, livestock breeding. The region is the main fish supplier in the country. The province gently surrounds Lake Sevan and includes the “Sevan” National Park (147,456 ha) which covers the lake itself and further 24,000 ha of coastal land territories. The lake is fed by 28 rivers and streams. Sevan National Park has a zoning system, which includes: a) zone under strict protection regime; b) a recreational zone and c) an economic zone. These areas are interrupted and enforcement of protection regime is difficult. The recreation zone covers approximately 4300 ha of coastal areas. The economic zone incorporates areas where fishery and forestry activities are intense and due to the proximity of the strict protected areas, are directly affecting water and terrestrial ecosystems and key species habitats.

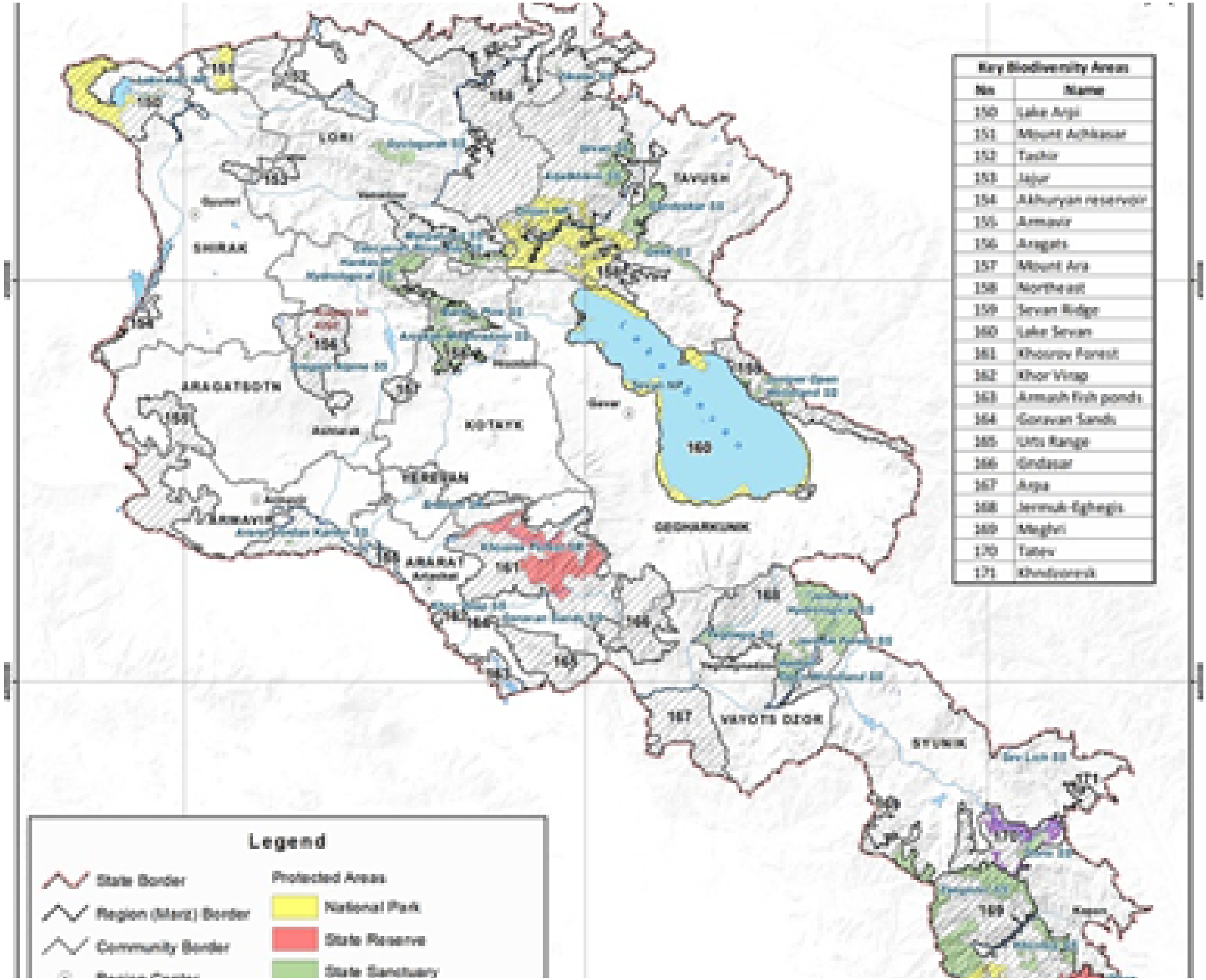
Vayots Dzor region (marz) is the smallest region in the country, characterized by the mountain steppe bio-climate type, between 1,300 and 1,800 m altitude. Vegetation is mostly encompassing grasses (*Festuca spp, Stipa spp.*) and cushion shrubs, in some cases as a result of deforestation. Chestnut soils predominate, in most cases exposed to erosion processes. Vayots Dzor stretches over 2,308 km2 (7.8% of the country), encompassing 15,741 ha of arable land, 6,378 ha of irrigated land, 92,302 ha pastures and 15,065 ha forest ecosystems. The population was estimated at 52,324 people as of 2011 census. The province has 3 urban communities, 41 rural communities and 52 village settlements. People are working mostly in agriculture, focused on commercial horticulture with vines and fruit trees, vegetable crops, animal husbandry and beekeeping. The main problems affecting agriculture development in Vayots Dzor marz are given by the obsolete, deteriorated irrigation and drainage system, inefficient use of water, unsustainable pasture-forest and farming management practices, lack of adequate machinery and technology, and weak presence of agriculture processing enterprises, resulting in low income and land degradation/soil erosion problems.

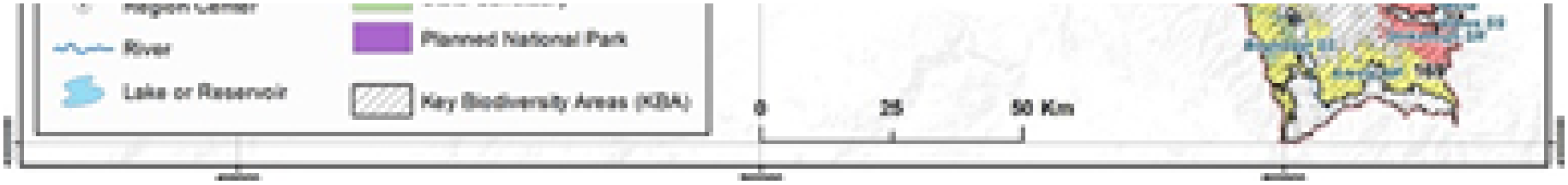
Biodiversity

Lake Sevan is one of the largest freshwater high mountain lakes of Eurasia, with a surface of 1242 km2. Its basin covers 1/6th of Armenia's territory and has a cooler climate, owing to its high mountain location. A unique feature of the landscape is its relatively high rate of endemism of flora and fauna. The biological diversity of plants is extremely high: approximately 1,600 species of vascular plants (50% of Armenia's flora) of which 48 are in the Red Data Book of Armenia and six species are endemic. A number of 29 Important Plan Areas were identified in Armenia[2]. Vertebrate fauna consists of 276 species of which 48 Red Book species with three of them being endemic to the region. Fauna of aquatic invertebrates include 150 species of different systematic groups. There are five natural zones in Lake Sevan Basin: (i) mountain steppe (situated in the lower regions of the basin 1900-2200m); (ii) mountain forests (located only in Pambak and Sevan ranges at 211-233m); (iii) mountain meadows (high biodiversity grasslands situated at 2300-2600) as well as (iv) alpine and sub-alpine meadows (located at 3500-2600m). Remnants of natural oak and juniper forests can be found between 2 900-2200 m altitude. According to Eurasian Dry Grassland Group's (EDGG) field observations published in 2019-2020[3], Armenia is one of the Palearctic hotspots of fine grain plant diversity.[4]Several biodiversity rich palearctic grassland areas are located in Sevan landscape and have been sampled by a group of researchers in 2020: (i) in Ghegarkunik: Sevan (vicinity of Sevan town); Ardanish; Shorja; Selim pass (ii) in Vayots Dzor : Hermon, Vicinity of Gnishik village, Khakik and Areni vilalges, Khachik village. The richest biodiversity of grasslands has been found Ardanish peninsula. The project area includes Sevan Ramsar site (incorporating the entire hydrological system of the Lake Sevan including its watershed, tributaries and outflow) officially designated in 1993, is anchored by several KBAs/IBAs and wildlife sanctuaries (Fig.2). Gegharkunik region is anchored by *Sevan* KBA/IBA (171,972 ha) nearly completely covered by Sevan National Park (147,456 ha). The Juniper Woodland Sanctuary (3312 ha) is neighboring Lake Sevan. In Vayots Dzor region, there are several wildlife sanctuaries Yeghegnadzor (4200 ha), Herher Open Woodland Sanctuary (6139 ha), Jermook Forest Sanctuary (3865 ha) and Jermook Hydrological State Sanctuary (18,000 ha). The *Jermook* KBA/IBA in Vayotz Dzor region overlaps with parts of the Jemook sanctuaries. These protected areas are partially or totally nestled within the South Eastern Lesser Caucasus Corridors, one of the main wildlife corridors in Caucasus Ecoregion (WWF), encompassing broadleaf and coniferous forests and subalpine-alpine meadows and shrublands. However, the biodiversity outside Sevan National Park is exposed to different threats.

Fig. 2: KBAs/PAs in the targeted regions




Key Biodiversity Areas
No
Name
150 Lake Arpi
151 Mount Achkasar
152 Tashir
153 Jajur
154 Akhuryan reservoir
155 Armavir
156 Aragats
157 Mount Ara
158 Northeast
159 Sevan Ridge
160 Lake Sevan
161 Khosrov Forest
162 Khor Virap
163 Armash fish ponds
164 Goravan Sands
165 Urts Range
166 Gndasar
167 Arpa
168 Jermuk-Eghegis
169 Meghri
170 Tatev
171 Khndzoresk
LORI
TAVUSH
SHIRAK
ARAGATSOTN
KOTAYK
YEREVAN
ARMAVIR
ARARAT
GEGHARKUNIK
VAYOTS DZOR
SYUNIK
Legend
State Border
Region (Marz) Border
Community Border
Protected Areas
National Park
State Reserve
State Sanctuary



Agriculture

Agriculture is one of the leading sectors of economy in the Lake Sevan Basin (12.7%)[5]. The total arable cropland area in Gegharkunik region is estimated at 81,545 ha of which irrigated area makes up to 9,730 ha, pastures cover 177,541 ha and forest area is estimated at 11,985 ha. In Vayots Dzor, the total arable cropland is estimated at 14,741 ha of which 6,378 ha represent irrigated areas. Pastures cover 92,302 ha and forest area is estimated at 15,063 ha. The exact land degradation extent in these two regions is not fully assessed. The Agricultural Census reports 345,875 farms with an average of 1.5 ha of agricultural land. Eighty percent of these farms have less than 2 ha. Only 1% of farms have more than 10 ha, and these farms account for 15% of agricultural land use. Traditional, mixed crop and livestock production systems predominate, with most land used for dryland cereal production for own consumption and livestock feed. A small herd of cattle and sheep provides milk and meat for own consumption and some cash income, supplemented by cash income from fruit and vegetables. The use of modern technology is low, with low consequent crop and livestock productivity. Sector growth has had a modest impact on rural household income, as the combination of small farm size and low farm productivity keep farm incomes low. Rural households rely on a mix of farm and non-farm incomes for their livelihoods, with non-farm sources as the major component[6]. Participation in cooperative structures is not widespread and the level of their performance is not satisfactory for the general agricultural sector. Accessible funding is a crucial factor for the success of the agricultural sector and for the well-being of smallholders, as it provides a number of opportunities: investing in efficient technologies and new product varieties, accessing markets, integrating into a value chain, extending the business, and much more. Access to finance is a leverage for the economic empowerment of rural women and men. There are several sources of funding that smallholders in Armenia have access to such as: commercial credits and loans (the access however remains low due to collateral, difficult application process and limited capacity for loan repayment of many small and midsize farmers), grants, government subsidies, remittances and personal savings.There is a continuing disparity in economic opportunities among women and men in Armenia. Rural women usually benefit from micro-credit or loan programmes provided by donor organizations, which make these funds available on the basis of a specific level of women's involvement (quotas). However, women face difficulties in obtaining loans, partly because they lack property for collateral. Other indirect burdens are women-unfriendly business environments, mobility constraints, limited access to large markets, and the gendered dimensions of social capital (i.e. social interaction and networking) (FAO, 2017).

Forest

The country is roughly divided into 4 landscape types: Deserts and semi-deserts, Mountain steppes, Forests, thin forests and shrubs, and sub alpine meadows. The forests of Armenia cover 334,100 ha (11.5% of a historic coverage of 30%), which includes 283,600 ha of natural forests and 50,500 ha of plantation forests. Forests of Armenia outside of official protected areas are managed by the state, through "Hayantar" State Non-Commercial Organization (SNCO–

state-owned enterprises) of the Ministry of Agriculture. Oriental beech (*Fagus orientalis*), the Georgian oak (*Quercus iberica*), the Oriental oak (*Quercus macranthera*), the Caucasian hornbeam (*Carpinus caucasica*) and the Pine tree (*Pinus kochiana*) form 97.2% of the forested territory in Armenia and 97.2% of the overall forest mass. Armenian forests include a number of endemic and rare species[7]. Across much of the country, landscapes face moderate to severe deforestation and overgrazing pressures, corresponding in high rates of erosion, increasing soil salinity, lowered soil fertility, and loss of biodiversity.

*Climate Baseline**[8]***

Armenia's climate can be described as highland continental, with large variation between summer highs (June to

August) and winter lows (December to February) The country also experiences large climatic contrasts because of its intricate terrain, and the climates range from arid to sub-tropical and to cold, high mountains. Summer highs in Armenia's capital Yerevan average around 30°C–33°C while the average in winter is 1°C–3°C. The more mountainous regions experience lower average temperatures and prolonged periods of snow cover. The average annual precipitation is low at 526 millimetres (mm). Precipitation intensity is greater in Armenia's high-altitude regions with May and June the wettest months. For Armenia, altitude is the strongest controlling factor determining the spatial distribution of temperatures and precipitation in Armenia. Sub-zero average temperatures are common in Armenia's mountain ranges while its highest average temperatures are experienced in the relatively low-lying western plains. Similarly, Armenia's highest peaks may receive up to 1,000 mm of annual precipitation

while precipitation can be as low as 200 mm in the western plains. Armenia's NC4 reports that it experienced an average temperature rise of 1.23°C between 1929–2016. This historical rise in temperatures has resulted in the rapid shrinking of the glaciers in Armenia's mountain regions, with spatial extents retreating at around 8 m per year.19 Trends suggest climate variability is increasing and in 2018, Yerevan experienced a new record July temperature, reaching 42°C. Armenia's NC4 reported a 10% reduction in average annual precipitation volume was documented over the period 1935–2012.

Climate trends

Armenia's climate is influenced by the Caucasus Mountains, and ranges from dry sub-tropical to cold alpine. The average annual temperature (1960-2015) is 7.6°C, varying from -8°C in the high mountains to 12 to 14°C in low valleys. The coldest temperatures occur December to February (ranging from -3 to -7°C), and warmest temperatures occur in July and August (averaging about 20°C); though, in low-land areas temperatures can reach 24 to 26°C in July and August, and in high alpine regions temperatures typically do not exceed 10°C. Armenia's average annual precipitation is 524 mm (1960-2015), over 40 percent occurring April through June; with average annual precipitation of 200 to 250 mm in low-land areas, and 800 to 1,000 mm at higher altitudes. The projected changes by 2050 include: (i) An increase in average annual temperature of 1.6^0C to 2.2^0C; (ii) An increase in the number of "hot" days and nights and a decrease in the number of "cold" days and nights; (iii) Inconsistent changes in average annual precipitation, but likely reductions of -7 to -10% in monthly average precipitation June to September; (iv) An increase in the number of consecutive dry days by 7 to 11 percent; (v) An increase in extreme rainfall days by 22 to 32 percent.[9]

Threats, Root causes and Key Barriers

The main threats to biodiversity and land resources in the Lake Sevan Basin listed below are rooted in the outcomes of the agrarian reform and land privatization in early 1990s, undeveloped agricultural markets, economic background and policy framework inadequacies.

Human encroachment through land conversion. Even though agriculture remains the main source of economic activity in rural areas, Armenia still lacks a rational approach to sustainable use of existing arable lands. Armenia has a tremendous agricultural potential but the land is divided in small parcels and land owners have insufficient knowledge in applying modern cultivation technologies, making a rationalized approach challenging. According to the World Bank, with almost half a million hectares of cropland divided over 350,000 small farms, Armenian agriculture is at a crossroads[10]. Encroachment is evident in all habitats and through various schemes. More than 60% of land is under active agriculture and water wastage is the main cause of soil degradation and salinization due to obsolete irrigation infrastructure. Almost 33% of cropland is not used according to its purpose and/or abandoned, which threatens adjacent biodiversity rich areas as croplands get invaded by aggressive weeds that expand and affect biodiversity in the surrounding habitats. Other lands are changed to make room for construction, open mining, development of hydropower production sector, tourism and agriculture, leading to loss of valuable habitats, overexploitation of biological resources and environmental pollution[11].

Overexploitation and spatial requirements of fragmented wildlife populations and their habitats. The Caucasus ecoregion is a global biodiversity hotspot. Beyond the boundaries of the well-established protected areas in Armenia, the enforcement of wildlife law is weak and inefficient. Poaching of large mammals such as Mouflon and Bezoar goat for sport and consumption remain quite common. These wild mountain ungulates often occur in fragmented populations, because they depend on elevation belts such as alpine grasslands or landscape features such as cliffs on which they rely, as refuge from predators. Due to these associations, wild ungulates are relatively easy to locate and hunt. The analysis of their spatial distribution and delineation of wildlife corridors in the spatial and land use planning, with clear conservation requirements and enforcements should therefore become a priority. Illegal tree cutting for fuel wood, overuse of communal grasslands for livestock grazing are already negatively affecting local biodiversity and key species habitats. Climate change will likely alter the spatial requirements of most species and therefore some flexibility and adjustments should exist within the landscape managed specifically for biodiversity benefits.

Unsustainable grazing loads: underutilization or overutilization Across the country, landscapes face moderate to severe overgrazing pressure corresponding to high rates of soil erosion, increased soil salinity, lowered soil fertility and loss of grassland biodiversity. Overgrazing of communal pastures end up destroying the upper layer of vegetation and causing subsequent loss of biodiversity with changes of ecosystems and communities of plants. Despite availability of vast pastures, grazing is excessively carried out in only 19 percent of that land (i.e. land in close vicinity, 0-7 km, to the livestock farmers' villages). The remaining 81 percent of grazing land is underutilized. The problem of overgrazing in nearby village pastures and under-grazing in remote areas had led, on one hand to degradation and erosion of nearby pastures, and on the other hand to under-utilization of other remote pastures, resulting in a build-up of a soil crust and reduced water absorption and the gradual displacement of valuable pasture flora by lichens. Remote pastures are underused (because of distance and access), but still subject to degradation: in this case by the development of bushes, small trees and unsuitable species for livestock[12].

Soil degradation from unsustainable farming practices and desertification. The annual cost of land degradation is estimated at US$ 71 million (approx. 4.2% of the GDP)[13]. Of the 464,300 ha of arable lands in Armenia, 20.3 percent is eroded. Inappropriate farming techniques and unsustainable extensive irrigation practices, especially on steep slopes in the meadow and steppe zones, where shelterbelts do not exist, exacerbate erosion problems. Approximately 20% of irrigated areas in Armenia are affected by severe to moderate soil salinity, due to poor maintenance and operation of the irrigation system and inadequate irrigation practices. By 2030, a decline of 8-14% in the yields of the main agriculture crops, and of 4-10% in the yields of pastures is forecasted. Soil humidity

will reduce by 10-30%, moisture reserves of various crops will decline by 7-13%, and the water deficit of land will increase by 25-30%. The higher frequency and intensity of heavy rainfall and floods will intensify water-driven erosion, and droughts and southern winds will cause further wind erosion. The assessment of the level of soil erosion in Gegharkunik subregions (Sevan, Martuni, Chambarak, Gavar, Vardenis) shows that approx.80% of the soils are slightly eroded and 19% moderately/strongly eroded. In Vayots Dzor region, the level of soil erosion is estimated at 61% slightly eroded and 39% moderately/strongly eroded. Droughts and sand storms are more frequent in Vayots Dzor region.

Unsustainable wood harvesting Local deforestation is driven primarily by unsustainable wood harvesting due to the precarious socio-economic situation of rural population. The slow pace of reforestation/afforestation, the forest fires and the insufficiently robust forest management plans as well as an overall underfunding of the forest management sector are additional drivers. Furthermore, uncontrolled grazing continues to encroach forest lands more and more each year, degrading forest health, structure, quality, and carbon storage potential. Legal and illegal wood harvesting is taking place on areas which potentially qualify as High Conservation Value Forests. The residual effect of past and present ongoing deforestation and forest degradation, combined with continuing forest fragmentation due to construction of roads, pipelines and railways pose a threat to biodiversity.

Declining water quality and disturbed aquatic ecosystem in Lake Sevan. There are 28 inflow rivers and one outflow (Hazdan river) associated with the Sevan catchment area, affected by several pressors impacting water quality in the Lake Sevan such as: untreated wastewater from domestic and industrial sectors-including mining; diffuse pollution from agriculture sector (crop farming and use of fertilisers, cattle breeding and overgrazing of pastureland and soil erosion). Fish farms and cage farms located in Sevan Lake are further impacting the water quality and represent a source of nitrogen and phosphorus effluents. The impact of fish farming on lake eutrophication and the phosphorus balance have not been intensively studied and significant gaps in other data such as on the fertilisers use in the arable land of Sevan Basin makes it difficult to elaborate on adequate management measures[14]. The lack of monitoring data on the quality and quantity of water resources and on the status of ecosystems represents a challenge in the Sevan basin. While significant progress is being made with support from the European Union (EU) and other donors - there are still important gaps to be filled, including addressing the inadequate hydro-meteorological and hydrogeological observation data due to insufficient monitoring sites; insufficient actual water use data; absence of biological monitoring data; insufficient data on the water abstraction for fish-farming and data on phosphorus release from fish farms; as well as data on wastewater composition and volume. Furthermore, the current water use in the Sevan basin - including excessive transfers of Lake Sevan's water through Sevan-Hrazdan Cascade for generation of hydropower and irrigation represent compounding drivers. The fluctuation of water's temperature (due to cooling water, wastewater release in the lake, water stagnation due to abstraction; climate change etc) and the drop in the available oxygen due to the organic pollution, eutrophication and algal blooms are further disturbing the lake's aquatic ecosystem.[15]

Climate change According to the Fourth National Communication to the UNFCCC, under anthropogenic influence, Sevan Lake's water level has decreased in the past decades by approximately 20 meters, and its water volume by more than 40% leading to significant thermal regime and ecosystem changes. Climate change is further contributing to the worsening of the lakes ecosystem's condition. Air and water temperature (within the range of 12-19.4 degrees Celsius[16]) are increasing, exacerbating eutrophication processes with peaks in summer and autumn. The increase in temperature will have a negative impact on fish populations, particularly the endemic *Salmonidae* species, likely to be gradually replaced by *Cyprinidae* species, which are less sensitive to water temperature and content of dissolved oxygen. As a result of a reduction in precipitation, saline marshes located at the lower mountain level will transition to herbaceous ecosystems such as saline steppes[17]. Plant and animal species are likely to shift upwards in elevation due to climatic changes,

altering ecosystem structure, habitat biodiversity and ecosystem services. Wildfire risk is projected to increase under all climate change scenarios accounting for up to 1300 ha of lost forest ecosystems by 2030. The forest ecosystems in Vayots Dzor region are vulnerable to increasingly dry and arid climate. More than 15% of Armenia's higher plant species are in danger of extinction due to projected climate change. Semi-desert and desert areas are projected to expand by 30%, which will accelerate desertification. More frequent summer droughts and water stress will reduce the growth rate of trees and increase susceptibility to pests and diseases; this will also create conditions conducive to more frequent and intense wildfires, leading to an estimated 14,000 to 17,000 ha of forest loss by 2030. Two primary types of drought may affect Armenia: meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region's wider river basins). At present, Armenia faces a significant annual probability of severe meteorological drought.[18]

Key Barriers

The following key barriers need to be removed on the path towards a sustainable use of natural resources and conservation of land resources and high value ecosystems in Lake Sevan landscape:

Barrier 1*: Limited technical capacity and stakeholders coordination for sustainable integrated spatial and land use planning that accounts for LDN and high nature value habitats in the Lake Sevan Basin*

According to the National LDN report, approximately two-thirds of all agricultural lands are at different stages of degradation. Although the underlying causes of the land degradation are well understood, the technical and institutional capacities, including inter-sectoral coordination to address land degradation are insufficient. LDN approaches are not yet part of the land use planning, legal, policy and regulatory framework at national or regional/local levels and capacities to implement integrated land use planning and sustainable non-depleting agriculture practices that reduce/eliminate diffuse water pollution sources from agriculture are extremely limited. Furthermore, in order to conserve biodiversity outside PAs, there is a need for local-level spatial plans that not only fully take into consideration biodiversity conservation considerations, but are also effectively implemented with compliance being monitored and enforced. High nature value farmland and grassland in Armenia are not covered in full by any strategic document or plan in operation. Biodiversity conservation, in practice, relies primarily on in-situ protection, within the existing protected areas which do not cover all species and habitats important for conservation, like the biodiversity rich grasslands which are exposed to various threats and pressures. Several PAs and KBAs/IBAs, wildlife sanctuaries and other biodiversity hot spots are present in Lake Sevan landscape outside the Sevan National Park, however a spatial integration of the biodiversity in land use and spatial planning at regional and local levels remains yet to be achieved.

Barrier 2. *Limited technical knowledge and lack of financial incentives for LDN/SLM implementation and livelihood diversification*

Land Degradation Neutrality is implemented at local level through tailored Sustainable Land Use Management (SLM) measures that will aim at preventing-reducing-restoring degraded land. Currently there is limited knowledge and information on LDN approaches and guided LDN compliant SLM at local level. There are successful models of SLM implementation in different areas, within the framework of various GEF and UNDP and other multilateral (e.g. World Bank, IFAD) and bilateral donors that have been investing for a number of years in developing Armenia's national capacity for sustainable land and water management, with some progress. At local levels, there are significant gaps in the technical knowledge regarding the implementation of sustainable pastures

and forest management measures and efficient irrigation and crop farming methods that do not deplete soil resources. Similarly, there is little knowledge on the potential for alternative incomes and little or no affordable finance to offset initial investments in order to facilitate livelihood diversification of the local communities and an increase of their food security and resilience.

Barrier 3: Little or no financial/compensation schemes to incorporate biodiversity friendly practices in the priority sectors

Although certain biodiversity conservation considerations are embedded into the sectoral policy framework documents, little or nothing is provided for the implementation of biodiversity-friendly practices in the priority sectors (tourism, forestry, agriculture). Private businesses in the vicinity of PAs and KBAs (tourism, agriculture, forestry) do not mainstream biodiversity conservation as a priority. No incentives to support biodiversity-friendly practices for the small-scale production and service businesses (tourism, farming) are in place. In agriculture sector, the high cost of accessing distant pastures and fodder provision together with limited availability of labor, have increased pressure on pastures near villages. Declining livestock productivity has pushed households to generate income through increasing their livestock numbers, adding pressure on pastures. There is insufficient financial support for farmers to access distant pastures and there are no compensations that would incentivize the implementation of sustainable management practices beneficial for biodiversity rich grasslands such as the palearctic grasslands that are found in the project area. Similarly, there is no evidence of existing regulations and/or certification standards in the travel and tourism sector that would incentivize the application of nature-based, environmentally responsive and biodiversity sensitive operations.

Barrier 4. Limited human and financial resources in the management of PAs

ıe lack of capacity at the individual, institutional and systemic levels is a limiting factor in biodiversity conservation and PA management in the country. PA anagement barriers are associated with deficiencies in management planning and implementation of PA management plans, insufficient capacities for patrolling ıd monitoring, unrealized opportunities for sustainable tourism development and income generation. Inadequate enforcement of relevant regulations remains one of e important underlying causes of biodiversity loss. The GEF UNDP Project 3986 "*Developing the Protected Area System of Armenia*" highlights a series of capacity ıps of the PAs such as gaps in business and management planning, capacities in tourism management, capacities in community-based/participatory management, ɔdiversity monitoring law enforcement.

2) The baseline scenario and any associated baseline projects

The National LDN Target agreed by Armenia is the following "By the year 2040, the carbon stock lost between 2000 and 2010 will be recovered and increased by 2,8% in relation to present". The National LDN target setting process recommends several directions to be followed in order to attain the LDN such as: 1) Halting cropland degradation currently affecting 2/3rd of the country's territory, by applying organic agriculture measures, increasing knowledge and awareness about the use of organic fertilizers; 2) Implementing reforestation of 2/3rd of degraded land, expected to be supported by the *Armenian Forest Programme* aiming at increasing the afforested area up to 20% of the country's territory; 3) Halting deforestation and improving forest management on 100% of national territory; 4) Halting overgrazing and improving grassland management on the 100% of national territory. A draft Government Decree on the formal approval of Program on Land Degradation Neutrality is submitted for Government's review (2021). The UNDP/GEF project will contribute to the overall progress towards the National LDN Target by (i) focusing at regional LDN target setting and implementation in Lake Sevan Basin landscape (ii) strengthening

the inter-sectorial coordination for LDN at Lake Sevan landscape level (iii) coordinating closely with the existing similar LDN initiatives (FAO) in order to establish monitoring and reporting mechanisms for LDN and exchange lessons learned and experience on LDN regional implementation and reporting from sub-national (regional) to national levels.

The Government of Armenia is committed to set and implement measures that meet the global commitments of LDN, contributing to goal 15.3 of the SDGs to achieve LDN by 2030. The Government's **Agricultural Development Strategy** (2014-2025) and the **Government's Sustainable Development Strategy** (2030) are focusing on sustainable agriculture, by promoting soil conservation measures improving water collection and irrigation methods limiting the use of fertilisers and other agrochemicals and improving pasture management. A number of laws have been established to address environment in farming practices however limited resources are allocated to reduce soil erosion and use of fertilisers or to increase production of degraded land through agroforestry, plantation of shelterbelts to reduce degradation of arable land[19], facilitating public investments into sustainable land management measures, some of them being complementary to the project's objective.

The EU has been one of the key players in modernising agricultural and rural development approaches. The **European Neighbourhood Programme Agriculture and Rural Development (ENPARD)** in Armenia was implemented between 2015-2017 EU-ENPARD and has promoted sustainable and inclusive agricultural approaches and support to rural development through investments in modernisation of equipment, farming techniques and crop diversification, income generating activities in the rural areas. The project will draw on the lessons learned and generated knowledge.

The GIZ has implemented a regional project targeting Armenia, Azerbaijan, Georgia during 2015-2019 titled **"Integrated Biodiversity Management, South Caucasus (IBiS) programme"** with a total budget of US$ 22.89 million. The programme focused on two area related to this project: (i) sustainable forest management at national and forest enterprise levels and (ii) sustainable pasture management at national and local levels. In the forest area the programme focused on the development of a National Forest Management Information System. In the pasture area, it supported the development of a pasture toolkit, which includes a pasture monitoring manual, pasture management guidelines and pasture rehabilitation guidelines. The UNDP/GEF project will seek to include and build on these results and tools developed for pastures management and forest monitoring and will draw on the lessons learned in pilot regions on participatory natural resources management

WWF Promotion of Ecological Corridors (2015-2020) funded by the Ministry of Environment and the Government of Germany through KfW Development Bank. The establishment of safe migration ecological corridors included awareness raising and education activities engaging 30 rural settlements in Ararat, Syunik and Vayotz Dzor. Community supported nature conservation areas covering 37,000 ha and community supported monitoring programmes have been established. Habitat mapping and species population's assessment of Armenian Mouflon, Bezoar Goat, Brown Bear have enriched the knowledge base on these threatened species. Community support sub-projects consisting in provision of agriculture machinery, investments in action plans for restoration of adjacent forests, and energy efficient lighting have been implemented in these areas as compensatory mechanisms and support to sustainable resource management .

EU funded **River Basin management Plan Armenia (EUWI+) 2016-2021** part of the EU Water Initiative Plus for the Eastern Partnership (EUWI+4 EaP) has supported the Armenian government to bring water legislation closer to the EU Water Framework Directive and has developed three rivers basin districts management plans, Sevan Basin among them. The proposed project will further strengthen the intersectoral stakeholders coordination that has been leveraged under the EUWI+ project and through its activities will support the implementation of various actions included in the management plan under Ecosystems chapters such as: support to improved farming practices in Sevan basin, agroforestry measures and improvement of forest ecosystem management; support to integrated monitoring and availability of data on ecosystems and species in Sevan basin.

Several current government investments programmes and donor funded initiatives are particularly relevant for the proposed project:

Implementing National Organization	Brief description, time period, budget and relevance to the project
Ministry of Economy	**The Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector of the Republic of Armenia 2020-2030** The Strategy outlines the key priorities of the agricultural policy of the Republic of Armenia, defines the scope of priority issues, as well as the Action Plan for the initial implementation period of the Strategy (2020-2022). The priorities include, *inter alia*: climate change adaptation, resilience and environmental sustainability – increased focus on climate change awareness, adaptation and mitigation strategies, while also working to ensure that agriculture sector development is informed by a focus on resource sustainability, including good water and soil management principles. *Synergies:* The proposed project will support some of the measures that are related to the priority investments listed in the Strategy e.g. Improved georeferenced data on abandoned land; Development of Local markets; Improvement of the effectiveness of agricultural advisory services; Support sustainable rural development; Support to modernization of agriculture. *Total budget: US$39.8 million* *Initial Period: 2019-2021*
Ministry of Economy	The Ministry of Economy and the World Bank are implementing the project **Community Agricultural Resource Management and Competitiveness (CARMAC II).**

	The main objective of the project is to improve the productivity and sustainability of pastur e and livestock systems in the target communities and to increase production volumes pro duced and marketed in selected high value agri-food value chains Components: Communit y Pasture and Livestock Management Systems, Value Chain Development, State Capacity Building Capacity. *Synergies*: The proposed project will build on this project's analysis and lessons learned in pasture management and livestock farmers' involvement. *Total budget: US$42million* *Period: 2015-2022*
Ministry of Territorial A dministration and Infra structure	**Management of natural resources and safeguarding of ecosystem services for sustainable rural development in the South Caucasus (ECOserve)** The project is implemented in Armenia, Azerbaijan, Georgia aiming at improving condition s for the sustainable and biodiversity-friendly use of natural resources in the dominant land -use systems (grazing, agriculture and forest) in the South Caucasus. The focus is on the d ominant land-use systems - grazing land in Armenia, agriculture in Azerbaijan, and forests i n Georgia. Project components: Data collection and management, Regulatory framework, P ilot activities, Training and PR, establishment of pasture platform. *Synergies*: The proposed project will build on the GIS analysis, data and lessons learned on pastureland and forest management. *Total budget: US$15 million* *Period: 2018-2021*
Ministry of Environmen t	**SEVAMOD2 Building up science-based management instruments for Lake Sevan, Armenia** The project is a continuation of SEVAMOD *Development of a model for Lake Sevan for the i mprovement and understanding of its ecology and as instrument for the sustainable mana gement and use of its natural resources (2017-2019)* that provided valuable research result

	gement and use of its natural resources (2017-2019) that provided valuable research results on the water quality assessment of the Lake Sevan and its tributaries. The SEVAMOD2 is funded by the Federal Ministry for Education and Research of Germany and aims at the monthly sampling of water and assessment of water quality in Lake Sevan through the development of physical-ecological eutrophication modelling (considering parameters such as nutrients, plankton, oxygen) and analysis of different scenarios. The project will develop a nutrient management concept and will strengthen Armenia's capacity for the use of remote sensing in water modelling. *Synergies:* The GEF project will support the Lake Sevan National Park management measures and integrated monitoring, and will explore the possibility of building on the SEVAMOD research results and SEVAMOD2 proposed Lake Sevan Nutrient Management Concept. *Total budget* *Period: 2020-2023*
Ministry of Environment	**Increased climate resilience of South Caucasus mountain communities and ecosystems through wildfire risk reduction** The project seeks to increase resilience of mountain communities and forest ecosystems to climate-induced hazards, and in particular to the increasing risk of forest wildfire in mountainous regions of the Southern Caucasus. By doing so, the project aims to improve the safety and livelihoods of forest-dependent communities, reduce bio-diversity losses and other environmental impacts, reduce the costs associated with large scale wildfire response, loss of life and other damages, and maximize ancillary benefits associated with sustainable forest management, including the role of forests as carbon sinks. Synergies: The GEF project will support sustainable forest management plans (under Output 3.1.3), and will work with the "Hayantar" State Non-Commercial Organization (SNCO– state-owned enterprises) of the Ministry of Agriculture in coordination with the Adaptation Fund Project, building on this project's generated knowledge and experience in wildfire and forest management plans and risk reduction measures at community level in Vayots Dzor region.

	Total budget: 7,475,650 USD *Period:2020-2025*
Ministry of Economy	**EU Green Agriculture Initiative in Armenia (EU-GAIA)** The project will support local smallholder farmers, producers and agri-businesses in general to develop their competitiveness, through grant schemes and investments in green technologies and demonstrative activities at farm level in Shirak, Lori and Tavush regions. The project is partially implemented by UNDP. *Synergies*: The proposed project will build on the good practices and will support knowledge exchange and joint awareness and training activities. *Total budget: EU 9,7 million EUR; Austrian Development Agency : 2 million EUR* *Period: 2020-2024*
Ministry of Environment	**EU4Energy Efficiency and Environment/ EU4Sevan** *(implemented by GIZ and UNDP)* The main objective is to support initiatives aimed at energy efficiency and environmental protection. In particular, this programme aims to increase energy efficiency in existing buildings, in particular in multi-apartment residential buildings (MAB) as well as public buildings, non-gasified communities, low-income households and aims to reduce water contamination in Armenia's largest lake. The EU4Sevan (sub)project is to enhance the environmental protection of Lake Sevan by improving water monitoring and management capacities for Lake Sevan watershed; implementation of ecosystem-friendly and water -protecting land use and cultivation practices; capacities for implementing wastewater treatment; awareness. The project will develop Sevan National Park management plan. *Synergies:* the proposed project targets Lake Sevan landscape and will coordinate with EU

	4Sevan project to support Sevan National Park with the implementation of the managemen t plan developed under the EU4Sevan. *Total budget: EU4Energy Efficiency and Environment 9,000,000 EUR, of which EU4Sevan: 5, 000,664 EUR* *Period: 2020-2024*
Ministry of Environmen t	**Program of Establishing New Forest Stands Around Lake Sevan (2014-2023)** The main objective of the Program is to restore the environmental balance of Lake Sevan a nd its watershed through the expansion of forested areas. Planting of valuable forest fruit species is aiming to also benefit local communities. Within the framework of the programe a tree/plan nursery will be set up to support planting of 1,113 hectares of new forested are as. *Synergies:* The proposed project will support sustainable forest management plans integra ted with the exiting forest management planning of the forestry business units and Sevan National Park administration. There are good opportunities for sharing knowledge and buil ding on existing plant/tree nurseries and strengthening the infrastructure. *Total budget: US$4.8 million (including US$ 1.8 mil for planting on community lands)* *Period: 2019-2021*
Ministry of Environmen t	**EU4Climate** *(Armenia component implemented by UNDP)* The EU4Climate helps governments in the six EU Eastern Partner countries Armenia, Azerb aijan, Belarus, Georgia, the Republic of Moldova and Ukraine to take action against climate change. It supports countries in implementing the Paris Climate Agreement and improving climate policies and legislation. Its ambition is to limit climate change impact on citizens li ves and make them more resilient to it. *Synergies:* The coordination potential rest with the opportunity to align the proposed projec t's supported biodiversity friendly and LDN compliant outputs with the EU4Climate support ed adaptation planning.

	Total budget: US 10.3 million *Period: 2019-2022*

Under the ***Baseline scenario,*** the Government of Armenia (GoA) is committed to provide an effective response to achieving land degradation neutrality and implement measures to meet global commitments under UNCCD contributing to Goal 15.3 of the SDG to achieve LDN by 2030. Despite the existing few donor funded projects implementing sustainable land management measures and support to LDN enabling framework (such as FAO), in the Lake Sevan Basin landscape the LDN approach is not part of the local and regional land use planning and there is little or no technical knowledge and institutional coordination for the implementation of LDN compliant integrated land use planning. Several restoration and improvement of degraded pastures have been implemented in Armenia in different regions including Gegharkunik and Vayots Dzor with very good results, however there are little incentives for biodiversity sensitive sustainable agriculture practices and a wider uptake of SLM measures aligned with LDN based integrated land use planning in Lake Sevan landscape. Cross-sectoral coordination that allow for integrated policy making in Lake Sevan basin landscape is insufficient. Biodiversity conservation has been done primarily through "classic" approaches through designation of protected areas and focus on lake Sevan itself. There is little focus on the biodiversity surrounding the Lake Sevan National Park. The palearctic grasslands will continue to lose their rich species composition that characterises this grassland type. Private business in the vicinity of PAs/KBAs (tourism, agriculture, forestry) does not mainstream biodiversity conservation as a priority. No incentives to support biodiversity-friendly practices for the small-scale production and service businesses (tourism, farming) are in place. The national approach to agricultural incentives is very much production-oriented with insufficient regard to natural resources, including soil productivity and water consumption at irrigated areas. The farmers are not stimulated to manage their land in an integrated manner that produces economic, social, and environmental benefits, and extends the care for soil productivity, nearby biodiversity and rural vitality. A large share of public investments will continue in the rehabilitation of the irrigation sector. However, the benefits of sustainable LDN compliant cropping patterns that do not deplete soil resources in Sevan landscape will continue to remain largely untapped.Sevan National Park will remain insufficiently capacitated to implement the new management plans that is being developed with the EU support. The lack of integrated monitoring data and real-time information on species, habitats, changes of ecosystems and their causes are stumbling blocks to the planning and decision-making processes and a better integration of biodiversity values in the broader landscape. In order for the KBAs, IBAs and other biodiversity hot spots to be effective in the conservation of viable species populations, they need to be adequately interconnected. Currently, despite ad hoc efforts of academia and NGOs, there is insufficient data on critical biodiversity outside Lake Sevan National Park, and most of the monitoring information consist of data on lake water quality and fish population. The current decoupling of researchers from decision makers in managing biodiversity will continue. The current land use planning will continue to have little or no specific provisions to define the biodiversity landscape elements.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project

Long-term Solution: The long term solution for the conservation and sustainable management of land resources and high value ecosystems in Lake Sevan Landscape revolves around the Land Degradation Neutrality concept and integrated landscape planning in the PA/KBAs buffer and productive zones. Improved status of biodiversity hot spots that are not legally protected means integration of spatial elements of the biodiversity rich habitats into the land use planning and work with production sectors, such as agriculture and forestry to mainstream biodiversity concerns. This includes promotion of LDN compatible models of non-depleting farming agriculture practices in the Lake Sevan basin landscape that will also reduce/eliminate diffuse sources of pollution form agriculture in the lake and associated river system and at the same time allowing for effective conservation of critical ecosystem services within and outside

the PAs. Furthermore, impacts on biodiversity that stem from Sevan National Park's management capacity constraints, or biodiversity-negative development of tourism, forestry, and agriculture, need and can be addressed in an integrated manner. These ecological goals must be achieved within the context of supporting and securing sustainable and resilient livelihoods for local resource users, whose daily existence depends greatly on the integrity and productivity of these high value ecosystems. Therefore the long-term solution is one where government resource managers and local communities plan and implement integrated natural resource use practices that are neutral from the point of view of land degradation, are biodiversity friendly, and support healthy soil and vegetation.

-

Theory of Change: The proposed project's Theory of Change is based on the premise that land, water and biodiversity resources are managed in an integrated way, that takes the full range of ecosystem services into consideration. The project components are closely aligned to ensure an integrated landscape approach within Lake Sevan basin for sustainable land, biodiversity and water management that safeguards the continuity of ecosystem services on which local livelihoods depend. This is why the project targets different types of land use: pasture land, forestland, irrigated agricultural land and critical ecosystems (protected and otherwise). For an integrated landscape approach, a coherent and complete picture of the landscape must be visualized, and addressed through multiple types of related management measures.

In this context, the project will support biodiversity sensitive LDN-based Integrated Spatial and Land Use Plans (ISLUPs) to put all the different types of on-the-ground management practices in place that are necessary for an integrated approach to landscape management: efficient water management, sustainable and biodiversity friendly land management for arable land and pasture land, sustainable forest management and effective protected area management. LDN will be achieved through the implementation of the ISLUPs and scalable LDN compatible SLM measures that not only paves the way towards land degradation neutrality but also towards diminished water pollution- from agriculture and soil erosion- in the lake and the associated river systems (hosting spawning grounds for key fish species of Lake Sevan) and towards a better integration of biodiversity (within PAs and otherwise) into the broader landscape, to provide for the continuity of ecosystem services that sustain livelihoods. While the landscape approach is retained throughout the whole project, when it comes to working on the ground, the project is divided into closely aligned components. Thus a component dedicated to LDN and integrated land use planning (Component 1) is closely aligned with work on key biodiversity areas is segregated under Component 2 (focusing on biodiversity within and outside the existing Sevan National Park) which is central to retaining ecosystems stability of the whole landscape. Specifically, work on securing critical biodiversity value within the Sevan National Park allows to maintain resilient delivery of ecosystem services across the whole landscape, many of which are critical for the economic activities in the productive zones such as pollination, erosion control, micro-climate regulation and ground water table maintenance. Through support to key biodiversity areas, these functions will be maintained and enjoyed by economic actors in the wider landscape. At the same time the work outside the PA in the economic landscape needs to incorporate LDN principles as otherwise these areas will be used beyond their regeneration capacity and any conservation efforts at protected areas alone would be futile. The four project components are closely linked and mutually reinforcing:

1) Under Component 1, the LDN targets in Gegharkunik and Vayots Dzor regions hosting the Lake Sevan basin landscape will be established and will guide the formulation of the Integrated Spatial and Land Use Plans (ISLUP) These integrated land use plans represent the main element linking all the land use types and the project components together. A multistakeholder cross-sectoral coordination mechanism will support the integration of different land and water management use approaches in PAs buffer and production zones.

2) Under Component 2, the project will strengthen the management of the Lake Sevan National Park which almost entirely overlaps with Sevan KBA, anchoring the Lake Sevan Basin landscape and will support a better integration of the PAs/KBA buffer and economic zones into the broader landscape through the ISLUPs developed under Component 1. The assessments and inventories of KBAs and other biodiversity hot spots under this component, will ensure that key biodiversity values outside the Lake Sevan National Park are mapped, their conservation status assessed and climate sensitive conservation spatial requirements mainstreamed into ISLUPs. This allows to maintain resilient ecosystem services across the whole landscape, many of which are critical for the economic activities in the economic zones such as pollination, erosion control, micro-climate regulation and ground water table maintenance.

3)Under Component 3, the project will effectively demonstrate sustainable use of biodiversity and land resources in PAs buffer and economic zones and in the vicinity of PAs, KBAs and ecological corridors reflected in the ISLUPs, and will offer financial incentives for the implementation of biodiversity sensitive SLM measures in prioritized areas. The design of the LDN compatible SLM measures (e.g. sustainable pasture management, forest restoration and sustainable forest management measures, integrated water management planning and LDN guided farming techniques on irrigated land, agroforestry etc) implemented under this component are guided by the Integrated Spatial and Land Use Plans and the LDN assessments carried out under the other two components.

4) The project experience and knowledge will be systematized and shared widely using available platforms, fostering iterative learning processes in coordination with similar initiatives (e.g. FAO; GIZ) . Monitoring and evaluation of project results will support adaptive management and learning. With the support of the inter-sectoral coordination mechanism set-up under Component 1 the results will be scaled up at Lake Sevan Basin landscape level.

The project's main feature is its integrated landscape approach supporting effective management of the Lake Sevan National Park and at the same time targeting multiple types of landscapes in the national park's vicinity covered by the project supported ISLUPs e.g.10,000 ha of irrigated agricultural land; 150,000 ha pasture land; 8,000 ha of forest ecosystems, and other critical ecosystems located outside Lake Sevan National Park. The proposed interventions are sequenced in order to include adaptive management strategies encompassing integrated and participative landscape approaches, innovative biodiversity conservation and mainstreaming, sustainable farming, pasture and forest management techniques that will be included in alternative transformational pathways and will be reinforced consistently through learning and awareness that are necessary for removing existing barriers. The project does not have the scope and resources to fully implement efficient water management and sustainable land management throughout the entire landscape, but by introducing these good practices in priority areas in Gegharkunik and Vayots Dzor provinces, and through the capacity strengthening and cross-sectoral cooperation of responsible government institutions, the project results will be sustained and replicated throughout Lake Sevan basin landscape.

The drivers of change are represented by: (i) Government's commitment to implementing LDN and environmental responsible governance considering the overwhelming importance of Lake Sevan for the country; (ii) Financial government support for sustainable livestock-based business models and affordable lending conditions to develop climate-smart agriculture and (iii) Access to technical knowledge and capacity building.

The proposed transformative paths are based on several assumptions identified at PIF stage *(to be revisited at PPG stage)* that will be further tested throughout the project implementation:

· Political will and institutional coordination : It is expected that political will exists to foster inter-sectoral coordination in Lake Sevan Basin and that the strengthened Intersectoral Committee of Lake Sevan Basin (Output 1.1.3) will provide a platform for a better integration of LDN/SLM integrated landscape approach supported by the project and the IWRM approach underpinning the River Basin Management Plan for Sevan and the subsequent Plan of Measures for the Sevan River Basin District, in terms of promoting ecosystem friendly agricultural practices that reduces/eliminate diffuse water pollution sources from agriculture.

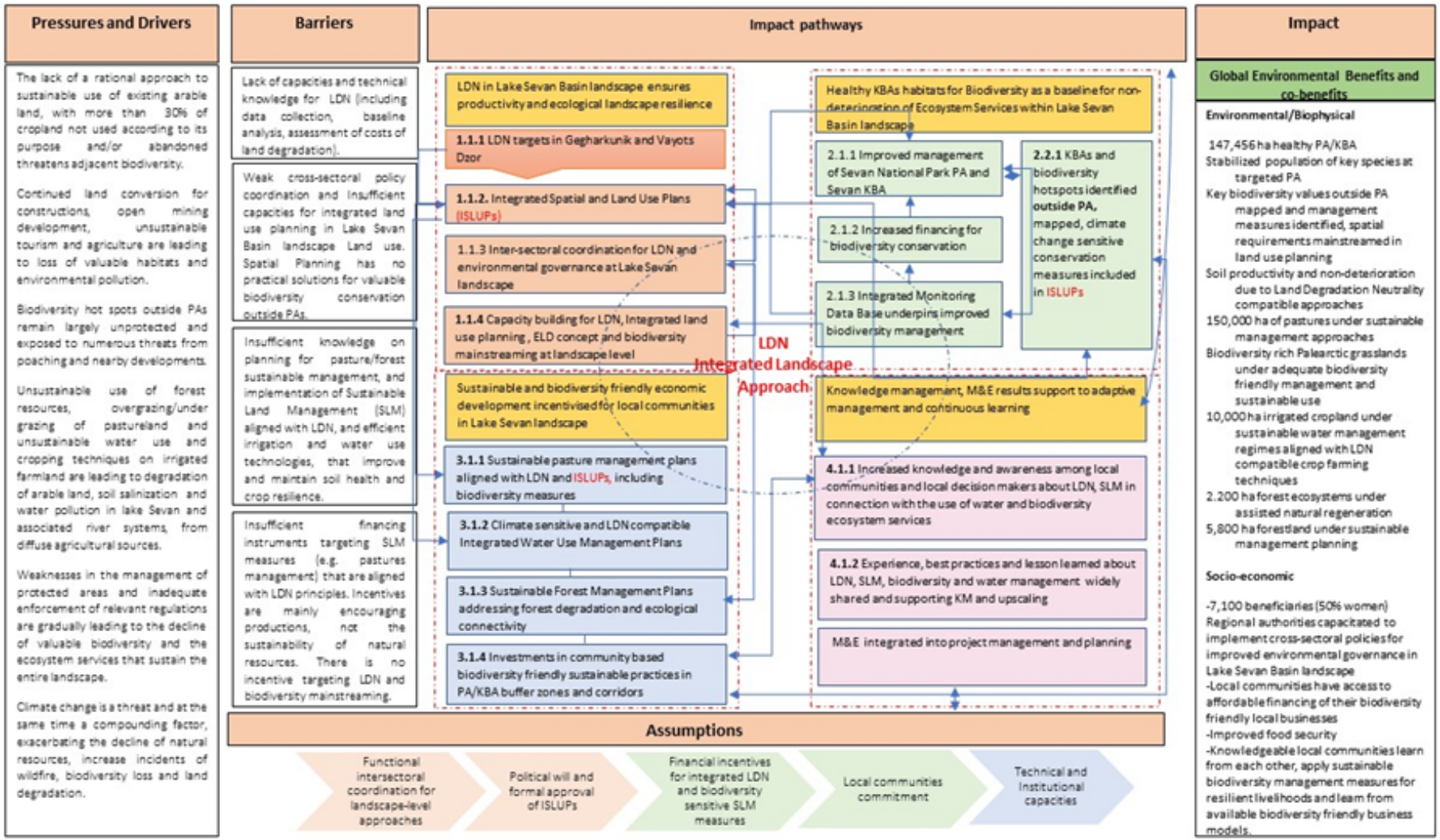
· Commitment towards LDN: It is assumed that the government will implement integrated land use planning needed to advance towards LDN, efficient water use on irrigated farm areas that reduces the use of fertilisers and does not deplete soil productivity and efficient pasture/forest management plans that are compatible with LDN targets. And in this context, it is expected that the decision makers will formally approve the proposed LDN compliant ISLUPs, manuals and guidelines, demonstrated in prioritized Lake Sevan landscape, and as a result, the project experience could be replicated in coordination with other LDN initiatives (FAO) to support the national LDN targets.

· Interest and participation: Another assumption is that there will be sufficient interest and commitment from local farmers and producers to take up biodiversity friendly agricultural practices in production landscapes

· Available financing: It is expected that the financial incentives will be available for the implementation of KPI agro-environmental payment scheme, followed by its integration with existing governmental programmes for a wider uptake of the demonstrated biodiversity sensitive SLM approaches;

· Institutional capacities: It is expected that the national institutions will have the capacity for effective biodiversity management and that the land use management institutions will be capacitated to integrate biodiversity spatial elements and LDN/SLM approaches within the land use planning.

Fig. 3 Theory of Change



The proposed project's **objective** is to promote land degradation neutrality (LDN), to restore and improve the use of land and water resources in Armenia's Lake Sevan Basin landscape to enhance the sustainability and resilience of livelihoods and globally significant ecosystems. This will be accomplished through the following inter-connected components.

Component 1: Promoting Land Degradation Neutrality in Lake Sevan Basin landscape to ensure productivity and ecological landscape resilience. This component will complement the Government of Armenia's efforts towards land degradation neutrality and will focus on the promotion of LDN approaches in Lake Sevan landscape in two targeted regions (marzes) through integrated land use planning that will contribute to the land degradation neutrality and improved integration of key biodiversity habitats into surrounding geographies. The UNDP/GEF project will contribute to the overall progress towards the

National LDN Target by (i) focusing at regional LDN target setting and implementation in Lake Sevan Basin landscape (ii) strengthening the inter-sectorial coordination for LDN at Lake Sevan landscape level (iii) coordinating closely with the existing similar LDN initiatives (FAO) in order to establish monitoring and reporting mechanisms for LDN and exchange lessons learned and experience on LDN regional implementation and reporting from sub-national to national levels.

Outcome 1.1.: Land Degradation Neutrality (LDN) in Gegharkunik and Vayots Dzor provinces promoted through integrated multi-sectoral landscape approaches. The proposed project's aims at setting LDN regional targets in the regions of Gegharkunik and Vayots Dzor and will coordinate with the GEF/FAO project *"Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscapes*" and will build on this project's LDN assessments and leveraged inter-sectoral coordination, will share knowledge and experience in LDN sub-national target setting and implementation.

Output 1.1.1 : Land Degradation trends assessed, LDN targets set-up and monitoring system developed for Ghegarkunik (534,900 ha) and Vayots Dzor (230,800 ha) provinces, providing a framework to avoid, reduce and restore degraded land through integrated landscape planning

The proposed project will leverage stakeholders engagement in LDN target setting in the two targeted provinces and will strengthen their technical knowledge through related trainings, with continuous involvement of the UNCCD focal point. The project concept is based on fundamental elements of the GEF STAP Guidelines on Land Degradation Neutrality and the UNCCD's Scientific Framework for Land Degradation Neutrality e.g.: Understanding the land degradation drivers will inform LDN target setting at the regional level and will involve mapping of land degradation trends and drives and assessment of its costs. Data will be collected through multiple sources such as official statistics, Earth Observation (EO) data, Global Soil Organic Carbon Map, land use and management practices and surveys. Satellite image analysis, ground truthing, soil sampling and harmonisation of soil assessments methodologies to include LDN metrics will be used. Following recommendations from the UNCCD, the Good Practice Guidance[20] promotes the use of the SDG 15.3.1 sub-indicators as means to measure and monitor compliance with voluntary LDN national targets. The LDN baseline is the land-based natural capital as measured by three voluntary LDN indicators (Land Cover Change (LCC), Land Productivity, and Soil Organic Carbon (SOC- seen as a proxy for carbon stock above and below ground) and additional national indicators. Each of these indicators assesses a different aspect relevant to LDN. Based on these assessments, the mechanism for neutrality that counterbalances anticipated degradation with actions to avoid losses elsewhere to ensure that land degradation neutrality is achieved, will be used to guide the project's supported integrated land use planning which will link all the project's components. The proposed project will coordinate with similar LDN initiatives (e.g FAO) in order to scale up LDN based land use planning and good practices. The project will work with the Soil Science, Melioration and Agrochemistry Scientific Center and will further explore additional national indicators (e.g. Normalized Difference Vegetation Index *NDVI* -for vegetation mapping and assessment of land cover and associated changes) that could be used to complement the baseline analysis. *(complementary relevant local indicators to support LDN baseline assessments and monitoring will be identified at PPG stage; full involvement of UNCCD focal point will continue)*. Technical *LDN working groups* will be set up for the LDN baseline collection, technical assessments and LDN target setting and trainings in both regions. The LDN Technical working group, with the support of soil and land-use specialists and GIS experts will also identify several *"LDN hot spots*" to be prioritized for further action in the Lake Sevan landscape and inform work under other outputs (Output 3.1.1;Output 3.1.2; Output 3.1.3; Output 3.1.4). Coordination with FAO Project "*Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscapes"* and the Ministry of Economy, Land and Cadastre will ensure harmonized LDN data collection methodologies for LDN assessments.

Output 1.1.2 LDN compatible Integrated Spatial and Land-use Plans **(ISLUPs)** informed by climate change vulnerability, Economics of Land Degradation (ELD) and biodiversity values, in prioritized municipalities

Land Degradation Neutrality is attained at local levels through integrated land use planning. *The targeted municipalities will be selected based on a thorough analysis at PPG stage*. The proposed project will work with the local authorities involved in land use planning in selected municipalities and will facilitate the setup of *Integrated Land use planning working groups* to guide the participatory integrated spatial land-use planning and support the engagement with the local communities. The potential risk of economic displacement arising from the project-supported land use planning will be assessed at PPG stage. The development of the Integrated Spatial and Land Use Plans in the pilot municipalities will include targeted assessments conducted in line with UNDP SES requirements, such that the plans themselves will include adequate environmental and social safeguards measures to address any potential environmental and social risks. In addition, the project will deploy the Process Framework to conduct local consultations and assess/eliminate potential conflicts among different land-users and between land users and ecosystems, by identifying commonly agreed solutions to be included in the respective plans. The LDN and biodiversity sensitive guided Integrated Spatial and Land use Planning will be coordinated with the SLM measures under different outputs i.e. sustainable pasture management under Output 3.1.1; sustainable water management in irrigated areas under Output 3.1.2; and sustainable forest management under Output 3.1.3 ; agroforestry measures implemented with the local communities under Output 3.1.4; and the climate resilience and adaptation solutions identified under Output 2.2.1 will be included in the ISLUPs, within the spatial development priorities for the targeted areas.

The LDN response hierarchy *prevent-reduce-restore* degraded land approach under Output 1.1.1. will guide the integrated land use planning in the targeted municipalities and will identify a set of SLM interventions across different land use types (such as pastures, forests, irrigated areas, implemented under Component 3) to support progress towards the LDN regional targets. The proposed project will pilot the new LUP4LDN[21] - the winning software of the GEO LDN International technology innovation competition organized by UNCCD for the development of a software tool to implement or support the implementation of a “neutrality mechanism” for LDN, which allows a participatory implementation of an LDN guided land use planning at subnational level.

LDN principles, climate change vulnerability assessment, Economics of Land Degradation (ELD) concept as well as biodiversity assessments (results under Output 2.2.1) will be used as inputs, and will inform the spatial and land use planning in the targeted communities. The project will consider STAP's guidance on climate risk assessment (http://www.stapgef.org/stap-guidanceclimate-risk-screening). Based on the experience in targeted communities the proposed project will develop a Manual with methodologies and Guidelines for the replication of these approaches and for prioritization of private sector’s investments into SLM measures

Output 1.1.3 Inter-sectoral coordination strengthened to oversee LDN regional target setting and implementation, integrated land use planning and strengthened environmental governance in Lake Sevan basin landscape

The proposed work under Output 1.1.3 will strengthen inter-sectoral coordination for LDN and integrated landscape planning first at region/marz level and second at local self-government level in the targeted municipalities, to oversee LDN target setting and implementation through integrated landscape planning. Finally, it will support cross-sectoral coordination for a better integration of different approaches such as the LDN/SLM integrated landscape approach with the river basin management (IWRM) approach at Lake Sevan Basin landscape level, together with other development partners (FAO, GIZ).

At the region/local level, the project does not intend to create a new coordinating mechanism for LDN and integrated land use planning at regional/local levels but it will aim at clarifying mandates and building capacities of the region/marz governing structure i.e. the Governor of the respective province who will facilitate the coordination and cross-sectoral policy work; representative institutions at regional level subordinated to the Ministry of Territorial Administration and Infrastructure, and agencies subordinated to the Ministry of Environment including PA managers; as well as the local self-government structures in the targeted municipalities. The administrative power at province/region (marz) level is derived directly from the state, with the governor implementing the territorial policy of the national government in the regions and supervising activities of the local governments, ensuring the link between state policies and local policies and ensuring horizontal coordination and support to cross-sectoral policies. In this regard, the project will support the governor/regional administrations to oversee the implementation of the provisions of the Governmental Decree N725 (May 2021) which approves LDN National Target for Armenia and establishes the National LDN Programme. Under article 12 the Government Decree highlights the mandatory "cross sectoral cooperation and flow of resources to achieve LDN" enlisting provisions for different sectors' involvement in achieving LDN targets. The project supported capacity building will therefore capacitate the regional and local authorities and will strengthen the technical knowledge for regional LDN target setting/implementation, integrated land use planning, LDN monitoring and reporting from sub-national to national level. From this perspective, the UNDP project will also learn from FAO project *"Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscapes"* experience with the regional/local coordinating mechanisms for LDN implementation in Lori and Syunik regions. The UNDP/GEF project will also build upon the results of the EU4Sevan Project and recommendations for policy and institutional amendments to improve the enabling environment for Lake Sevan management.

In addition, the UNDP/GEF project intends to further support cross-sectoral coordination at the Lake Sevan Basin level. The PPG stage will bring more clarity on the feasible option that the proposed project could pursue in this regard, which is either (i) setting up a new inter-sectorial body at Lake Sevan landscape level (i.e. a new Committee or Working Group) with an integrative policy making role; or (ii) strengthening and expanding the scope of the existing Commission on Lake Sevan, established in 2008 by Presidential Decree, primarily managing freshwater resources. The envisaged role of such an inter-sectoral body/Committee will be integrative *par excellence,* destined to oversee the integration of the (i) LDN compliant spatial/land use planning approach and UNCCD commitments with (ii) existing and future commitments on biodiversity under UNCBD (aligned with the global post 2020 framework directions) and with (iii) the commitments under UNFCCC Paris Agreement and with (iv) the principles of the EU Water Framework Directive (WFD) and Integrated Water Resource Management (IWRM) in the Lake Sevan Basin (covered by the two targeted regions/marzes Ghegarkunik and Vayots Dzor).The existing Lake Sevan Committee has an advisory role, however its status, mandate (ie.TOR/governance) could be strengthened and its membership extended to include representatives of the following institutions as full members and/or consultative member (some are already members of the existing Lake Sevan Committee): the Ministry of Environment which has the mandate over natural resources protection and hosts UNCBD, UNCCD, UNFCCC convention focal points; the Ministry of Economy which is responsible for agricultural sector; the Ministry of Territorial Administration and Infrastructure which is in charge of local governance and infrastructure; the Water Committee – as a public agency under the Ministry of Territorial Administration and Infrastructure, which develops and implements the policy of the government regarding the management and use of state owned water management systems; the Hydrometeorological and Monitoring Center (under the mandate of the Ministry of Environment); the National Academy of Sciences; the Sevan National Park authority; the Gegharkunik Regional Administration and Vayots Dzor Governors (Regional Administration); NGOs; Water Users Associations and Pasture Users Associations; private sector such as tourism operators.

(*Committee's membership and mandate to be clarified at PPG stage and in coordination with the UNDP-GIZ EU4Sevan Project).*

Output 1.1.4 Capacity building programme for regional and local authorities, natural resources users on LDN, SLM and methodologies for land use planning informed by ELD concept.

Under this output, regional branches of the Government institutions at regional level and local administrations in the selected regions will be strengthened through development and delivery of targeted capacity building modules on Biodiversity, LDN and LDN based Integrated Land Use Planning, SLM and ELD concept, as well as methodologies on data collection for LDN baseline and LDN progress monitoring in collaboration with GEF FAO *"Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscapes*" Project (*priority topics to be identified at the PPG stage*). Dedicated trainings and webinars will be organized in coordination with UNCCD in order to get familiar with the LUP4LDN software which not only support LDN guided Land Use Planning but in addition it links the users with the relevant SLM examples stored under WOCAT. The trainings will focus on improving coordination between biodiversity/environmental related institutions and land use/spatial planning-related institutions and the audience will be gender balanced, the project will strive to promote at least 50% women participation in all the project activities. The impact of the project's capacity building activities will be tracked with a capacity development scorecard. In addition, a set of training sessions are envisaged for natural resource users including Water Users Associations (WUAs) from local targeted communities; Farmers associations and Cooperatives; Farmers National Union; Gegharkunik Region Farmers' Council, local NGOs and Women groups (in coordination with Output 4.1.1).

Component 2 Securing critical KBAs habitats for Biodiversity as a baseline for non-deterioration of ecosystem services within Lake Sevan Basin landscape. The proposed project's work will focus on addressing direct drivers of biodiversity degradation, to protect globally important biodiversity, habitats, and species, through targeted support to Sevan National Park in strengthening its management effectiveness, assessment of biodiversity status at wildlife sanctuaries in both regions, as well as biodiversity inventories and assessments of critical habitats that exist outside PAs. This component has two pronged approach i.e. (i) focus on securing the ecological integrity of key species and valuable habitats within the PA/ the Lake Sevan National Park- anchoring the entire Lake Sevan Basin landscape; and (ii) target biodiversity values in the production landscape in the PA vicinity, and support their integration within the landscape, therefore supporting the key ecosystem services on which local livelihoods depend.

Outcome 2.1 Secured biodiversity status in Sevan National Park (147,456 ha) by strengthened PA capacity to better address the key threats to globally significant species and habitats of the main PA/KBA anchoring the Lake Sevan landscape.

Output 2.1.1 Improved management effectiveness of Sevan National Park through PA regime compliance and enforcement, strengthened PA infrastructure, improved patrolling and enforcement capacity of environmental regulation, research and monitoring and species-focused conservation skills and capacities strengthened. The proposed project will coordinate its efforts with EU4Sevan project, and will support the implementation of the management plan that is currently developed by EU4Sevan project. Existing human and institutional capacities to implement the measures identified in the Park's management plan will be assessed by METT. *(METT will be completed at PPG stage).*

The proposed project will assist the National Park management with an incremental effort to incorporate integrated data into management decisions, including climate change adaptation scenarios and resilience measures to address the climate risks for vulnerable wetland and freshwater ecosystems, as well as fire risks to forest and grassland habitats. The UNDP/GEF project will build on the results of the EU4Sevan project and coordinate with the UNDP and

GIZ to assess if there are any information gaps that needs to be bridged in terms of additional inventories of key species and habitats and support to promote sustainable biodiversity use in the buffer areas. If deemed necessary, the UNDP/GEF project will include additional inventories based on which it may recommend altering the current zonation as necessary. In the latter case, the project will use the full Process Framework[22] to guide the consultations with local communities and mitigate the risk of potential economic displacement of local communities (*determined at PPG stage, in consultation with EU4Sevan project team and GIZ*). Building upon synergies with other on-going initiatives notably EU4Sevan project and in coordination with the Ministry of Environment and the Foundation for Restoration of Sevan Trout Stock and Development for Aquaculture the proposed project will also contribute to distinct biodiversity conservation measures e.g. i) Assessment of the ecological status of Sevan basin rivers which represent the spawning grounds for key fish species in the Lake Sevan and implementation of priority conservation measures; (ii) Research on the climate change-induced modifications of key species populations and habitats; (iii) Restoration measures of prioritized vulnerable wetland habitats situated around lake Sevan, and recording and monitoring changes (*to be validated at PPG stage with the UNDP/GIZ team of the EU4Sevan Project*).

Sevan Park's infrastructure will be supported through strengthened basic research facilities and establishment of integrated monitoring protocols, provision of sufficient species field determinators and species identification guides, including publications based on IUCN best practice/guidelines. Operational IT equipment, GIS devices and field equipment (binoculars, camera traps, mobile communication devices; GPS navigators, power sources, generators, basic field equipment, etc) to support monitoring and patrolling will be provided. In addition, the project will strengthen the patrolling of PAs by facilitating inter-institutional agreements between the Park Administration and local police and ecological inspectors in order to address illegal fishing in Lake Sevan, wildlife poaching, illegal natural resources harvesting (wood cutting included) in a more coherent way. The project and PA staff will ensure that such agreements are fully aligned with the human rights based approach. The PA staff will also explore partnership opportunities with local community representatives, and their engagement in joint local anti-poaching schemes.. Building on the training modules and lessons learned under previous GEF initiatives[23], the proposed project will conduct a Training Needs Assessment upon the project's inception that will inform tailored capacity building sessions to respond to the most stringent PA staff capacity gaps. The PA trainings will include a specific module for rangers and local police and environmental inspectors concerning patrolling and application of fines, search and arrest and interaction with local communities, aiming at promoting collaborative approaches; strengthening understanding related to community rights and needs; inculcating respect for human rights and empowering communities to manage and protect wildlife and critical habitats. There is a critical need for protected areas to move away from the approach where local communities largely experience conservation efforts through law enforcement operations. The project will therefore adopt a more collaborative approach. The community outreach efforts will also focus on supporting the social and economic development of villages located within or bordering the PA (such as nature-based ecotourism development, improved productivity of crops and pastures, development of community-based hunting packages and improved access to the markets) linked/aligned to specific pre-determined conservation outcomes in protected areas (such as better control over poaching, more sustainable levels of fuel wood collection, reduction of livestock numbers in sensitive areas, etc.).

Output 2.1.2 Sevan National Park Business Plan developed and financing avenues identified, including strengthened tourism infrastructure at Sevan National Park , innovative financing mechanism of the Park's biodiversity values, Public Private Partnerships for the valorization of Lake Sevan nature values. The proposed project will develop Sevan National Park's Business Plan by: costing operational and capital needs including assessment of cost-efficiency, and budget management measures to ensure sustainable PA management financing identifying the revenue sources, development of mechanisms for local income-generation and business opportunities related to rational use of resources, adapting the staffing tables and management plans to the scenario in which revenues are optimally matched with the cost needs. The business plans will be based upon best international experience and will help with identifying

potential economic opportunities, break down investment costs, examine potential markets, and provide instructions on how to develop and maintain sustainable biodiversity friendly businesses and engaging local entrepreneurs and communities. The Park's existing infrastructure will be strengthened, to attract tourists, researchers and promote key biodiversity values of the Lake Sevan landscape and Ramsar site. A much more comprehensive assessment of the management gaps and assessment plans will be conducted at PPG to implement targeted, on-the-ground conservation and threat reduction measures. In addition, the proposed project will facilitate public-private partnerships with municipal tourist organizations, tour operators and individual businesses in order to identify opportunities for the Sevan National Park's participation into post COVID-19 tourism recovery measures. During the PPG stage, interviews with private tours operators will be conducted in order to identify potential partnership opportunities. Through the partnership with the Sevan National Park visitor programmes, the private tour operator would have an opportunity to expand and diversify the standard tourist package while promoting environmental awareness about Lake Sevan and the entire Sevan Ramsar site values, birding and camping opportunities during low season, through guides, booklets, support to the visitor centre, specifically tailored guided tours, learning activities etc.

It is envisaged that in cooperation with the Ministry of Environment, the project will organize an *Innovation Challenge,* aligned with UNDP procedures, to identify innovative financing mechanisms of Sevan National Park including the possibility of establishing a crowdfunding platform. The project will invite private sector and mobile phone operators to participate and co-finance innovative solutions to finance biodiversity values. The project will work with Sevan National Park administration and with WWF to support identification of conservation targets and awareness raising about the importance of critical species and habitats and conservation financing needs.

Output 2.1.3 *Integrated Monitoring Data Base* developed to facilitate research and monitoring activities that reflects identified knowledge gaps and priority information needs for effective, participatory and science-based PA management.Currently, the "Sevan National Park" State Non-commercial Organisation (SNCO) of the Ministry of Environment is the governing institution responsible for the protection of the National Park's ecosystems. The Park has good research and monitoring data particularly on the water quality data and fish population, however there is no integrated monitoring programme and data base in place, capable of generating GIS supported integrated reports on a multitude of inter-related biodiversity , socio-economic and climate change aspects, to inform optimal management decisions *(gaps to be identified at PPG stage).* With the support of an integrated monitoring data base, the overall monitoring activity would be expected to be guided by scientific principles in order to provide information into the ecological processes at work and point directly to if, when, and how an active management may need to be employed in order to prevent the loss of biodiversity. In addition, under this output the proposed project will also promote inclusive monitoring activities, consisting of monitoring activities that will include schools, representatives of local communities, NGOs and small tourist operators, in order to support the implementation of key species and habitat monitoring programs Activities could include non-invasive survey techniques for indicator species and critical habitats and trainings and building capacities for both data collection and management for priority species and habitats benefiting PA staff and participating local community members. This will be accompanied by strengthening capacities for the development of survey protocols and the application of GPS and GIS technologies. The project will coordinate with the GIZ activities under the EU4Sevan Programme and ECOSERV and will complement and/or build on the data, analysis and recommendations for nutrient management in Lake Sevan. The project will also coordinate with WWF Armenia and will apply the WWF tested "Caretaker network" approach whereby community representatives are involved in the Park's management decisions, monitoring of biodiversity including water sampling and assessment of water quality in Lake Sevan and monitoring/reporting of illegal fishing activities. The Park's information centers will support community training programmes on the identification of key species and habitats in Sevan National

Park. The project will, where practical, leverage technology such as mobile applications to support species identification and monitoring. The project will further explore a partnership with the Armenian divers NGO "Arm Diving" - an active organization that supports the water sampling and monitoring of Sevan lake's water quality, advocating for "greening" tourism businesses to reduce/avert water pollution (*to be determined at PPG stage).*

Outcome 2.2 Biodiversity conservation assessments and proposed arrangements in Lake Sevan landscape in place for the biodiversity hot-spots outside the PA.

Output 2.2.1 Key Biodiversity Areas (KBAs) and other biodiversity hotspots in Lake Sevan Basin landscape outside PA, identified, mapped, conservation status assessed and climate sensitive conservation measures mainstreamed into the Integrated Spatial and Land Use Plans (ISLUPs).

Armenia is one of the Palearctic hotspots of fine grain plant diversity, a fact that was recently demonstrated by the Eurasian Dry Grassland Group's (EDGG) field observations published in 2019-2020[24]. In addition, 29 Important Bird Areas[25] have been identified in Armenia, some of them located in the targeted regions of Sevan landscape. The project's targeted Sevan landscape is anchored by several KBAs/IBAs and wildlife sanctuaries and includes spatial elements of the South Eastern Lesser Caucasus Corridor. Despite the abundant biodiversity in these regions, there is no consistent research, mapping and assessments undertaken with the aim of mainstreaming biodiversity into sectoral planning and understanding the effects of climate change. The first step in the process would be to achieve the knowledge base that can be used for informed decision-making. Thus, the proposed project would bring incremental research into key species and habitats in order to assess their baseline status and formulate conservation objectives/measures as well as monitoring indicators and protocols (*proposed areas to be validated at PPG stage*). The biodiversity and climate vulnerability assessments will serve as baseline studies (inputs) for the integrated spatial and land-use planning (ISLUPs) (Output 1.1.2), as well as for strengthening the knowledge base of Lake Sevan National Park (Output 2.1.3) and for community based activities under Component 3. The project will make sure that the spatial development scenarios are reflective of the climate change threats and impacts, and climate resilience and adaptation solutions are considered within the spatial development priorities for the areas that are vulnerable to and/or affected by climate change effects. In addition, the proposed project will take stock and analyze the condition of the existing Sanctuaries (IUCN IV) and update the existing information and management measures and will map ecological corridors for safe wildlife migration in coordination with WWF Armenia (this information will serve as input for the identification of biodiversity sensitive SLM measures under Component 3).

The proposed project will provide adequate guidelines and methodology for the activities that will support the preparation of spatial and land use plans in the selected municipalities as well as for forest and pasture management plans at village levels. The main idea would be to emphasize the necessity for adequately reflecting the spatial elements of the biodiversity rich areas into overall spatial and land use planning of selected municipalities and the importance of reconciliation between planned developments and biodiversity protection. In addition, the project will make sure that the spatial development scenarios are reflective of the climate change threats and impacts, and climate resilience and adaptation solutions are considered within the spatial development priorities for the areas that are vulnerable to and/or affected by climate change effects. Assessments of land use should be done through climate change lenses with respect to land degradation and biodiversity. For example, it is likely that climate change will alter the spatial requirements for some of the species that would migrate and these modifications need to be taken into consideration when developing methodologies for deciding on land allocations.

Component 3 Promoting sustainable and biodiversity friendly economic development and incentives for local communities in Lake Sevan landscape.

Outcome 3.1 Biodiversity friendly and LDN compatible Sustainable Land Management (SLM) practices promoted in Lake Sevan production landscapeMaintenance of biodiversity of habitats, species and varieties in the agricultural landscape protect against disease, pests, climate change, facilitates rangeland biodiversity, maintains soil fertility and safeguards vital resources for local livelihoods. There are existing successful models promoted by different projects of UNDP, IFAD, World Bank that will be considered in the project strategy. The proposed project will learn from these initiatives and will offer incremental support by promoting biodiversity friendly sustainable land management measures that are LDN compatible and will increase livelihoods resilience The project strategy will include provisions for screening potential risks related to labor and working conditions in case of third party subcontractors, and appropriately scaled Labor Management Procedures[26] that will address the UNDP SES requirements.

Output 3.1.1 Sustainable pasture management plans at targeted village level, aligned with the LDN assessment and the Integrated Spatial and Land Use Plans (ISLUPs), including biodiversity measures for palearctic grasslands conservation; 10 Pasture Users Associations capacitated to apply biodiversity friendly SLM measures to achieve LDN and resilient livelihoods. The selection of target municipalities will be based on a series of analysis to be conducted at PPG stage and will involve ample stakeholders consultations. The concrete demonstration sites would be further validated during the first year of the project implementation, by the envisaged LDN/ land degradation and biodiversity assessments of the selected rangelands. After the selection of the sites, the assessment of the grassland health would employ a combination of participatory mapping of target landscapes (consultation with local representatives and land users) and field studies (plot surveys and field-based indicators) including palearctic grasslands flora/fauna inventories. A detailed pastures and grasslands inventory (qualitative and quantitative) will be developed for the targeted areas; the inventories will be done in coordination with Output 2.2.1. Based on the flora inventories, land degradation assessments and analysis of drivers, the pasture management plans will be designed and will encompass the applicable tactical grazing, watering and other methods to prevent-reduce or restore soil degradation and maintain grassland biodiversity. Achieving LDN requires land managers to monitor land use decisions that may impact the neutrality, and estimate their likely cumulative impacts, so that these can be counterbalanced by reversing land degradation on the same land type, elsewhere. Thus, the pastures management plans for the 150,000 ha of pastures and grasslands will be developed such, that they'll align with the land use management decisions and the *prevent-reduce-restore* hierarchy based on which the LDN compliant Integrated Spatial and Land Use Plans (ISLUPs) in the targeted municipalities have been developed (under Output 1.1.2). However, the counter-balancing mechanism will be managed at the level stipulated in the pasture management plans. LDN indicators, and other additional indicators will be further set at pasture level in order to monitor "gains" and "losses". The proposed project will also analyze and build upon GIZ work on promotion of sustainable pastures management under the GIZ component of EU4Sevan Project and ECOServ results on sustainable pasture and forest management.

The proposed project will sign written agreements with approximately 10 Pastures Users Associations and/or Pastures Cooperatives (*to be validated at PPG stage*), willing to participate in the project activities and commit to sustainable pastures management. The project will support pastures/grasslands inventories, develop pastures management plans and Key Performance Indicators (KPI) to be monitored by the farmers and by the Pastures Associations/Cooperatives.

The pastures management plans will be implemented by the farmers with the support of a KPI based agro-environmental scheme proposed to be piloted by the project *upon a feasibility assessment at PPG stage.*

The agri-environmental scheme structure could potentially follow the currently piloted Social Impact Bond (EBRD/UNDP) in Armenia's diary sector[27] . The project will learn from the EBRD/UNDP pilot approach, which is still in an inception phase, and will further ascertain at PPG stage the feasibility of using a similar approach for sustainable grassland management. The envisaged UNDP/GEF proposed agri-environmental payment mechanism could have the following structure: a) An *Investor:* an institution with agriculture portfolio, offering the upfront capital. The Investor pays the Bond; b) An *Outcome payer:* a Government authority responsible for paying back the principal and interest; c) The *Farmers Associations/ Cooperatives:* will commit to agreed SLM standard

and will take up the responsibility for monitoring and sustainability of the results; d) The *Farmers:* are implementing required SLM measures and will be paid upon attaining the required pre-determined outcomes and Key performance Indicators (KPIs); e) The *GEF/UNDP Project:* will work with the farmers and will support pasture inventories, land degradation assessments, grassland biodiversity assessments, and development of the sustainable pastures/grasslands management plans and improving infrastructure. The pastures management plans will include Key Performance Indicators (KPIs) and monitoring mechanisms. The KPIs may encompass (i) LDN and other locally relevant indicators related to 150,000 ha under sustainable management measures that follows LDN hierarchy responses set up in the ISLUPs; (ii) Biodiversity indicators such as Density of valuable species/m2 ; Density and distribution of palearctic grassland species of flora and fauna (identified under Output 2.2.1); (iii) Climate vulnerability indicators; (iv) Socio-economic indicators tracking livelihoods improvements. *(to be identified at PPG stage).*

The three LDN indicators, additional national indicators for rangeland health, GEBs and socio-economic benefits will be included in the agreements with the Pastures Associations/Cooperatives and will be monitored according to an agreed monitoring scheme. To ensure that the counterbalancing measures do not diminish the wellbeing of land users, a comprehensive socio-economic baseline analysis will be conducted at PPG stage) . The risk of potential economic displacement will be mitigated in accordance with UNDP SES requirements and the mitigation measures will be included in the pastures management plans. In addition, targeted compensatory payments will be offered in case of any potential temporary economic displacement, consisting in support to acquisition of biological material and technical assistance.

The preliminary consultations at PIF stage with the line ministries (Ministry of Economy; Ministry of Environment) have highlighted several government subsidy programmes promoting subsidized loans and other subsidies for improvements in pasture infrastructure, modernisation of irrigation systems, seeds, agricultural machinery that could be considered to support the proposed KPI based agro environmental scheme.[28] The sustainability of the proposed project's intervention will be secured through embedding the proposed KPI agro-environmental scheme into relevant governmental programmes and financial incentives.

In consultation with the Ministry of Agriculture, Ministry of Environment and the local authorities, the project will identify the partners and detail content for piloting the agro-environmental measures at appropriate scales. Key actors in the agri-business sector will be engaged e.g. Armenian National Investment Fund (ANIF), Development and Investment Corporation of Armenia (DICA), the Centre for Agribusiness and Rural Development (CARD), the International Centre for Agribusiness Research and Education (ICARE), and different other financial institutions with agriculture portfolios and focus on "green" lending such as ACBA Credit Agricole Bank.

In addition, to support access to concessional loans under applicable State Programmes the project will also provide technical assistance for bank applications for SLM practices and agri-environmental subsidies for efficient equipment and machinery.

Output 3.1.2 Climate sensitive and LDN compatible Integrated Water Management Plans in selected municipalities leading to soil improvement through innovative irrigation technologies and climate resilient crop farming aligned with LDN principles; strengthened capacity of WUAs to demonstrate sustainable crop farming and agroforestry measures.

Under this output the proposed project will work with Water Users Associations (WUAs) in the targeted regions and support investments in sustainable farming approaches that do not deplete soil and water resources, in line with the priorities of the Armenian government to mitigate land degradation and the climate related risks to agriculture development. The project will learn from the good practices demonstrated by other donor funded projects (e.g. GEF/IFAD). The selected irrigated sites will encompass an estimated 10,000 ha (to be validated at PPG stage) The GEF resources will support the development of integrated water management plans (*municipalities to be selected at PPG stage*). The demonstration activities will be supported by the project through the project's pilot agro-environmental payment scheme and grant support. Further support will be offered to the Water Users Associations (WUAs) to access governmental incentives and concessional loans for climate smart. The risk of potential economic displacement will be mitigated in accordance with UNDP SES requirements and the mitigation measures will be included in the water management plans. The project supported measures will include the application of best practices in crop selection, crop rotation techniques and innovative technologies and methods for the efficient use of water to the field level, where the project will work with local farmers and agricultural producers to scale out cutting edge irrigation and farming technologies such as drip irrigation, laser leveling, and other related approaches. The response hierarchy of Avoid-Reduce-Reverse land degradation will guide the planning of LDN/SLM interventions and the selection of demonstration areas and SLM interventions will be linked with ISLUPs and LDN baseline assessments. The project will further support suitable agro-forestry fruit tree systems, resistant to water scarcity, on marginal and degraded land, slopes and ravines. The agroforestry demonstration areas will be selected/validated during the first year of the project based on LDN assessments and LDN hot spot identification. The funding of agro-forestry measures will be supported by grants based on UNDP Low Value Grants procedures.

Priority will be given to those farmers who own land in unfavorable locations, far from irrigation networks and where degradation is evidently higher. Selection criteria will be defined at PPG stage and grant funding could cover start up investments for soil analysis, land preparation, efficient irrigation and other farming equipment, plant material etc.

Output 3.1.3 Sustainable Forest Management Plans addressing forest degradation and ecological connectivity through sustainable forestry measures and assisted regeneration.

Armenia's forests cover 334,100 ha (11.5% of a historic coverage of 30%), which includes 283,600 ha of natural forests and 50,500 ha of plantation forests. Outside of the official protected areas, the forest is managed by the state, through "Hayantar" State Non-Commercial Organization (SNCO– state-owned enterprises) of the Ministry of Agriculture. The targeted administrative regions of Gegharkunik and Vayots Dzor, included in the Lake Sevan Basin, encompass approximately 27,050 ha of forest which represents 8.09% of the total forest area. The current forest management plans in the selected municipalities' forest areas *(to be selected at PPG stage*) will be revised in order to include measures aligned with the LDN related land degradation assessments and land use planning (developed under Output 1.1.1 and 1.1.2) as well as with the biodiversity assessments that will be conducted under Output 2.2.1. The adjusted forest management plans for approximately 8,000 ha of forest ecosystems will incorporate climate change resilience and fire management measures and will demarcate areas for restricted/sustainable land and forest use; areas for the provision of ecosystem services; and for priority corridors for wildlife (including the areas nestled within the South Eastern Lesser Caucasus Ecological Corridor). Approximately 2,200 ha of the selected forest areas will be restored through assisted natural regeneration through a mix of measures to be designed and implemented together with the local communities (*validation at PPG stage*). The areas will be selected in alignment with the LDN prevent-reduce-restore philosophy and with the decisions guided by the Integrated Spatial and Land Use Plans (ISLUPs) developed under Output 1.1.2. The revision of the forest plans for the selected forest districts will be based on participatory approaches, with full participation of foresters and adjacent local land managers, in particular local communities, and will stipulate roles, responsibilities and benefits, and will secure consensus on the management and monitoring mechanisms. Any potential economic displacement will be addressed as per UNDP SES requirements and will be based on an appropriately scoped/targeted assessments. Based on these assessments, the mitigation measures will be included in the forest

management plans. The proposed project will offer grant support to local communities for alternative income generating activities such as agroforestry measures, apiculture, processing of non-wood forests products (berries, mushrooms, medicinal herbs) and community-based ecotourism ventures, expected to improve livelihoods and relieve pressure on forest ecosystems, in coordination with Output 3.1.4 *(to be validated at PPG stage based on socio economic and climate vulnerability assessment and interviews with farmers).*

Output 3.1.4 Investments in community based biodiversity friendly sustainable use measures and support to small eco-tourism operators in the PA, KBAs buffer zones and corridors aiming to provide alternative income to local communities.

Livelihood diversity is an essential prerequisite for reducing risk, building resilience and providing food security. Under this output, the proposed project will incentivize diversification of livelihoods of the small and mid-size farms and fishermen in the targeted municipalities, by facilitating the sustainable use of ecosystem products such as honey, wild fruits and medicinal aromatic plants, as well as for promotion of sustainable green agriculture with possibility of facilitating applicable certification (such as EcoGlobe or Green Caucasus – *to be identified at PPG stage*) safe local eco-tourism business models including COVID-19 *safeguards (COVID-19 risk assessment will be conducted at PPG stage) and sustainable fishing/aquaculture practices* . The project will implement a micro-grant scheme aligned with UNDP Low Value Grants procedures. In cooperation with the local authorities, the project will develop the Grant Manual encompassing the selection criteria and related procedures, and will organize a number of local information events and brief trainings to raise awareness about the potential economic opportunities derived from agroforestry measures, SLM measures, products based on sustainable harvesting of wild fruits and aromatic plants, eco-tourism and/or organic agriculture. Sustainable local biodiversity friendly tourism will be encouraged as a tool to promote conservation education and ethics. The project will support the business associations and small-scale tourism businesses to mitigate the impact of the COVID-19 pandemic and adapt to the new reality of the tourism and travel industry while minimizing the potential negative side-effects on vulnerable ecosystems and biodiversity. The project will explore possibilities to develop and boost off-peak tourism products and to stimulate travel by specific groups, e.g. through developing nature-based tourism schemes aimed at families, elderly groups, and youth.For example, a special observatory called “Ditaket” in Shatin village of Vayots Dzor region gives the opportunity to small groups of tourists to observe bezoar goats while it is also involved in the protection of this species[29]. Additional small community based local project investments may support model tourism routes (i.e.hiking trails), low cost infrastructure (i.e. garbage collection sites, picnic areas; strengthening wildlife observatories), development of field guides and informative materials (*The analysis of the potential for livelihood diversification including assessment of COVID-19 impact on small scale tourism in targeted municipalities will be commissioned at PPG stage*)

Component 4 Knowledge management and learning will focus on raising awareness and imparting knowledge on LDN and SLM measures and demonstrated good practices, biodiversity values and the need for a holistic integrative approach in Sevan Basin.

Outcome 4.1 Best practices and lessons are accessed and applied in other production landscapes and micro-catchments in the country and in the region

Output 4.1.1 Increased knowledge and awareness among local communities and decision makers about LDN. SLM and key values of Lake Sevan Basin in connection with the use of water and biodiversity ecosystem services.The proposed project will support targeted trainings at local community level on LDN compatible SLM measures and accessing available funding in coordination with FAO Project *“Implementation of Armenia’s LDN commitments through sustainable land management and restoration of degraded landscapes*”. The training will be tailored to local communities’ needs for information, be it about technical LDN and SLM aspects (with FAO), sustainable fishing/aquaculture, LDN friendly value chain (in collaboration with FAO), available financing and financial products (in collaboration with financing institutions), climate risk insurance products, rural entrepreneurship, farm business planning, eco-tourism

and aspects related to land and water use legislation and regulatory measures on biodiversity utilization in and around KBAs and on Sanctuaries (IUCN IV) territory. The trainings will include outdoor activities (planning and production oriented) and farmer-to-farmer experience sharing. Some of the training sessions for natural resources users may be organized jointly with the financial institutions (i.e. such as ACBA Credit Agricole; FINCA) in order to raise awareness about existing financial products and application requirements as well as teach/enhance farmers' skills in farm-finance and farm and sustainable aquaculture concepts, marketing and farm produce selling.

In coordination with WWF Armenia, the project will further organize ample awareness raising and education activities targeted at capacity gaps, with the participation of local and national decision makers and local natural resource users, aiming at increasing awareness and technical knowledge on what Land Degradation Neutrality stands for; acknowledging the problems and changing behaviors by adopting a more responsible attitude towards the use of land, water and biodiversity resources (*the behavior change related aspects will be further elaborated at PPG stage*); the awareness raising activities on critical species and habitats will use novel information from the project-born available data as a result of species inventories and biodiversity mapping. The project will make sure that the awareness and training activities will be gender sensitive and will highlight the differentiated roles of men and women in implementing LDN, while promoting women entrepreneurship, participation in decision making and access to socio-economic benefits. Biodiversity values of Lake Sevan and Sevan National Park are well known but the biodiversity hot spots outside of the protected areas are less known and studied, and the project will raise awareness on their importance.

Output 4.1.2 Experience, best practices and lessons learned about LDN, SLM, biodiversity and water management, captured, systematized and made available through various platforms for public and private stakeholders for use in other production landscapes and catchment areas in the country and in the region. The proposed project will make sure that the demonstrated good practices of spatial and land use planning informed by biodiversity mapping, ELD approach and LDN concept will be scaled up in the Sevan Lake basin, with the support of the Intersectoral Committee of Lake Sevan Basin (Output 1.1.3). Other valuable experience and demonstrated good practices will be systematically analyzed and captured under various Knowledge Management products that will be largely disseminated using the project's web site, social media, tailored radio/TV talk-shows, UNCCD WOCAT platform, IW:Learn, Annual Sevan conference and forum, WWF networks, GIZ initiatives and networks, and other on-going project's platforms particularly supported by the GEF funded FAO project " *Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscape*". The latter supports national LDN legal framework, that represents an excellent platform to upscale the regional LDN target setting and implementation in Lake Sevan Basin. Project-supported biodiversity assessments of the palearctic grasslands and other biodiversity hotspots outside PAs are critical for the biodiversity-oriented content for the Spatial and Land Use Plans and other spatial planning instruments and will build capacities of the land use decision makers for biodiversity mainstreaming into the regulatory framework. In addition, the project will support knowledge sharing and research of palearctic grasslands and facilitate scientific exchanges between the Armenian Academy of Science, Institute of Botany, Institute of Zoology and potential joint research field observations with academic institutions of countries that have relevant research programmes (e.g. Zurich University of Applied Science). The results of targeted research/inventories of high nature value grasslands and other biodiversity hotspots will be systematized in knowledge products that will inform decision making processes over land use and in this way the project would address to some extent the current decoupling of biodiversity research from land use decision making.

Component 5 Monitoring and Evaluation

Output 5.1 Project results properly monitored and evaluated

Output 5.1.1 Set of monitoring and evaluation activities implemented, and monitoring and evaluative knowledge systematically integrated into project management and planning. During the proposed project implementation, the M&E will be conducted following GEF and UNDP guidelines. The main tasks of the M&E plan include an inception conference/workshop and report, annual monitoring of indicators in the project results framework, annual project implementation reports (PIR), ongoing monitoring of environmental and social risks and implementation of Social and Environmental Standards (SES) requirements, supervision missions, updating GEF core indicators and METT (at midterm and project end), monitoring of Global Environmental Benefits, ongoing monitoring of the Stakeholder Engagement Plan and the Gender Action Plan, Project Board meetings, oversight missions by the UNDP-GEF team, mid-term and terminal GEF7 Core Indicators and METT updates, an Independent Mid-term Review (MTR), Project Completion Report, Independent Terminal Evaluation (TE) and the project final conference. The Project Manager will ensure the collation of all the project evaluative knowledge and information which will be testing ToC assumptions and supporting the project's adaptive management.

4) *Alignment with GEF focal area and/or Impact Program strategies*

The project is consistent with the objectives and will contribute to the outcomes and outputs of the GEF's Biodiversity focal area.

GEF-7 Biodiversity Results Framework			
Objective	**Sub-objective**	**Strategic Priority**	**GEF-7 Sub-indicators**
BD Objective I Mainstream biodiversity across sectors as well as within production landscapes and seascapes	C) Harness biodiversity for sustainable agriculture	BD 1-1 Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	4.1 Area of landscapes under improved management to benefit biodiversity *Project contribution* 150,000 ha grasslands sustainably managed including biodiversity considerations
BD Objective II. Address direct drivers to protect habitats and species	F) Enhance the effectiveness of protected area systems	BD-2-7: Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	1.2: Terrestrial protected areas under improved management effectiveness *Project contribution:* 1 PA covering 147,456 hectares of protected areas under improved management effectiveness

The project is also supportive of the Land Degradation focal area strategies.

GEF-7 Land Degradation Results Framework			
Objective	**Sub-objective**	**Strategic Priority**	**GEF-7 Sub-indicators**
LD Objective I Support on the ground implementation of Land Degradation Neutrality (LDN)	Integrated Landscape and Resilience	LD-1-4: Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	3.2: Area of forest and forest land restored *Project contribution:* 2,200 hectares of forest restored through assisted regeneration 4.3 Area of landscapes under sustainable land management in production systems *Project contribution* 10,000 ha irrigated areas under sustainable management 5,800 ha forest areas under sustainable management

5) ***Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing*** 6) ***Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)***

State of *ecosystems under baseline*	*Summary of GEF incremental intervention*	*Benefits*
Sustainable Land Management		
· Perpetuated lack of rational approach to sustainable use of existing arable and non-arable lands in Lake Sevan Basin landscape · Continued degradation of arable	· National Land Degradation Neutrality target established for the landscape and action plan agreed for achieving target, guiding land use planning; · The new LUP4LDN[30] (UNCCD) s	· LDN promotion in a concrete landscape *(pls. see on LDN Checklist compatibility under the table)* · Innovative approaches supporting efficient use of land, soil, water,

lands from ineffective and inefficient irrigation techniques, and inappropriate crop prioritization · Continued degradation of pastures from overutilization and underutilization; · Limited knowledge on biodiversity rich palearctic grassland areas located in Sevan landscape · Further destruction of critical and sensitive forest ecosystems, with continuing degradation of the important ecosystem services they provide · Pasture managers do not have capacity or data to implement sustainable grazing and land management practices in their respective pasturelands · Overgrazed pastures: exceeding carrying capacity by [1.5-2] times resulting in reduced provision of ecosystem services, leading to reduced economic and ecological productivity, and diminished livelihoods; · Livestock numbers continue to increase beyond ecological carrying capacity; · Poor agricultural land management near protected areas; · Wildlife is negatively impacted by livestock presence in key biodiversity areas;	oftware will be piloted in selected municipalities of Lake Sevan Basin, offering valuable scalable knowledge on LDN compliant land use planning · Integrated Spatial and Land Use Plans (ISLUPs) developed, guided by LDN and implemented in priority areas of critical interface between production systems and high value ecosystems, including mapping of various land use and land cover information, including biodiversity consideration; · LDN and ELD information available, educating land use managers; · Demonstrated and scalable SLM models in Lake Sevan Basin including: -5,800 ha forest under sustainable management ; measures facilitating natural regeneration of 2,200 ha of juniper forest, -150,000 pastures and grasslands under sustainable measures, -10,000 ha of irrigate arable land under sustainable water management and crop farming that does not deplete soil productivity; · Water User Groups; Pasture users Associations/Cooperatives ; Women Farmers Groups with enhanced capacities to implement SLM.	and vegetation in crop and livestock production systems; · Increased agricultural productivity by improved soil management and increased soil organic matter content on 10,000 ha irrigated arable land; · Improved condition of degraded marginal lands through agro-forestry measures; · Increased vegetation and tree coverage on 2,200 ha of forest ecosystem; · Stabilized ecosystem services at 5,800 ha forest ecosystems; · Stabilized ecosystem services in 150,000 ha of grasslands in production landscape in Gegharkunik and Vayots Dzor provinces in Lake Sevan Basin; · Improved livelihoods of 7,100 farmers (50% women); · Marginal land in agro-forestry systems restored through demonstrated agro-forestry measures adding value to eroded soil and ravines; · Restored agricultural productivity demonstrated through mutually beneficial agri-environmental scheme implementing SLM measures and engaging smallholder farmers, private sector and public authorities; · Demonstrated alternative livelihoods through biodiversity friendly v

		entures.
Biodiversity		
· The current EU4Sevan develops Sevan National park management pla n' however there is insufficient capacit y to implement the plan and insufficie nt monitoring data to guide managem ent responses to complex challenges. · Baseline government support fo r the National Park Sevan in the lands cape covering 147,456 hectares will c ontinue to have low management effe ctiveness, failing to fully achieve their biodiversity conservation objectives. T he PA will continue to be inadequately integrated in the wider landscape due to a lack of integrated spatial land us e planning that fully mainstreams biod iversity considerations. Under the baseline situation the identi fied KBAs and biodiversity hot spots l ocated outside National Park area in t he Lake Sevan Basin landscape will c ontinue to have their biodiversity degr aded, as resource use is unsustainabl e and land use patterns do not adequ ately reflect biodiversity consideration s. Armenia is one of the Palearctic hotsp ots of fine grain plant diversity-Biodive rsity rich palearctic grasslands are not systematically researched and their st atus and soil and vegetation condition are not fully known; Populations of threatened species are likely to continue decreasing due to lo	· Management effectiveness suppo rted for Sevan National Park including: (1) support to critical activities on impro vement of status of species in PAs, stre ngthened capacities for patrolling to ad dress illegal fishing (and support to sus tainable fishery management practices) and wildlife poaching ; (2) support to local tourism infrastructu re to facilitate additional income genera tion at targeted PA; (3) control over illeg al activities (e.g. poaching, illegal tree c utting). (4) Innovative financing sources for the PA and biodiversity hotspots identified; · Biodiversity hotspots outside PA s upported by: - Identification, mapping and assessme nt of biodiversity condition at KBAs/IBA s, Important Plant Areas, Wildlife Sanct uaries, elements of the South Eastern L esser Caucasus Ecological Corridor in L ake Sevan Basin -Inclusion of spatial distribution of biodi versity hotspots in the land use plannin g and management recommendations f or biodiversity management -Regulatory amendments developed ba sed on the biodiversity assessments as needed.	· Secured biodiversity status in 171,972 ha of KBA/IBA overlapping Sevan National Park (147,456 ha); · Community based monitoring and support to biodiversity conserv ation in Sevan PA and surroundings · Improved availability of data o n biodiversity condition Lake Sevan Basin · Non-deterioration of threatene d species including Bezoar goat (*C apra aegagrus aegagrus*); Indian cre sted porcupine (*Hystrix indica*); Euro pean otter (*Lutra lutra*); Common po chard (*Aythya farina*) VU; European t urtle-dove (*Streptopelia turtur*) VU; E gyptian vulture (*Neophron percnopt erus*) EN Saker falcon (*Falco cherru g*) EN; Armenian gull (*Larus armenic us*); Feruginous duck (*Aythya nyroca*); Lesser white fronted goose (*Anser erythropus*) VU · Management effectiveness in creased for the Lake Sevan National Park (measured by METT). · Biodiversity friendly practices promoted around KBAs/IBAs, wildlif e sanctuaries and ecological corrido rs benefiting biodiversity. · Incentives to support biodiver sity-friendly agricultural practices fo r the small-scale production and ser vice businesses (e.g. ecotourism, su

ss of habitat, poaching, and poor natural regeneration. These include: Bezoar goat (*Capra aegagrus aegagrus*); Indian crested porcupine (*Hystrix indica*); European otter (*Lutra lutra*); Common pochard (*Aythya ferina*) VU; European turtle-dove (*Streptopelia turtur*) VU; Egyptian vulture (*Neophron percnopterus*) EN Saker falcon (*Falco cherrug*) EN; Armenian gull (*Larus armenicus*); Ferruginous duck (*Aythya nyroca*); Lesser white fronted goose (*Anser erythropus*) VU	· Implementation of biodiversity-friendly sustainable use regimes in PA buffer zones, ecological corridors, KBAs and other biodiversity hotspots.	stainable farming, agroforestry, sustainable fishing/aquaculture etc) are in place · Integration of biodiversity considerations in the integrated land use planning
Capacity Development and Knowledge Management		
· Regional/national efforts on the conservation and restoration of the Lake Sevan basin land and water resources are inadequate, not fully implemented, and do not effectively engage all stakeholders · LDN approach is not part of the local and regional land use planning and there is little or no technical knowledge and institutional coordination for the implementation of LDN compliant SLM measures · Land and water managers in the Lake Sevan Basin landscape do not have capacity, knowledge, or awareness to implement strategic land use and sustainable land and water management practices especially that benefit biodiversity; · Critical ecosystems continue to be negatively impacted by poor land a	· Capacity strengthening for government and scientific institutions for participating in knowledge exchange over biodiversity rich biomes such as palearctic grasslands; · Targeted capacity building on LDN, baseline collection, implementation and monitoring; integrated land use planning informed by ELD concept climate change considerations and biodiversity values; · Knowledge management and exchange products (web-based, TV programs, trainings for communities and decision makers) on Land Degradation and Biodiversity issues in the Sevan Basin Landscape; · Direct exchange of good practices and lessons (particularly on SLM/LDN) with ongoing regional initiatives and knowledge management platforms, includ	· Strengthened technical knowledge on LDN and SLM and ELD concept benefiting especially land use managers but other stakeholders too; · Inter-sectoral coordination and knowledge exchange on Lake Sevan Basin management, Land Degradation Neutrality (LDN) based Integrated Land use planning and Biodiversity management. · Local natural resources users, smallholder farmers and women groups, youth groups with increase knowledge on biodiversity friendly SLM, sustainable fishery/aquaculture and alternative sources of income · Gap/decoupling between research conclusions and land use decision makers addressed · Private sector more knowledg

be negatively impacted by poor land and water management practices, with associated ecosystem services degrading over time · Protected area staff and managers do not have the capacity and resources for effective PA management in sufficiently anchored in monitoring of complex and interconnected systems; · Baseline information on the distribution, abundance, seasonality, and recruitment rates of rare and endangered species remains incomplete · Biodiversity data outside PA remains limited.	knowledge management platforms, including WOCAT, IW:Learn; research platforms; · Outreach and awareness raising on the problems of the Lake Sevan Basin, supporting Armenia's efforts to address land degradation and biodiversity decline. · Lessons documented and disseminated within project partners and amongst stakeholders · Project activities comprehensively monitored, evaluated, and well-documented	eable on biodiversity friendly practices, promoting improved standards of their operations. · Guidance, methodologies, manuals approved and institutionalized, supporting replication and scaling up of results. Best practice compilation, video documentary available and shared with stakeholders and via various platforms. · M&E knowledge, available, included in the project's adaptive management and learning; evaluative knowledge shared with stakeholders.

Note: The PIF design has been based on the **LDN Checklist developed by UNCCD** (https://www.thegef.org/documents/checklist-land-degradation-neutrality-transformative-projects-and-programmes-draft).

Summary of project's adherence to the checklist is reflected under Annex E.

7) ***Innovation, sustainability and potential for scaling up***

Innovation: The proposed project will include innovative measures engaging local natural resource users and private sector, expected to bring about change and support the shift towards a more sustainable use of natural resources:

- *Integrated LDN compliant integrated land use management:* The project is turning the LDN concept into practice in Lake Sevan Basin and will generate innovative approaches to multi-sector land use planning based on remote sensing data in mapping and geospatial analysis, testing and implementation of LDN compatible land use planning in Gegharqunik and Vayotz Dzor provinces.

- *The UNCCD endorsed innovative online tool LUP4LDN will be piloted in selected municipalities.* The resulting "Neutrality Maps" from using such an innovative tool will allow visualisation and quantification of gains (where interventions are planned to reverse past land degradation), stable areas (where land based natural capital can be maintained through good management) and anticipated losses (where realistically it is determined that land degradation may not be avoidable).

- *Restored pastures, cropland and assisted regeneration of high value forest ecosystems:* The innovative element will consist in the application of diverse irrigated land, pasture and forests management measures aligned with the "prevent-reduce-restore" hierarchy, based on the LDN baseline assessments and active promotion of biodiversity-friendly production practices and ecological corridors and buffer zones around PAs and KBAs/IBA

- *Integrated water management:* The project's integrated approach is aligned with IWRM and LDN concepts, and will provide concrete demonstration of efficient water use in irrigated areas in the targeted local communities; it will support the use of innovative irrigation technologies (such as laser leveling and drip irrigation), targeted software for monitoring crop-water productivity e.g. *Aquacrop (FAO)*. The proposed project will coordinate with other donor funded initiatives implementing sustainable Lake Sevan catchment management by building upon and supporting different measures under Sevan River Basin Management Plan and its Programe of Measures (PoM); and Lake Sevan National Park Management Plan.

- UNDP supported *Innovation Challenge* will be organized together with Impact Hub Social Innovation Development Foundation and will promote innovative business solutions, innovative technologies, policies, regulations and financial instruments aiming at identifying alternative financing solutions for Lake Sevan National Park, and other biodiversity hotspots.

- *Innovative biodiversity monitoring* involving local communities "green patrols", guided monitoring activities with schools and academia representatives.

- *Innovative financing* of biodiversity friendly agriculture in Lake Sevan Basin landscape through agri-environmental payments.

- Sustainability: Institutional sustainability will be ensured through a strengthened inter-sectoral coordination at regional. Local levels for LDN and at landscape level , the latter expected to be facilitated through the *Inter-Sectoral Coordination Committee* (Output 1.1.3) at Lake Sevan Basin landscape level. This Committee's main role is envisaged to advise and support coordination of sectoral policies and a better integration of LDN implementation with the current and future commitments on biodiversity, land degradation and climate change, and will promote UNCCD's LDN concept, UNCBD and UNFCCC agenda as well as coordination with EU WFD and IWRM principles in a synergic way. The participatory approaches employed by the proposed project will aim at multiple development dividends, empowered rural communities, conscientious and effective managers of natural resources, with increased capacities to manage their land, access financing and enhance their livelihoods.

Socio-economic sustainability will be enhanced by improving livelihoods of local communities, through the restoration of land resources and improved pasture management and securing ecosystem services (Component 3). The project will work through local governance structures – including strengthening pasture users group, cooperatives, women groups and farmers-to-farmers sharing of experiences, in order to improve communication, collaboration and cooperation between tenure holders, natural resource users and the relevant state, regional and local administrations. Environmental sustainability will be enhanced by LDN compatible land use planning (ISLUPs) in selected municipalities, guiding the implementation of concrete LDN compatible SLM measures resulting in improved land and biodiversity condition and a decrease of diffuse water pollution sources coming from agriculture. The financial sustainability will be ensured through the innovative agri- environmental payments that will encourage biodiversity friendly practices in Lake Sevan productive landscape. Moreover, through the strengthening of institutional capacities and management plan implementation mechanisms of Sevan National Park and by leveraging multi-sectoral stakeholders engagement at the level of the Lake Sevan Basin will create an enabling environment that reduces investment risks, creates the conditions for reduced dependency on grant-funded initiatives by attracting private finance. The project concept aligns with the STAP guidance (GEF/STAP/C.56/Inf.04) on achieving sustainable outcomes, including the following approaches: (i) Designing multi-stakeholder processes to engage key stakeholders, build stakeholder trust and motivation, and incentivize core actors for sustainable Lake Sevan Basin landscape management (ii) Outlining a theory of change that recognizes the need for integrated and participatory approaches and emphasizes diversity and adaptive learning. The STAP guidance on this issue will be further reviewed during the PPG phase, with additional specific aspects of the project designed to ensure sustainability.

Scaling up: The project is innovative and scalable in its design, and will employ mainstreaming, replication and linking of results with on-going national initiatives in order to achieve greater impact. Its objective is to identify LDN targets and support their implementation in selected municipalities and provide replicable models that could be immediately scaled up to the entire Lake Sevan Basin. The guidelines and manuals capturing the LDN compliant land use management, informed by ELD concept and biodiversity considerations as well as SLM generated experience will be institutionalized and therefore could be replicated in other municipalities and/or regions. The new innovative UNCCD endorsed LUP4LDN software tool will be piloted and demonstrated at the level of targeted municipalities providing knowledge and expertise for replication and sustainability of interventions. Ample awareness raising and capacity building events is expected to result in a wider up taking of LDN/SLM and biodiversity friendly practices. The project will closely coordinate with other ongoing interventions in particular with GEF/FAO *"Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscape*" linking the proposed LDN approaches in Lake Sevan basin with the National LDN platform and reporting mechanism, in view of scaling up demonstrated LDN implementation at sub-national levels (*to be validated at PPG stage*).

---

[1] Sevan Basin Management Plan (EU Project EUWI+)

[2] https://www.researchgate.net/figure/Accumulation-of-locations-of-rare-and-endangered-species-of-the-flora-of-Armenia-alpine_fig1_311353283

[3]https://www.researchgate.net/publication/344142055_High_diversity_in_Armenian_grasslands_EDGG_Field_Workshop_provides_standardized_data_for_the_first_time

[4] https://iwlearn.net/resolveuid/6af5017fa3a56bc7b8428f71c100362e

[5] Sevan Basin Management Plan

[6] World Bank, Background report for the Systematic Country Diagnostic, 2017
https://documents1.worldbank.org/curated/en/701491522220670956/pdf/124666-WP-PUBLIC-FINAL-Armenia-SCD-publication-of-technical-background-papers-on-agriculture-final-040518.pdf

[7] These include Endemic: *Myosotis claralaghezica*, *Colchicum goharae*, *Merendera mirzoevae*, *Ribus armenum*, *Cotoneaster armenus*, *Pyrus elata*, *Pyrus hajastana*, *Pyrus sosnowskyi*, *Pyrus tamamschianae*, *Pyrus voronovii*, *Rosa sosnovskyana*, *Rosa zangezura*, *Rubus takhtadjanii*, *Rubus zangezurus* and rare species registered in the Red Book of Armenia: *Ophioglossum vulgatum*, *Pteridium tauricum*, *Galanthus alpines*, *Castanea sativa*, *Tulipa confusa*, *Epipogium aphyllum*.

[8] WB, Armenia Climate Profile (2021) https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15765-WB_Armenia%20Country%20Profile-WEB.pdf

[9] USAID, Armenia Climate Risk Profile

[10] https://www.worldbank.org/en/news/feature/2020/02/03/can-better-land-management-unlock-agricultural-transformation-in-armenia

[11] NBSAP Armenia

[12] CARMAC Project (GEF/WB)

[13] https://www.unccd.int/sites/default/files/inline-files/Armenia_1.pdf

[14] Sevan Basin Management Plan (EU Water Initiative Plus)

[15] EU4Sevan Project Document (CRIS No.ENI/2020/416-204)

[16] Data recorded between August-October 2016

[17] https://unfccc.int/sites/default/files/resource/NC4_Armenia_.pdf

[18] Armenia Climate profile, WB,2021 https://climateknowledgeportal.worldbank.org/sites/default/files/2021-06/15765-WB_Armenia%20Country%20Profile-WEB.pdf

[19] IFAD, 2015

[20] https://www.sciencedirect.com/science/article/abs/pii/S1462901118305768

[21] https://www.wocat.net/en/projects-and-countries/projects/land-use-planning-land-degradation-neutrality-lup4ldn

2] A Process Framework is prepared when UNDP-supported projects may cause restrictions in access to natural resources in legally designated parks and protected eas. The purpose of the process framework is to establish a process by which members of potentially affected communities participate in the design of project mponents, determination of measures necessary to address the requirements of SES Standard 5, and implementation and monitoring of relevant project activities.

The level of detail of the Process Framework may vary depending on project activities, characteristics of restrictions and their impacts, and the number of persons affected. The Process Framework supplements the project's environmental and social assessment with a participatory framework focused on the potential impacts of access restrictions.

[23] PIMS 3986 "Developing the Protected Areas of Armenia"

[24]https://www.researchgate.net/publication/344142055_High_diversity_in_Armenian_grasslands_EDGG_Field_Workshop_provides_standardized_data_for_the_first_time

[25] https://www.zobodat.at/pdf/ANNA_115B_0011-0020.pdf

[26]https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Learning%20Materials/UNDP_S7_Labour%20Guidance%20Note_June2021.pdf

[27] https://www.ebrd.com/news/2021/ebrd-and-undp-to-pilot-social-impact-bond-in-armenia.html

[28] Examples of current government supported programmes-The projects are implemented currently through a co-investment scheme, as the loan interest is subsidized by the State, as follows:(i)Construction of cattle barns through a the state-funded investment for 2021 – US$ 2,76 mln (1,380,000,000 AMD), co-investment rate is 50-70%. (ii) Climate smart Irrigation - the investment planned by the State for 2022-2023 – US$ 4 mln (2,000,000,000 AMD), including the subsidy of loans. Co-investment rate is 16-18%; (iii) Intensive orchards, vineyards – Envisaged investment for 2022-2023 is US$ 260,000 (130,000,000 AMD), the co-investment rate is 50%. US$ 3 mln (1,500,000,000 AMD) is allocated to subsidize the interest rates of loans (iv) Seeds – US$ 1,4-1.6 mln (700-800 mln AMD) annually is allocated to subsidize 50% of loansl (v) For other agricultural products (agro-machinery, agro-processing, sheep/livestock breeding, anti-hail nets), the loan interest is subsidized in full.

[29] https://www.armgeo.am/en/ecotourism-in-armenia/

[30] https://www.wocat.net/en/projects-and-countries/projects/land-use-planning-land-degradation-neutrality-lup4ldn

1b. Project Map and Coordinates

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

(*Please see Fig. 1 and Fig. 2 under the Section 1 Project Description*)

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The initial stakeholders engagement during the PIF stage has validated the country ownership and has preliminarily secured support from key government partners, civil society and academia. UNDP has engaged with key partners primarily for assessing the opportunity and feasibility of the proposed project, alignment with the government priorities, potential co-financing sources, and identification of the need for further assessments of the financial partners at the PPG stage The project's implementation arrangements have been consulted and agreed with the Ministry of Environment and WWF Armenia.

The project's components and the main LDN guided integrated landscape approach was discussed and agreed with the Regional authorities (Agriculture and Environment departments) of Gegharkunik and Vayotz Dzor. The project was further assessed by the Ministry of Environment (relevant departments, CBD, UNCCD, UNFCCC focal points and GEF OFP) and different technical aspects explored further with the Ministry of Economy, Forest Committee, Hayantar (ArmForest); "Environmental Group" LLC; WWF Armenia, Foundation for Restoration of Sevan Trout Stock; Sevan National Park; FAO and GIZ, UNDP country office; Impact AIM Armenia; other UNDP initiatives and different independent experts.

The discussions have also allowed for the identification of other key stakeholders who will be further engaged at PPG stage, to confirm roles and responsibilities for the project and preliminary analysis of the gaps in opportunities and needs for further assessments at the PPG stage. A preliminary analysis is presented in the table below:

Institution	Description/Role in the project
Ministry of Environment (MoE)	Ministry of Environment is responsible for environmental protection and rational use of natural resources, prevention or reduction of negative impact on air, waters, soil, flora and fauna, protected areas and forests, wetlands. The MoE will play a leading role in the Intersectoral Stakeholder Coordination Committee for LDN implementation in Lake Sevan (Component 1: Output 1.1.3), organi

	mittee for LDN implementation in Lake Sevan (Component 1, Output 1.1.3), organization of Innovation Challenge for identification of biodiversity alternative financing sources, organization of awareness and training activities. MoE is the Implementing Partner for this project.
WWF Armenia	Operational since 2002, WWF is implementing projects focused on development and strengthening Ecological network of Armenia, conservation and restoration of threatened species, mitigation and adaptation of climate change impact on forest ecosystems, introduction of economic mechanisms for alternative livelihood for local communities in order to promote sustainable use of natural resources. WWF Armenia will retain an important role in supporting the implementation of distinct outputs or activities of the project (to be clarified at PPG stage).
Ministry of Economy	The Ministry of Economy is mandated with the development, implementation, coordination, and assessment of the results of economic policy, implementation of unified agrarian policy of the Government, technical and technological equipment of agriculture sector and introduction of innovative solutions, promotion of organic agriculture, development of agricultural cooperation. The Ministry of Economy is a key project partner in implementation of LDN and SLM measures.
Ministry of Territorial Administration and Infrastructure of the Republic of Armenia	Mandated with the increasing of performance efficiency of regional administrations and local self-governance bodies, development of recommendations on introduction of waste removal and sanitary cleanup system in compliance with international norms, development and implementation of state policy in energy and transport sectors. The Ministry is a key partner in implementation of LDN guided land use planning, review and approval of the plans.
The Water Committee	This is a public agency under the Ministry of Territorial Administration and Infrastructure, which develops and implements the policy of the government regarding the management and use of state owned water management and it will participate in the inter-sectoral coordination mechanism at Lake Sevan Basin landscape level, other working groups related to the development of integrated monitoring database in the Lake Sevan National Park and trainings.
Urban Development State Committee	Mandated with the development of “green urban development” principles, ensuring harmonic development of natural and cultural landscapes. The Urban Development Committee will participate in the LDN and spatial and land use planning meetings

	Committee will participate in the LDN and spatial and land use planning meetings and working groups as well as trainings and awareness sessions.
State Committee of Real Estate Cadaster	Mandated with the land use data management, development of land policy, principles of management of land resources, development and implementation of geodesy and mapping project. The Cadaster Committee is a key partner in the implementation of LUP4LDN and LDN guided land use planning.
Statistical Committee of the Republic of Armenia	Mandated with the development, production and dissemination of official statistics according to the statistical programs. The Statistical Committee will be involved in Land use planning, socio economic and biodiversity data collection and analysis.
Environmental Protection and Mining Inspection Body of the Republic of Armenia	Mandated with ensuring compliance with safety and legislative requirements related to nature protection and mining. Beneficiaries of trainings and awareness sessions.
Gegharkunik and Vayots Dzor Regional Administrations	Mandated with the implementation of territorial policy of the Government, coordination of activities of territorial units of executive institutions of the country. The regional authorities are key partners in LDN target setting, approval and implementation and monitoring. Beneficiaries of trainings and awareness sessions.
Committee of Forest of the Ministry of Environment of the Republic of Armenia (Chambarak and Vayots Dzor branches of Hayantar SNCO)	Mandated with ensuring sustainable management of state forests, including protection, reforestation, afforestation and efficient use. The local branches of Hayantar SNCO are key partners in the development and implementation of sustainable forest management plans and restoration of forest ecosystems. Beneficiaries of trainings and awareness.
«Hydrometeorology and Monitoring Center» State Non-Commercial Organization	Mandated with the collection, analysis and protection environmental and hydrometeorological data. The Center will participate in the project's activities, climate change assessments and working groups, trainings.
"Sevan National Park" State Non-Commercial Organization	Mandated with ensuring normal process of development of aquatic and terrestrial ecosystems, protection of natural and historical monuments of Lake Sevan basin. The Park administration is a key partner for the implementation of the activities related to biodiversity in and around PA and community outreach. Beneficiary of training and awareness sessions.
Foundation for Restoration of Sevan Trout Stock and Development for Aquaculture	Mandated with the restoration of trout stock in Lake Sevan, establishing and development of Sevan trout production and realization value chains and related branches, solving of Lake Sevan problems, development of production and processing of aquaculture in Armenia, development of knowledge-based and innovative technologies.

	The Foundation will support data collection and analysis on ichthyofauna of Lake S evan and analysis of threats and impact and will support capacity building on sust ainable fishing/aquaculture.
Caucasus Nature Fund (CNF)	CNF is a conservation trust fund created to safeguard the Caucasus ecoregion- on e of the global biodiversity hotspots. It provides matching grants and technical assi stance to protected areas in Armenia, Georgia and Azerbaijan, building capacities t o sustain natural parks for future generations. Initially established in 2007 by the G erman Government (MBZ), Conservation Internationals and the WWF, today Caucas us Nature Fund is a multi-stakeholder organization. Beneficiaries of trainings and awareness activities. Partners in the organization of j oint events and knowledge management.
Local Self-Governance Bodies	These local authorities are in charge with monitoring the implementation of the en vironmental regulations, including promotion of environmental education, promoti on of tourism, implementation of disaster risk reduction measures, waste removal and sanitary clean-up in communities. They are key partners in the development an d implementation of pastures management plans, forest management plans, agrof orestry measures. Beneficiaries of trainings and awareness activities.
Local natural resource users groups	· National Union of Farmers- regional branches · Ghegarkunik Water Users Associations (Ghegarkuni region) · "Yeghegnadzor" Water Users' Association (Vayots Dzor) Project beneficiaries.
Private sector	The project will work with the representatives of tourism/hospitality industry in La ke Sevan basin. The project will also focus on small livestock entrepreneurs and lo cal agriculture producers, and other local small tourism entrepreneurs in targeted v illages/municipalities. The project will work with financial institutions to encourag e/promote green lending to support responsible and sustainable agriculture and t ourism business models. Project beneficiaries.
Financial Institutions	The project will work with the representatives of financial institutions (EBRD; ACBA Bank; FinBank; Inecobank) with portfolios in agriculture sector and tourism sector in order to ascertain the feasibility of piloting an agri-environmental payment sche me and explore operationalization options of such a mechanism for sustainable pa sture management and financing biodiversity friendly agriculture practices.

	Beneficiaries of training and awareness activities.
Center for Ecological-Noosphere Studies, National Academy of Sciences, RA	The Center is conducting various assessments: assessment of ecological status of territories, development of scientific and methodological fundamentals of risk analysis, optimization of natural resource management processes, solution of problems in the area of human ecology. It will be a key partner in promoting LDN guided land use planning, mainstreaming of biodiversity spatial elements into land use planning, roll-out of the LUP4LDN software for land use planning, setting up integrated monitoring data base at Lake Sevan National Park, monitoring of key species, trainings and data analysis.
Institute of Botany, National Academy of Sciences, RA	The Institute is in charge with inventories of flora, vegetation and plant resources of Armenia, development of principles for increasing the efficiency of main forest systems, importing and adaptation of vegetation and plant resources, study of dynamics of changes of vegetation of Armenia. The Institute will be a key partner in the assessments of palearctic grassland areas and management recommendations, as well as knowledge management, knowledge sharing, targeted research.
Scientific Center of Zoology and Hydroecology, National Academy of Sciences, RA	Studying of hydro- and terrestrial ecosystems of Armenia, biodiversity, taxonomy, morphology, ecology, ethology, evolution, genetics, zoogeography of invertebrate, vertebrate animals and hydrobionts, and parasitic fauna of animals. Assessment of bioresources, development of their conservation methods, restoration and sustainable use. The Institute will participate into species survey, management recommendations, as well as knowledge management, knowledge sharing, targeted research.
Armenian National Agrarian University	The University is in charge with the preparation of agritechnology specialists capable to develop the food and agriculture system in the country with the help of their professional skills and through cooperation with the sector's stakeholders. The University will participate to surveys, analysis of biodiversity and land degradation assessments.
Gavar State University	Mandated with the provision of higher education, including in biology, nature protection and use, mapping and cadaster. The University will participate to surveys, analysis of biodiversity and land degradation assessments.
Media	Key partners of the organization of awareness raising dissemination of information on project activities.
NGOs	Participation in consultations, training and capacity building activities, development of local knowledge, implementation of project-related activities.

GIZ Armenia	Operational since 2002 in Armenia, the GIZ initiatives in Armenia are part of a strategic approach to support regional cooperation under the Caucasus Initiative in several areas: sustainable economic development, democracy and environmental governance.The results under GIZ supported initiatives will be analyzed and the project will ensure a close coordination with current GIZ supported measures.
Other International Organizations	Coordination and support to development of national policies related to conservation and sustainable management of land resources and high value ecosystems in Lake Sevan landscape.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Armenia ranks 98th of 153 countries in the World Economic Forum (WEF)'s Global Gender Gap Report, illustrating important gains in terms of gender equality in recent years, particularly in the area of education. However, challenges remain and gender inequalities are still socially accepted or tolerated, especially in rural areas where gender inequalities are more entrenched e.g. the share of women engaged in informal employment in agriculture is 82% compared to 60% of male informal workers and furthermore, and there are also uneven opportunities for men and women to engage in rural tourism activities. Women in rural areas are extensively involved in work related to the production of agricultural goods and services for the family and household use. This work includes crop production and breeding of livestock in the households' plots and family farms; production of household goods; production of food for consumption by the family and household members and for sale; fetching water and gathering firewood; housework; looking after children and the elderly and sick members of the families.Rural women working informally on family farms or businesses do not receive any compensation as defined by the Labour Code because they are considered to be either self-employed or economically inactive. There is a strong vertical and horizontal segregation in the labor market, which results in significant gender pay gap with women' average wages representing 66% of men's average wages. One of the primary contributors to gender inequality is the continuing disparity in economic entrepreneurship among women and men, access to trainings and knowledge products and difficulties in access to loans due to limited property for collateral[1].

The proposed project will promote an environment that will help overcome gender biases, promote women' empowerment and foster inclusion and equal opportunities. Gender considerations will be fully mainstreamed into project implementation. Under Output 1.1.3, the Intersectoral Stakeholders Committee will include at least 30% women representatives. Under Component 3 the project will support public advocacy for women's rights, including gender sensitive measures to be included in the pasture management strategies, forest management plans, agro-forestry measures and sustainable water management plans for irrigated areas; under Output 3.1.2 the project's efforts will be directed towards strengthening local women entrepreneurship, and enabling training of women (4.1.1.) in pasture management and sustainable agricultural practices and business development (3.1.1). The identification of gender sensitive climate resilient pasture management strategies will be linked with the national adaptation planning activities which are currently under implementation within the framework of the regional EU funded *EU4Climate Programme,* implemented by UNDP. Gender responsive approaches in the LDN compatible SLM measures will be identified and implemented throughout the project. Dedicated support to women farmers, women entrepreneurs and support to youth participation and trainings will be embedded in the project strategy. The project will also gather gender-disaggregated data for evaluation purposes and use gender sensitive indicators (particularly around beneficiaries) to facilitate planning, implementation and monitoring. In terms of ensuring gender mainstreaming, several practical steps will be undertaken. The project team and partners are committed to delivering following:

a. Commitment to integrate gender sensitive considerations into the potential amendments to regulations and associated explanatory materials relating to agricultural sector strategy development.

b. Targets for inclusion of women in training and capacity building initiatives among policy makers (minimum 50%)

c. At least 50% of farmers and farming and fishery entrepreneurs receiving sustainable land management training, sustainable fishery/aquaculture training and technical support services being women

d. Gender balanced approach to selection of the farms to benefit from tailored assistance that will facilitate accessing financing for pasture management measures.

Implementation strategies to deliver these targets will be designed and implemented by the project team in conjunction with key project partners. This will be done through the clear setting of targets in project agreements, performance based payments and regular monitoring of progress. A full and comprehensive gender assessment will be conducted during the project development phase, whose results will be reflected into a project gender action plan. The Gender Action Plan will include distinct gender performance indicators and actions and timeline.

---

[1] Gender, Agriculture and Rural Development in Armenia, FAO,2017

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The project will work directly with small-scale agricultural producers, including those producing crops, and those in the livestock sector. The land and water resources of the target region cannot be sustainably managed without the full cooperation and support from the private sector. The project will directly engage and involve local small holders in the agricultural sector, which are by and large the main relevant private sector actors with respect to sustainable land use in the rural areas targeted by the project *(priority municipalities will be identified at PPG stage).*

The project will work with the "Gegharkunik" Water Users Associations and "Yeghegnadzor" Water Users Associations (WUAs) in both regions to support the development of integrated LDN compatible water management plans and implement non-depleting agricultural practices that are LDN compatible and have lower environmental impacts (e.g. drip irrigation) (Output 3.1.2). The project will engage with the Gegharkunik and Vayots Dzor Regional Farmers Council and with pasture users associations/livestock private entrepreneurs in select municipalities in order to support the sustainable pastureland/grassland management plans and implement KPI based agro-environmental payments (Output 3.1.1) Furthermore, the project will work with "Hayantar" State Non-Commercial Organization (SNCO– state-owned enterprise) for the development of sustainable forest management planning and forest restoration activities (Output 3.1.3) and will engage with business associations and small scale tourism businesses in the local targeted areas develop nature-based tourism schemes. Facilitation of public private partnerships will be supported including the possibility of engaging with responsible tourism businesses e.g. hotels/tourism operators' in private sector supported programmes to raise awareness of the Lake Sevan Ramsar site values, bird watching and camping opportunities through guides, booklet, support to visitor center, specifically tailored guided tours learning activities (Output 2.1.2). Possible involvement of mobile phone operators in innovative PA funding (e.g. crowdfunding) will be also explored. The project's engagement with the private sector will further extend to coordination with financing institutions, investment funds and NGOs in promoting green lending to support responsible and sustainable agriculture and in the design and delivery of targeted trainings for natural resource users (Output 4.1.1) e.g. ACBA Credit Agricole; Armenian National Investment Fund (ANIF); Development and Investment Cooperation of Armenia (DICA); Centre for Agribusiness and Rural Development (CARD); the International Centre for Agribusiness Research and Education (ICARE).

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Identified Risks and Category	Impact	Likelihood	Mitigation Measures
Vulnerable groups (smallholders with less land and capacities, war veterans, war affected families), might not be involved in project design and therefore not engaged in, supportive of, or benefitting from project activities	M	Moderately likely	The project will be working closely with all stakeholders to ensure that stakeholders are adequately consulted, and their considerations integrated in the project design and project implementation. Activities designed under Component 3 will be specifically tailored to address the problems faced by small holders, poor households, women headed households etc. Engagement of vulnerable groups and other key community stakeholders will be detailed in the Comprehensive Stakeholder Engagement Plan and Gender Plan in line with current UNDP guidance, which will be prepared at the PPG stage. In addition, the project strategy will include criteria for prioritization of the participation opportunities to the most vulnerable groups and communities affected by the large scale military hostilities in the Nagorno Karabakh conflict.
Project activities and approaches might not fully incorporate or reflect views of women, and ensure equitable opportunities for their involvement and benefit or it may	M	Moderately likely	This risk will be assessed fully during PPG stage, in the gender analysis and managed through the Gender Action Plan.
Government resource management authorities may not hav e the capacity to ful	M	Moderately likely	The project will be working closely with all stakeholders to support government natural resource management authorities and institutions to meet their obligations, and with resource user rights holders to claim their rights. This will be accomplished through multiple stakehol

e the capacity to fulfill all aspects of their mandate, and rural resource users may not have the capacity to claim their rights.			claim their rights. This will be accomplished through multiple stakeholder consultation sessions during all relevant aspects of the project to ensure that all parties are aware of and understand the relevant obligations and rights.
The expected project impacts of the restoration of degraded land, and sustainable management of water resources, wetlands, pasture and forest ecosystems could be sensitive to changing climatic conditions in the future.	M	Moderately likely	The project strategy will demonstrate and put in place a programme framework for targeted ecosystems restoration and sustainable management that is grounded by scientific principles and participatory methods mechanisms that will enable stakeholders to adapt sustainable water, pasture/forest management to any given context and threats.
Increased incidence of climate-induced wildfires in targeted project sites	M	Moderately Likely	The increasingly dry and arid climate is making forest ecosystems vulnerable to wildfires especially in Vayots Dzor region. The PPG team will include relevant technical expertise to assess this particular risk and include appropriate mitigation measures within project activities, such as: development of climate resilient forestry management plans in targeted communities; supporting elaboration of disaster risks reduction planning at community level; tailored awareness activities etc.
The project impact on the status of biodiversity and KBAs might be limited by climate change.	M	Moderately Likely	Assessment of climate change effects within the targeted regions and PAs and ecosystems will be included in the Integrated Spatial and Land Use Plans (ISLUPs). The project will make sure that the spatial development scenarios are reflective of the climate change threats and impacts, and climate resilience and adaptation solutions are considered within the (i) spatial development priorities for the areas that are vulnerable to and/or affected by climate change effects and (ii) informing the sustainable pastures, forest and water management plans developed for the selected areas in the PA/KBAs vicinity.

National and local government institutions responsible for the management of water resources, land-use planning, pastures and forests management do not have adequate capacity to support, maintain and enforce integrated regional land use plans and pasture management strategies with communities	M	Moderately likely	The project will strengthen and expand the current capabilities of the key institutions responsible for the planning and management of pastures and forests across the high value ecosystems of Lake Sevan Basin. The project strategy will support the development of well-trained and properly equipped national, regional and local authorities of the targeted regions and municipalities, and will foster horizontal and vertical institutional coordination for increased consultations on solving pasture management problems and for increased capacities to mainstream land degradation neutrality principles and biodiversity concerns in long term planning. The UNDP project will develop an institutional sustainability plan to ensure that the different project investments in building the capacity of the targeted institutions are maintained (and scaled-up, if feasible and affordable) beyond the project.
Stakeholders in the project region may not perceive the benefits of proposed pastureland/forest management measures and view them as conflicting with their own livelihood development priorities.	M	Moderately Likely	During the PPG stage a Comprehensive Stakeholder Engagement Plan and Gender Plan in line with current UNDP guidance, will be prepared and project proposed activities will be discussed. The PPG will assess the potential of economic displacement and will include appropriate management measures of this risk. During the development of the project, the targeted communities will be engaged in designing and validating the project strategy, and an assessment of their livelihoods will be undertaken in view of the project's potential impact.
Agri-environmental payment scheme may fail to channel funds for sustainable land management and pasture management financing due to lack of appropriate governance mechanism and/or fina	H	Moderately Likely	At the PPG stage, a Feasibility Plan for the proposed Agri-environmental payment scheme will be developed, and based on the recommendations, the project strategy will include the most efficient and effective governance mechanism, aiming at sustainable and scalable results.

ncing.			
COVID 19 related risks to the project formulation and implementation: Project delays due to COVID 19 reinstated restrictions	M	Moderately Likely	During the PPG Phase, the UNDP CO will agree on the measures to mitigate any implementation delays that may result due to potential reinstatement of the COVID-19 related restrictions. UNDP issued corporate guidance on “Managing programmes and projects in the age of COVID-19”. These guidelines may be used during PPG and further included in the Project COVID-19 Response Strategy during the project Inception Stage. Adequate safeguards measures will be implemented during the project formulation and implementation to protect people and environment and prevent the virus spread (i.e. use of masks, social distancing, remote meetings whenever possible; remote field data collection as much as possible).
Project supported activities at local community level including ecotourism activities may inadvertently contribute to the spread of COVID-19	M	Moderately Likely	During the PPG phase the project will commission risk assessments in order to identify COVID-19 related safeguards measures that will be included in the project design, pertaining to ecotourism product development.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The Ministry of Environment will be the institution responsible for the implementation of the project and will act as the Implementing Partner in accordance with the UNDP National Implementation Modality (NIM), implying full ownership of the project. This is in line with the Standard Basic Assistance Agreement (SBAA) signed on 8 March 1995 between UNDP and the Government of Armenia The proposed project will be implemented within the context of the UN Sustainable Development Cooperation framework and the UNDP Country Programme Document 2021-2025. UNDP Country Office (CO) in Armenia will provide quality assurance, in accordance with requirements of the GEF and UNDP Policies and Procedures. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies[1]. The Ministry of Environment will have the overall executing and technical responsibility for the project while UNDP will provide oversight.

The Project Board (also called Project Steering Committee) will be responsible for taking corrective action as needed to ensure the project achieves the desired results and will include the line ministries and agencies responsible with land, water and biodiversity management In order to ensure UNDP's ultimate accountability, Project Board decisions will be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the UNDP Resident Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed. Implementation of the proposed project will be fully coordinated with a number of on-going relevant multilateral and bilateral financed initiatives, in order to avoid duplication and increase synergies and effectiveness.

The Inter-Sectoral Coordination envisaged under Output 1.1.3 will have a substantial involvement in the project's work and will strengthen the government ownership and inter-sectoral coordination while also supporting the integration between (i) management measures pertaining freshwater resources listed in the Programe of Measures under the River Basin Management Plan (RBMP) for Sevan River Basin District (RBD) and (ii) LDN based integrated land use planning, sustainable pasture/forest management and biodiversity mainstreaming measures in the Lake Sevan landscape with full engagement of UNCBD, UNCCD and UNFCCC Convention focal points and regional governors of Gegharkunik and Vayots Dzor. The proposed project will work closely with the Ministry of Environment to support the cross-sectoral coordination at regional level and by so doing, contributing to the implementation of the Program of Land Degradation Neutrality of Armenia (approved in May 2021) in coordination with the FAO project " *Implementation of Armenia's LDN commitments through sustainable land management and restoration of degraded landscape*" which supports the implementation of the National LDN targets.

The coordination with the GEF funded FAO Project will be particularly important also for linking the proposed regional LDN approaches in Lake Sevan basin landscape with the FAO supported national level LDN enabling framework, strengthened UNCCD Committee and reporting mechanism, in view of scaling up demonstrated LDN implementation at sub-national levels. Potential opportunities for coordination have been explored with FAO representatives e.g. (i) Harmonization of the methodologies for data collection, and in this regard the UNDP GEF project could use the *Earth Engine* software developed by FAO in

coordination with UNCCD and use FAO's experience in Armenia with regard to the data collection for LDN baseline assessments and progress monitoring; (ii) Organization of joint trainings on LDN and biodiversity friendly value chains- related capacity building for local authorities and local natural resources users, and exchange good practices in setting LDN targets at regional (sub-national) levels and measures and incentives for LDN implementation; (iii) Lesson learned on inter-sectoral coordination for LDN: the FAO project will support the setting up of an LDN coordination mechanism at regional level (in Lori and Syunik regions), and will mainstream LDN requirements into the national enabling policy framework; FAO project will strengthen the capacity and mandate of the UNCCD Committee to implement LDN and monitor LDN implementation. Both projects will exchange lessons learned in setting LDN subnational targets, and on monitoring and reporting LDN progress from subnational to national levels (further clarification of this mechanism will be sought at PPG level in coordination with FAO project).

The project will coordinate closely with WWF Armenia for the technical work under Component 2 in particular (further assessment of the opportunity of WWF Armenia to act as Responsible Party will be conducted at PPG stage).

The project will further learn and build upon the WB/CARMAC II project's rich experience in SLM, pasture management plans and working with local communities in Gegharkunik region as well as IFAD initiatives in Vayots Dzor region. Furthermore, the project will coordinate its activities with the UNDP implemented EU4Climate Project in view of synergies with the adaptation planning measures.

The project will also coordinate activities with the EU4Sevan UNDP/GIZ implemented project, under which the new Management Plan for the National Park Sevan is being developed. The UNDP/GEF project will support Sevan National Park's capacities for the implementation of the Park's management plan and with the promotion of biodiversity friendly agriculture practices and alternative livelihoods in the PAs buffer zones.

Ample opportunities for coordination and joint KM activities will be further explored with the GIZ e.g. (i) cooperation and synergies for strengthening cross-sectoral coordination in Lake Sevan Basin under Output 1.1.3 to support a better integration of biodiversity friendly agricultural measures under different programmes and initiatives using different approaches (i.e. LDN/landscape approach; IWRM/river basin approach; adaptation measures under NAP etc) (ii) collaboration and building on GIZ initiatives in water quality monitoring to support Sevan National Park capacity for integrated monitoring (under Output 2.1.3); further opportunities to synergize for the selection of targeted municipalities (at PPG stage) and the design of local pastures and forest management plans and in this regard the UNDP GEF project will build on GIZ existing GIS analysis of pastureland and pilot sustainable agriculture models promoted in Lake Sevan Basin under EU4Sevan Project in order to reduce diffuse water pollution from land use. The results of the GIZ/ECOServ initiative will be analyzed to build upon tested good practices in pastures and forest management. (iv) Furthermore, the project will analyze and build upon GIZ supported results under the SEVAMOD and SEVAMOD2 projects and the proposed Lake Sevan Nutrient Management Concept for the GEF supported work under Output 2.1.2.

The project will further synergize with the UNDP implemented project "Green Agriculture Initiative EU-GAIA" and will learn from their experience and will build upon the learning modules that will be developed under this project. The GEF-UNDP project will also coordinate with the GIZ ECOServe and will build on the GIS analysis for pasture management planning as well as with the and SEVAMOD2 project and will learn from the project's experience and assessments. The project will also coordinate with the Foundation for Restoration of Sevan Trout Stock and Development of Aquaculture for data collection and assessment of key species in lake Sevan, assessments and capacity building related to sustainable fishing/aquaculture.

The project will also coordinate with the UNDP/ Adaptation Fund project "Increased climate resilience of South Caucasus mountain communities and ecosystems through wildfire risk reduction" in selecting the target forest areas and building upon the generated experience in wildfire and forest management plan and risk reduction measures at community level in Vayots Dzor region.

---

[1] See https://www.thegef.org/gef/policies_guidelines

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assesments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The National LDN Target agreed by Armenia is the following "By the year 2040, the carbon stock lost between 2000 and 2010 will be recovered and increased by 2,8% in relation to present". The National LDN target setting process recommends several directions to be followed in order to attain the LDN such as: 1) Halting cropland degradation currently affecting 2/3rd of the country's territory, by applying organic agriculture measures, increasing knowledge and awareness about the use of organic fertilizers; 2) Implementing reforestation of 2/3rd of degraded land, expected to be supported by the *Armenian Forest Programme* aiming at increasing the afforested area up to 20% of the country's territory; 3) Halting deforestation and improving forest management on 100% of national territory; 4) Halting overgrazing and improving grassland management on the 100% of national territory. A draft Government Decree on the formal approval of Program on Land Degradation Neutrality is submitted for Government's review (2021). The UNDP/GEF project will contribute to the overall progress towards the National LDN Target by (i) focusing at regional LDN target setting and implementation in Lake Sevan Basin landscape (ii) strengthening the inter-sectorial coordination for LDN at Lake Sevan landscape level (iii) coordinating closely with the existing similar LDN initiatives (FAO) in order to establish monitoring and reporting mechanisms for LDN and exchange lessons learned and experience on LDN regional implementation and reporting from sub-national to national levels. Furthermore, the project is highly relevant to and consistent with Armenia's national priorities related to land degradation and biodiversity conservation, as outlined in key national policy documents. The proposed project is aligned with the Government's Program of Land Degradation Neutrality and will support the progress towards the implementation of the National LDN targets. The project is aligned with the NBSAP 2015-2020 which prioritized assessments of ecological status and conservation measures of endemic fish species in Lake Sevan. The project is also fully aligned with the country's updated NDCs ten year implementation framework 2021-2030 and adaptation priorities contributing to the national climate responsive indicators and targets.

The Government of Armenia recognizes the strategic importance of the rehabilitation of Lake Sevan ecosystem and for over two decades has invested in the institutional and regulatory framework and plan of actions towards ecosystem rehabilitation. The Law on Lake Sevan (2001) and On Adoption of the Annual and Complex Program of Activities for the Use, Protection, Reconstruction and Reproduction of the Lake Sevan Ecosystem (2001) have had a significant impact on enhancing the legal framework. The National Security Strategies of the Republic of Armenia (2007, 2020) acknowledge Lake Sevan as Armenia's strategic water resource reserve and prioritizes the necessity of the rehabilitation and preservation of the lake's ecosystem and the management of water resources. Armenia Development Strategy 2014-2025 adopted in March 2014 (currently under revision) highlights numerous measures to reduce pollution of water resources and rehabilitate the ecosystem of Lake Sevan. The proposed project is also in-line with the provision of the Programme of the Government of the Republic of Armenia for 2017-2022, namely with those related to the restoration and preservation of the ecological balance of Lake Sevan i.e.: (1) during 2017-2022, ensure continuous restoration and preservation of the ecological balance of Lake Sevan, as well as develop new cleanup mechanisms for the coastal zone in accordance with the legislative regulations; (2) adopt the Concept Paper and Management Plan for the Sevan National Park Development.

The project will contribute to overall post-COVID economic green recovery efforts to some extent, and will align with the objectives of the Government "Program to address the economic impact of COVID-19" in agriculture and job support areas. Armenia adopted 22 actions to address the economic and social impact of the COVID-19 pandemic. One action, for example, aimed to generate employment through afforestation activities (2020). In addition Armenia is incorporating green measures in its COVID 19 recovery package with support of the NDC Partnership. The proposed project will align with these green recovery efforts by promoting land degradation neutrality and supporting biodiversity friendly businesses and resilient local livelihoods. LDN represent an essential component of any COVID-19 recovery package and building forward strategy. Sustainable land management (SLM) is a proven and cost-effective strategy that can jumpstart a green economic recovery. It creates jobs, uplifts rural communities, and delivers significant co-benefits for human health, biodiversity and climate change. The LDN compatible Sustainable Land Management Measures (SLM) will support progress towards land degradation neutrality, and achieving the SDG 15.3. Furthermore, the proposed project will support responsible tourism business models.

The project will contribute to the national effort toward meeting the Aichi Targets with its incremental effort at preventing the loss of natural habitats and reducing degradation and fragmentation (Aichi Target 5), strengthening management capacity, resilience and financial sustainability of projected areas (Target 11), and restoration and building resilience of key ecosystems and habitats (Targets 10 and 15).The project has been designed using the UNCCD LDN Checklist *(please see Annex E).* The ecosystem management benefits will be mostly associated with the LDN guided integrated use of land resources for improved management of pastures and biodiversity rich grasslands, forests, cropland, lake ecosystems, combined with effective nature protection regimes and secured ecosystem services at landscape level.

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

At the PPG phase a knowledge management plan for the project will be developed, building on lessons learned and best practices generated under different initiatives, and will actively disseminate the project results, seeking opportunities for replication and upscaling. The communication and capacity building activities will focus on the importance of sustainable land, water and biodiversity management, land degradation neutrality and biodiversity friendly production practices around protected areas and how these translates into global environmental benefits while sustaining local livelihoods. The project knowledge management strategy will build on three key elements that foster learning and knowledge sharing, placed at the heart of the project's adaptive management and upscaling efforts at local, national and regional levels: (i) Learning from existing lessons and best practices; (ii) Assessing and documenting results; (iii) Knowledge sharing and communication.The project will learn from previous and ongoing initiatives that have been successful in implementing socio-economic small-scale SLM measures in production areas, helping people to improve their livelihoods. The project will learn from the previous GEF/UNDP Project "*Mainstreaming Sustainable Land and Forest Management in Dry Mountain Landscape of Northeastern Armenia*" and will use the generated knowledge in forest management planning and community based activities piloted by this project in Tavush and Lori regions. From the previous European Neighbourhood Programme Agriculture and Rural Development (ENPARD the project will use the lessons learned from the support to rural development, farming techniques and crop diversification, income generating activities in the rural areas. Valuable good practices and lessons learned could be use from the GEF funded WB/CARMAC II project, that will help design SLM activities and support the mainstreaming of biodiversity considerations into the sustainable pasture management plans. The good practices under IFAD project will be used/built upon e.g. GEF/IFAD projects played a key role in the establishment and the development of the appropriate legal framework for Water Users Associations (WUAs) in Armenia, initiated under the Irrigation Rehabilitation Project (IRP). A comprehensive review of relevant good practices and lessons relevant for the project design will be undertaken during the PPG phase. The project will also generate new lessons and good practices, particularly in relation to SLM and land restoration, which will be shared broadly through regional communication channels and knowledge management platforms.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Part A. Integrating Programming Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the project mainstreams the human rights-based approach
In line with UNDP's human-rights based approach, the project directly empowers right holders such as public authorities/ duty bearers, SMEs, smallholders, owners of production lands, and communities so that they are the principal facilitators and decision makers for the mainstreaming of biodiversity conservation objectives in the production landscapes and advancing the land degradation neutrality in the Lake Sevan Basin. The project fully support's UNDP's commitment to a human-rights based approach, and supports the universal respect for, and observance of, human rights and fundamental freedoms for all, but particularly in the case of this project, for the people living in the Lake Sevan Basin landscape. The project does this broadly by supporting the sustainable use of natural resources, including access to and sustainable use of lakes, wetlands, pastures, forests and arable land necessary for the rural communities, including the rural poor, in the project's landscape. In addition, the project will ensure and support the human rights principles of participation, inclusion and non-discrimination. Armenia has undergone a profound transformation since independence, including after the peaceful transition of power in 2018 which triggered renewed commitments to a human-centred governance system, investments in human capital and the realization of the human rights agenda. UNDP continues to be a key partner to the Government in the design, implementation and promotion of open governance policies. This will include efforts to dismantle structural barriers and promote the leadership and wide participation of women and youth in decision-making and help the Government to ensure that its strategies, plans and programmes are gender-responsive and inclusive of all the vulnerable groups. The project concentrates on the integrated landscape ecosystems of Armenia located in the Lake Sevan Basin. The project's main aim is to achieve improved status of lake Sevan, coastal and wetlands habitats, pastures and biodiversity rich palearctic grasslands, forests and alpine meadows, demonstrated by an integrated approach to the management of land, water and biodiversity for ecological and livelihoods benefits. The project will leverage critical partnerships with government, NGOs, local communities and private sector and will contribute to a transformational change of the approaches to

sustainable development and conservation of the high value ecosystems in Lake Sevan Basin by promoting effective landscape management models within the context of supporting and securing sustainable and resilient livelihoods for local resources users, whose daily existence depend greatly on th e integrity and productivity of these high value ecosystems. The project's components are closely aligned and linked to facilitate an enabling environme nt that provides for effective land/water/biodiversity resources protection and sustainable management based on a landscape approach that ensures progress towards the Land Degradation Neutrality and continuity of ecosystem services sustaining livelihoods:

(i) Component 1 Promoting Land Degradation Neutrality. This component will complement the Government of Armenia's efforts towards land degradation neutrality and will focus on the promotion of LDN approaches in Lake Sevan landscape in two targeted regions (marzes) through integrate d land use planning that will contribute to the land degradation neutrality and improved integration of key biodiversity habitats into surrounding geograp hies.

(ii) Component 2 Securing critical habitats for Biodiversity and Ecosystem Services. The proposed project's work will focus on addressing dire ct drivers of biodiversity degradation, to protect globally important biodiversity, habitats, and species, through targeted support to Sevan National Par k's in strengthening its management effectiveness, assessment of biodiversity status at wildlife sanctuaries in both regions, as well as biodiversity inv entories and assessments of critical habitats that exist outside PAs.

(iii) Component 3 Promoting sustainable and biodiversity friendly economic development and incentives for local communities. The proposed project will learn from existing successful initiatives and will offer incremental support by promoting biodiversity friendly sustainable land managemen t measures that are LDN compatible and will increase livelihoods resilience in lake Sevan Basin. Sustainable tourism practices will be promoted throug h improved standards in the travel and tourism sector and through community based eco-tourism initiatives. Sustainable biodiversity friendly agricultur e practices will be promoted, through a an agro-environmental performance based scheme to support biodiversity friendly palearctic grasslands mana gement. In addition, mini-grants will incentivize local communities away from destructive agriculture practices in the KBAs and PAs production landsc apes by supporting alternative income generation.

(iv) Component 4 will revolve around awareness and learning at local and national levels. Raising awareness and imparting knowledge on LDN and SLM measures and demonstrated good practices, biodiversity values and the need for a holistic integrative approach in Sevan Basin landscape.

(v) Component 5: is all about proper monitoring and evaluation of the results, and sharing the evaluative knowledge with the national counter parts, including it in a process of learning and adaptive management.

More specifically, the project will carry out the following activities that support UNDP's human rights-based approach:

- Throughout all project preparation, and later in the project implementation, the principles of participation and inclusion will be applied. In practical term s, this means, that the project design will be inclusive and participatory, and the strategy will indicate clearly that all stakeholders will be consulted in p lanning the details of project activities for the project workplans. Stakeholder groups will be fully represented in the project design, and later in the proj ect's steering committee, which will have oversight of the project, and provide strategic guidance on project implementation.
- In all aspects, the project preparation will ensure that that local communities have meaningful means of raising any concerns, to UNDP. During the proj ect inception phase the project will specifically communicate to all stakeholders and participating communities the specific mechanism and means for raising concerns or grievances to UNDP or to government representatives when activities may adversely affect them.
- The project design will include and will support the equality aspect of human rights particularly through supporting the implementation of UNDP's gen der mainstreaming policy, as further described in the following question of this SESP.
- During the PPG phase, multiple consultations will be held with local communities in the project's target area, to ensure/increase participation and equal ity in planning how communities will sustainably use their pasture resources to ensure sustainable livelihoods

ity in planning how communities will sustainably use their pasture resources to ensure sustainable livelihoods.

- Under Component 2 the project preparation will include PA management staff and local communities to increase the engagement and participation of local communities in the management of PAs. The project will work with PA staff to identify how to increase the capacity to engage and educate local c ommunity members living near PAs.
- Under Component 1 the project will work to improve land use planning and the management of natural resources, and align these processes with LDN principles, by facilitating local communities participation in the project design and later in the project implementation and planning (especially women and youth), access to information, data, and increasing resource management capacity. This will improve the sustainability and equitability of resource management planning in the project's priority districts.

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

During the project preparation phase, a gender specialist will be part of the project team and will undertake gender analysis and develop gender action plan to ensure that project interventions are gender responsive and improve the gender equality and women's empowerment. The project will make sur e that close consultations with local communities in the target geographies will take place, to identify gender mainstreaming opportunities in the proj ect design strategy. As described in the PIF under Section 3 " Gender Equality and Women's Empowerment" the project team and partners are committ ed to delivering following:

a. Commitment to integrate gender sensitive considerations into the design of new laws, regulations and associated explanatory materials relating to a gricultural sector strategy development.

b. Targets for inclusion of women in training and capacity building initiatives among policy makers (minimum 30%)

c. At least 30% of farmers and farming entrepreneurs receiving sustainable land management extension services being women

d. Gender balanced approach to selection of the farms to benefit from tailored assistance that will facilitate accessing financing for pasture managem ent measures.

e. At least 30% of those receiving field training being women.

Briefly describe in the space below how the project mainstreams sustainability and resilience

The project concept aligns with the STAP guidance (GEF/STAP/C.56/Inf.04) on achieving sustainable outcomes, including the following approaches: (i) Designing multi-stakeholder processes to engage key stakeholders, build stakeholder trust and motivation, and incentivize core actors for sustainable Lake Sevan Basin management (ii) Outlining a theory of change that recognizes the need for integrated and participatory approaches and emphasizes diversity and adaptive learning. The STAP guidance on this issue will be further reviewed during the PPG phase, with additional specific aspects of the project designed to ensure sustainability.

Sustainability of the project's results will ultimately depend on how invested the stakeholders are and will depend on their long-term commitment (regul atory, policy, funding and resources) to scale-up and replicate best practices in sustainable land and natural resources management for sustainable live lihoods. The project preparation will be based on multi-stakeholders participatory approaches, to ensure that the project strategy and activities will ens ure sustainability of the project results, including developing the project exit strategy to ensure project partners' commitment to long terms endurance of the project results. The proposed project will be aligned with the Government investment priorities in Lake Sevan basin and will build on the exiting b aseline, while promoting new incentives mechanisms. This alignment will support the sustainability of the project, as its integrative and mainstreaming

focus will help embed the project approaches and biodiversity friendly agriculture and tourism business models within future national investment.

Briefly describe in the space below how the project strengthens accountability to stakeholders

During the project preparation phase, the project will promote accountability of project partners and stakeholders. Furthermore, the project strategy will include:

a) Multi-stakeholders participatory mechanisms that increases accountability. Good examples of participatory mechanisms are demonstrated within the framework of Output 1.1.3 through the inter-sectorial coordination that is envisaged to take the form of an integrative/inter-sectorial Committee for the multi-stakeholders coordination in Lake Sevan Basin. The envisaged role of such an inter-sectorial body/Committee will be integrative *par excellence,* destined to oversee the integration of the LDN compliant spatial/land use planning and UNCCD commitments with existing and future commitments on biodiversity (aligned with the global post 2020 framework directions) and with the commitments under Paris Agreement (highlighted under Armenia's Nationally Determined Contributions/NDC) within the broader framework of advancing SDGs agenda at Sevan basin landscape level. Such a coordination mechanisms will increase cooperation among different agencies and institution and also accountability and decisional transparency.

b) The project preparation will include private sector and will explore the possibility of introducing greater accountability in the tourism by designing interventions that will support the State Committee on Tourism with the assessment of the verification mechanism related to the tourism and hospitality industry and will support the introduction of a biodiversity-sensitive dimension to the existing verification mechanisms for hotels and tourism operators. In addition, the project will develop an assessment of potential feasible voluntary eco-certification schemes in tourism industry that could be applicable in Armenia and will support implementing several pilots in Lake Sevan Basin

c) Similarly, the engagement with the rural entrepreneurs that is envisaged during the early project preparation will and the project design encompassing the project-supported community-led biodiversity friendly rural businesses (under Component 3)) and the awareness activities destined to increase accountability of decision makers for wetlands/natural resource management, these are all major project milestones, that will be implemented with embedded mechanisms for meaningful participation of all the stakeholders affected, particularly those at risk of being left behind.

d) The project preparation phase will ensure that everyone has access to information, through inclusive participation and dialogue, and through the project planned strategy which will include transparency of all the programmatic interventions, provision of timely and accessible information regarding supported activities (primarily captured under Component 4) but also through meaningful and strategic partnerships with both government and non-government organizations and private sector. Transparency and access to information and coordination with other local initiatives, will empower stakeholders to accelerate transition towards accountable decision making processes and more sustainable livelihoods.

e) The project preparation and project strategy will ensure that all the stakeholders can communicate their concerns and have access to rights-compatible complaints redress processes and mechanisms. The project preparation open and transparent consultations will ensure that cases where there is a risk of economic displacement (as a result of project intervention) such as the activities leading to stricter enforcement of PA zoning, the Process Framework will be deployed, in an inclusive and participative manner, supported at local level by project experts including representatives of local governing bodies, local NGOs in order to ensure inclusiveness. The project will ensure that in all interactions with stakeholders (consultations, meetings, web sites) information is available on how to access complaints processes. The Project's Stakeholder Engagement Plan will ensure the stakeholder's are engaged and informed about all activities. In addition to the UNDP Stakeholder Response Mechanism[1] which is embedded in all UNDP projects, this project will inform about the Grievance Redress mechanism(GRM) and will designate the Project Board as the project-GRM to ensure first of all that all the people and communities are informed of project-level grievance entry points

and avoid/minimize risks of retaliation and reprisal against people who may seek information on project activities or express concerns and/or access project level grievances.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Complete SESP Attachment 1 before responding to Question 2.*	QUESTION 3: What is the level of significance of the potential social and environmental risks? *Note: Respond to Questions 4 and 5below before proceeding to Question 5*			QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High
Risk Description ***(broken down by event, cause, impact)***	***Impact and Likelihood (1-5)***	***Significance*** ***(Low, Moderate Substantial, High)***	***Comments (optional)***	***Description of assessment and management measures for risks rated as Moderate, Substantial or High***
Risk 1: Vulnerable groups (smallholders with less land and capacities) including women and women entrepreneurs, might not be involved in project design and therefore not engaged in, supportive of, or benefitting from project activities. Project activities may not fully incorporate or reflect views of women and ensure equitable opportunities for their involvement and benefit. *SES Principle 2 Human Rights* *P2, P3, P5* *SES Principle 3 Gender* *P10, P11,* *SES Principle 5 Accountability*	I = 3 L =3	**Moderate**	Women may be underrepresented, due to ingrained social and cultural norms. Local communities located at the border with Azerbaijan in the proximity of Nagorno Karabakh conflict area have been massively affected by the war. The needs of displaced people, war veterans, wounded, newly disabled and their families, families who lost a breadwinner or productive assets, will need to be prioritized based on principles of humanity, neutrality, impartiality and independence.	The project preparation team will be working closely with all stakeholders to ensure that stakeholders are adequately consulted, included, especially those affected by the recent conflicts, and the project design will make sure that their considerations will be integrated in the project design and project implementation. Activities that will be designed under Component 3 will be informed by these consultations at the PPG stage, and will be tailored to address the problems faced by small holders, poor households, women entrepreneurs and vulnerable groups especially those affected by war. Engagement of vulnerable groups and other key community stakeholders will be detailed in the Comprehensive Stakeholder Engagement Plan and Gender Plan in line with current UNDP guidance, which will be prepared at the PPG stage.

P13, P14				
Risk 2: National and local governmen t institutions responsible for the regio ns (marzes) and local land use plann ing do not have adequate capacity t o support, maintain and enforce integ rated land use planning, LDN and bio diversity considerations into local str ategies (and furthermore, local gover nments (sub-national level) and com munity associations might not have t he capacity to implement project acti vities successfully). *SES Principle 2 Human Rights, P2, P3*	I = 3 L = 3	**Moderate**	Low capacities at regional, mu nicipalities and settlements/vil lage levels are many times res ulting in little or no instruction s for sustainable and integrate d land use planning and sustai nable management of pasture s and forests and inadequate monitoring.	The risk will be re-assessed at PPG stage. The project design will include concrete measures to s trengthen and expand the current capabilities of the ke y institutions responsible for the land use planning, bio diversity management and development planning at re gions/municipality and local levels in the two targeted regions Ghegarkhunik and Vayots Dzor. The project de sign will include national and local stakeholders' consu ltation and will identify the main capacity gaps hamperi ng the sustainable land use, LDN and sustainable biod iversity planning and will devise adequate measures (t o remove these barriers) included in the project docu ment. These capacity needs and offsetting measures will be also reflected in the comprehensive Stakeholder s' Engagement Plan.
Risk 3. The LDN centered planning of local natural resources in support of l ong-term sustainability could affect a ccess and use of resources by local c ommunities, including the rural poor a nd women. *SES Principle 2 Human Rights, P5, P6* *SES Principle 3, Gender, P10* *SES Principle 3, Gender, P11* *Principle 5, Accountability, P13* *Principle 5, Accountability, P14* *Standard 5 Displacement; 5.2* *Standard 5 Displacement; 5.4*	I=3 L=3	**Moderate**	Changes to the resource use a nd management regimes will a ffect the enjoyment of busines s-as-usual short-term direct be nefits to the resource users in the targeted area. The latter ar e primarily located in rural area s with a high percentage of un employed and poor; women co nstitute a substantial part of s mall-holders. There is a risk th at these groups will be negativ ely affected by the restricted a vailability, quality and access t o natural resources.	The risk will be assessed during the project developm ent phase. A key objective of the project is to improve the quality a nd sustainability of local livelihoods, so it is anticipated that any potential economic displacement from the sta tus quo would be compensated through other improve ments and benefits – though this risk will nonetheless be assessed and managed in line with SES Standard 5 (including the preparation of a Livelihood Action Plan, i f needed). Any potentially negative effects will be avoided through the project's design to the extent possible, and in cases where they are unavoidable, mitigation and compensati on measures will be designed. During the PPG phase a n analysis of existing economic uses in the specific pro ject target zones will be conducted, which will consider how the proposed project activities may economically

				affect local resource users The development of the Integrated Spatial and Land Use Plans in the pilot municipalities will include targeted assessments conducted in line with UNDP SES requirements, such that the plans themselves will include adequate environmental and social safeguards measures to address any potential environmental and social risks. In addition, the project will deploy the Process Framework to conduct local consultations and assess/eliminate potential conflicts among different land-users and between land users and ecosystems, by identifying commonly agreed solutions to be included in the respective plans.
Risk 4. Project developed plans, once implemented, may have a negative impact on the use of natural resources and/or the critical biodiversity habitats and species. *SES Standard 1 Biodiversity and NRM, 1.1* *SES Standard 1 Biodiversity and NRM, 1.2* *SES Standard 1 Biodiversity and NRM, 1.3* *SES Standard 1 Biodiversity and NRM, 1.6* *SES Standard 1 Biodiversity and NRM, 1.7* *SES Standard 1 Biodiversity and NRM 1.9* *SES Standard 1 Biodiversity and NR*	I=3 L=3	**Moderate**	The risks considered are related to potential inadequate design and implementation of water and SLM measures e.g. although the water management planning will indicate the technology to be used and will recommend SLM practices (such as crop rotation; agroforestry measures) in order to reduce water wastage and improved resource efficiency, there is the risk that these measures will lead to increase of natural resources (e.g. choice of water irrigation technology would lead to increase water consumption) ; another example would be the inadequate planning for forest regeneration that may harm surrounding nesting/feedin	These risks will be carefully assessed at PPG stage during the project design. The development of the Integrated Spatial and Land Use Plans in the pilot municipalities will include targeted assessments conducted in line with UNDP SES requirements, such that the plans themselves will include adequate environmental and social safeguards measures to address any potential environmental and social risks The risks will be managed through activities that will indicate the Site-specific screening (as envisaged by the SES measures included in these plans) for all these outputs. The project strategy will indicate adequate measures to be included in the project-supported pastures and forests and land use management plans. The project strategy will assess the feasibility of further targeted assessments at the selected sites during the development phase of these plans. Specialised technical expertise will be available at PPG stage in order to identify the adequate sustainable land and water resources management and risk mitigation measures.

M 1.10 *SES Standard 1; 1.11* *SES Standard 8; 8.6* *Standard 2; 2.3* *Standard 3; 3.6* *SES Standard 8 Pollution Prevention and Resource Efficiency 8.2, 8.6*			g areas of rare or endangered species. The pasture management plans may inadvertently plan for seeding of invasive species etc	
Risk 5. The expected impacts resulting from the project-supported LDN compatible SLM measures and biodiversity conservation activities could be sensitive to changing climate conditions in the future. *SES Standard 2 Climate Change Vulnerability, 2.2* *SES Standard 2 Climate Change Vulnerability, 2.3*	I=3 L=3	Moderate	Climate change is affecting Armenia's natural ecosystems and lake Sevan landscape is affected by extreme climate events such as drought, hail, floods. Soil erosion and vegetation cover loss are exacerbated by climate change.	Further climate risk assessment is required during the PPG phase to consider potential climate change impacts and identify the project activities that can best support ecosystem resilience/adaptation. The project preparatory stage will take into account the latest scientific evidence of climate change impact on land and water resources and population and habitats of key species. The PPG expert team will use the latest available scientific information and climate risk assessments in the design of feasible activities. The project strategy will demonstrate and put in place a framework for sustainable management of pasture/grasslands, forests and arable lands as well as biodiversity mainstreaming and biodiversity conservation measures that are grounded by scientific principles and participatory methods mechanisms that will enable stakeholders to adapt sustainable land and pasture management to any given context and threats.
	I=3 L=3	Moderate	Under Output 3.1.3 the project will design measures for the sustainable management of 5,800 forest ecosystems; of which approx. 2,200 ha will host de	The risk will be assessed at PPG stage. The project preparation will include consultations with forestry specialists in order to identify the appropriate restoration measures that will be included in the project strategy, with minimum impact on the natural ecosyste

Risk 6. While developing measures for assisted forest regeneration and improved forest ecosystem management it is potentially possible that solutions may go wrong and impact species or ecosystems unintentionally. *SES Standard 1 Biodiversity and NRM 1.2; 1.4; 1.6; 1.7; 1.8* *SES Standard 2 Climate Change, 2.2; 2.3*			monstration activities of forest restoration measures.	strategy), with minimum impact on the natural ecosyste ms. Any potential economic displacement will be addressed as per UNDP SES requirements and will be based on an appropriately scoped/targeted assessments. Based on these assessments, the mitigation measures will be included in the forest management plans. The project strategy will likely opt for "assisted natural forest regeneration", management of natural regrowth with minimal impact on the natural ecosystems. The potential need for new trees planting (for patching of missing trees rows) will be identified at PPG stage and further screening/assessments will be conducted during the project implementation as needed.
Risk 7. Supported local small businesses could involve third parties' subcontractors, that may inadvertently fail to comply with international labor standards including those related to child labor and/or may inadvertently fail to provide for occupational health and safety standards *SES Standard 7; 7.1* *SES Standard 7; 7.3*	I=3 L=3	**Moderate**	The project will support smallholders and small private rural entrepreneurs (small tourism operators; farmers associations) to green their investments and access financing in order to implement local initiatives such as sustainable grasslands management and other alternative income generating activities that will boost their livelihoods. Likelihood of non-observance of UN standards and policies of labor and working conditions especially child labor has been considered based also on some existing reports:	The risk will be assessed at PPG stage through stakeholders consultations and research of official statistics and reports.. The PPG Team will screen potential risks related to labor and working conditions in the project and if such risks will be validated, then the project strategy will include provisions for appropriately scaled Labor Management Procedures that will address the S7 requirements, (inclusive of an action plan to address the identified risks associated with labor and working conditions). The project will ensure that national working standards (Labor Code) are respected for all the project activities. The requirements of this Standard will be applied in an appropriately-scaled manner based on the nature and scale of the project, its specific activities, the project's associated social and environmental risks and impacts, and the type of contractual relationships with project w

			https://www.dol.gov/agencies/ilab/resources/reports/child-labor/armenia	orkers. Please see Guidance on LMP outline at : https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Learning%20Materials/UNDP_S7_Labour%20Guidance%20Note_June2021.pdf
Risk 8 The project may inadvertently contribute to potential perpetuation of discriminations against women. There are lingering disparities between men and women, particularly in rural areas and in the patriarchal cultures of some of the ethnic minority communities, which could be inadvertently replicated. *SES Principle 3, Gender, P10*	I=3 L=3	**Moderate**	The Project could potentially perpetuate discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities. In the targeted regions, women account for around 51-52% of the population. Many women form part of the unpaid family labor in home farming and lease of agricultural lands.	The risk will be further assessed at PPG stage. The PPG team will include a gender expert who will advise on the feasibility of project strategy in terms of gender sensitive results and will support the development of a Gender Analysis and Gender Action Plan . The project design will consistently mainstreamed gender sensitive approaches and will create opportunities for tackling women's needs and address the differentiated ways men and women use the natural resources.
Risk 9. The implementation of the new Sevan National Park Management Plan and improved PAs capacities for patrolling, stricter application of environmental regulation due to improved zoning may impinge on the livelihoods of the nearby communities in the project area. *SES Principle 2 Human Rights, P5* *SESP Principle 2 Human Rights, P6* *SES Principle 3, Gender, P10* *SES Principle 3, Gender, P11* *Principle 5, Accountability, P13* *Principle 5, Accountability, P14*	I=3 L=3	**Moderate**	The enhanced protection regime and a better zoning and delineation of on-the-ground of PAs core and buffer areas (although having significant environmental benefits) coupled with increased patrolling, may bring along potential risks of restrictions/limitations on the use of natural resources that may be at odd with the current agricultural practices of the local communities in project areas. Associated with that is the risk that not all key user groups of natural resources at project sites are consulted in project des	The risk of economic displacement will be further assessed at the PPG stage. If confirmed, appropriate mitigation measures will be included in the project strategy as necessary and/or standalone management plans e.g. Livelihood Action Plan and compensatory measures. The project preparation will include local consultations with resident communities and close coordination with EU4Sevan project in order to learn from that experience and include good practices of local community engagement in the UNDP/GEF project strategy (EU4Sevan project will support the development of the PA management Plan). The PPG team will explore the feasible project activities to mitigate this risk and will enlist relevant local consultations. For example, the project strategy will be designed such that it will include human rights principles at the heart of all the PA work, understanding the local

Standard 5 Displacement; 5.2 *Standard 5 Displacement; 5.4*			ign and implementation and th ey will be affected by the restri ctions on the use of natural re sources.	at the heart of all the PA work, understanding the local community's rights and activities such as patrolling/ en forcing the environmental regulations and engagement with local communities will be mainstreamed within t he PA management plan, to guide human rights-based measures/actions for PA rangers, aiming at promoting collaborative approaches with local communities. In addition, the PPG team will ensure that the project w ill develop a Stakeholder Engagement Plan and Gender Action Plan that will further support meaningful stakeh olders participation.
Risk 10. The project may potentially r esort to institutional collaborations wi th local police and gendarmerie that may risk facilitating potential altercati ons with local communities Improved enforcement/anti-poaching activities in protected areas might ha ve an effect on the local communities and traditional subsistence activities, and/or create conflict. *SES Principle 2 Human Rights, P2* *SES Principle 2 Human Rights, P7* *SES Standard 3 Community Health, S afety and Security, 3.8*	I=3 L=3	Moderate	The project may facilitate insti tutional agreements with local police in order to combat illeg al activities such as poaching and illegal logging in the target ed PAs. Enforcement issues of the environmental regulations may lead to conflicts between the PA rangers and the local c ommunity.	The project preparation team will have consultations w ith the PA management unit and the project strategy an d will include potential risks mitigation measures withi n the proposed institutional agreements with law enfor cement agencies. The project strategy will include und er Output 2.1.1 activities/dedicated trainings for PA ran gers, local police and environmental inspectors concer ning patrolling and application of fines, search and arre st and interaction with local communities, aiming at pr omoting collaborative approaches
Risk 11. The project supported demo nstration activities may inadvertently be implemented at/in proximity of si gnificant cultural and historical signifi cance sites.	I=3 L=3	Moderate	The targeted municipalities an d demonstration sites will be s elected at PPG stage. Given Ar menia's rich cultural heritage t he risk is assessed as modera te	The project risk will be assessed at PPG stage and if th is risk category will be validated, the project strategy w ill include specific selection criteria in order to prevent/ minimize the chance of selecting demonstration areas close to any cultural significant site. If needed a standa lone targeted management plan will be designed at PP

SES Standard 4; 4.1; 4.3, 4.4			te.	lone targeted management plan will be designed at PP G stage.
Risk 12: Project activities involving l ocal/field interventions and close eng agement with local communities may inadvertently contribute to the spread of COVID-19. *Standard 3 Community Health, Safety and Security, 3.4*	I=3 L=3	Moderate	Project activities at local level are envisaged to be based on participatory approaches, and most of the times may include meetings and local consultatio ns. There will be a number of t raining workshops and awaren ess events, round table meetin gs etc.	The risk will be assessed at PPG stage and mitigated t hrough adequate safeguards that will be designed and introduced in the project document such as: (i) clear pr ocedures in place in case of COVID19 reinstatement of restrictions, approved during project inception (ii) use o f protective equipment, maintaining social distancing a nd using remote methods of engagement whenever po ssible (iii) if adequate safeguards cannot be put in plac e, activities that entail close local communities engage ment will be put on hold if necessary, and work progra mme/budget will be revised as needed. Wherever poss ible on-line meeting platforms will be used and travel d ecreased. All project meetings will be organized mindf ul of government regulations and healthy standards an d other appropriate safeguards (including those of UN DSS).
[add additional rows as needed]				

	QUESTION 4: What is the overall project risk categorization?			
	Low Risk	☐		
	Moderate Risk	X		
	Substantial Risk	☐		
	High Risk	☐		

	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (ch eck all that apply)				
	Question only required for Moderate, Substantial and High Risk projects				
	Is assessment required? (check if "yes")	X			*Status? (co mpleted, pla*

				nned)
if yes, indicate overall type and status		x	Targeted assessment(s)	Planned during PPG phase
		☐	ESIA (Environmental and Social Impact Assessment)	
		☐	SESA (Strategic Environmental and Social Assessment)	
Are management plans required? (check if "yes)	X			
If yes, indicate overall type		x	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	Planned during PPG phase: Gender Action Plan; Comprehensive Stakeholder Engagement Plan; others as needed based on targeted assessments
		☐	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	
		☐	ESMF (Environmental and Social Management Framework)	
Based on identified <u>risks</u>, which Principles/Project-level Standards triggered?		**Comments (not required)**		
Overarching Principle: Leave No One Behind				
Human Rights	X			

	Human Rights	X	
	Gender Equality and Women's Empowerment	X	
	Accountability	X	
	1. Biodiversity Conservation and Sustainable Natural Resource Management	X	
	2. Climate Change and Disaster Risks	X	
	3. Community Health, Safety and Security	X	
	4. Cultural Heritage	X	
	5. Displacement and Resettlement	X	
	6. Indigenous Peoples	☐	UNDP definition of "Indigenous People" was carefully considered in the context of Armenia leading to the conclusion that the Standard doesn't apply in the country.
	7. Labour and Working Conditions	X	
	8. Pollution Prevention and Resource Efficiency	X	

[1] https://www.undp.org/accountability/audit/secu-srm

Supporting Documents

Upload available ESS supporting documents.

Title	Submitted
UNDP 6586 Armenia_Pre-SESP	

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

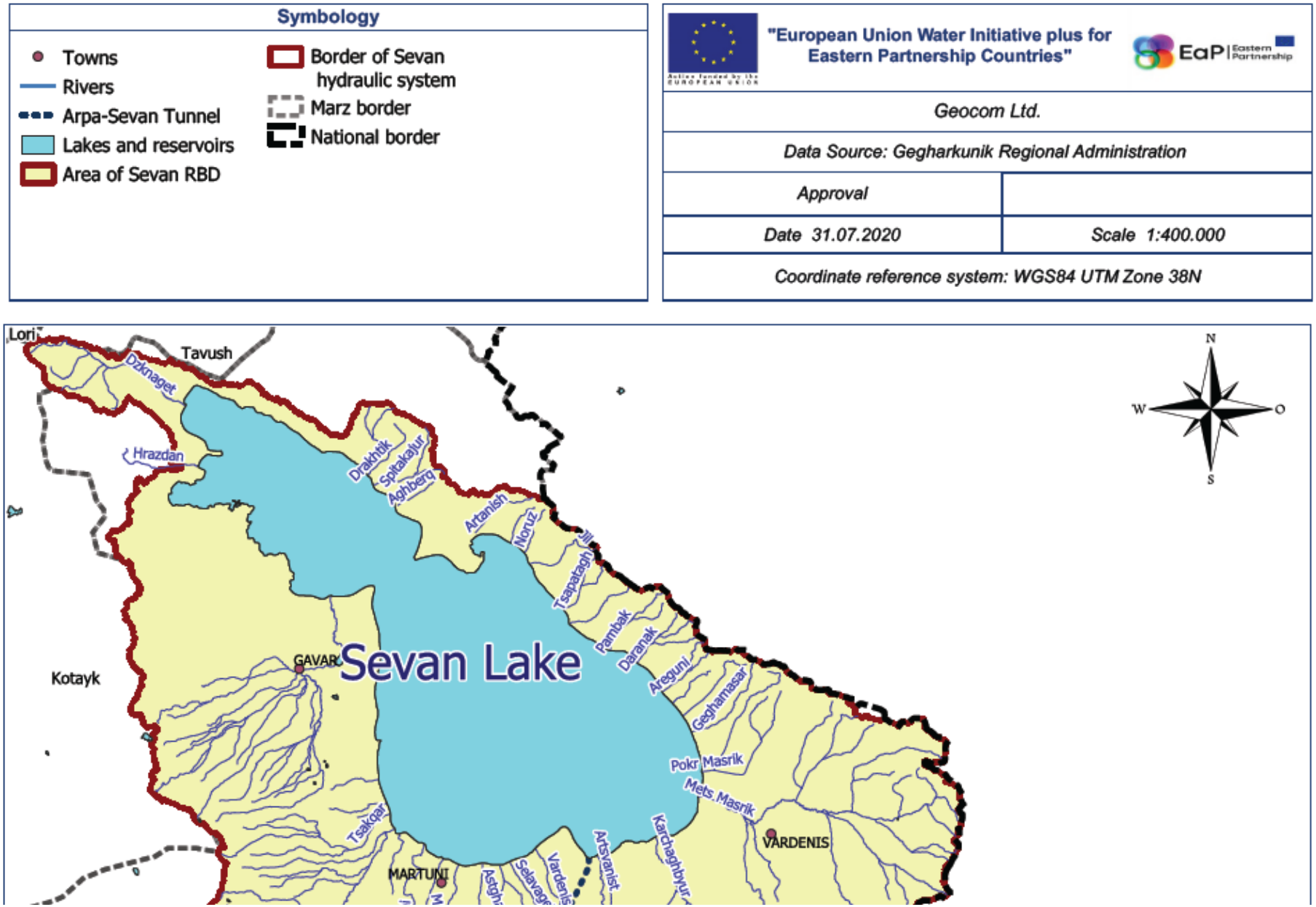
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

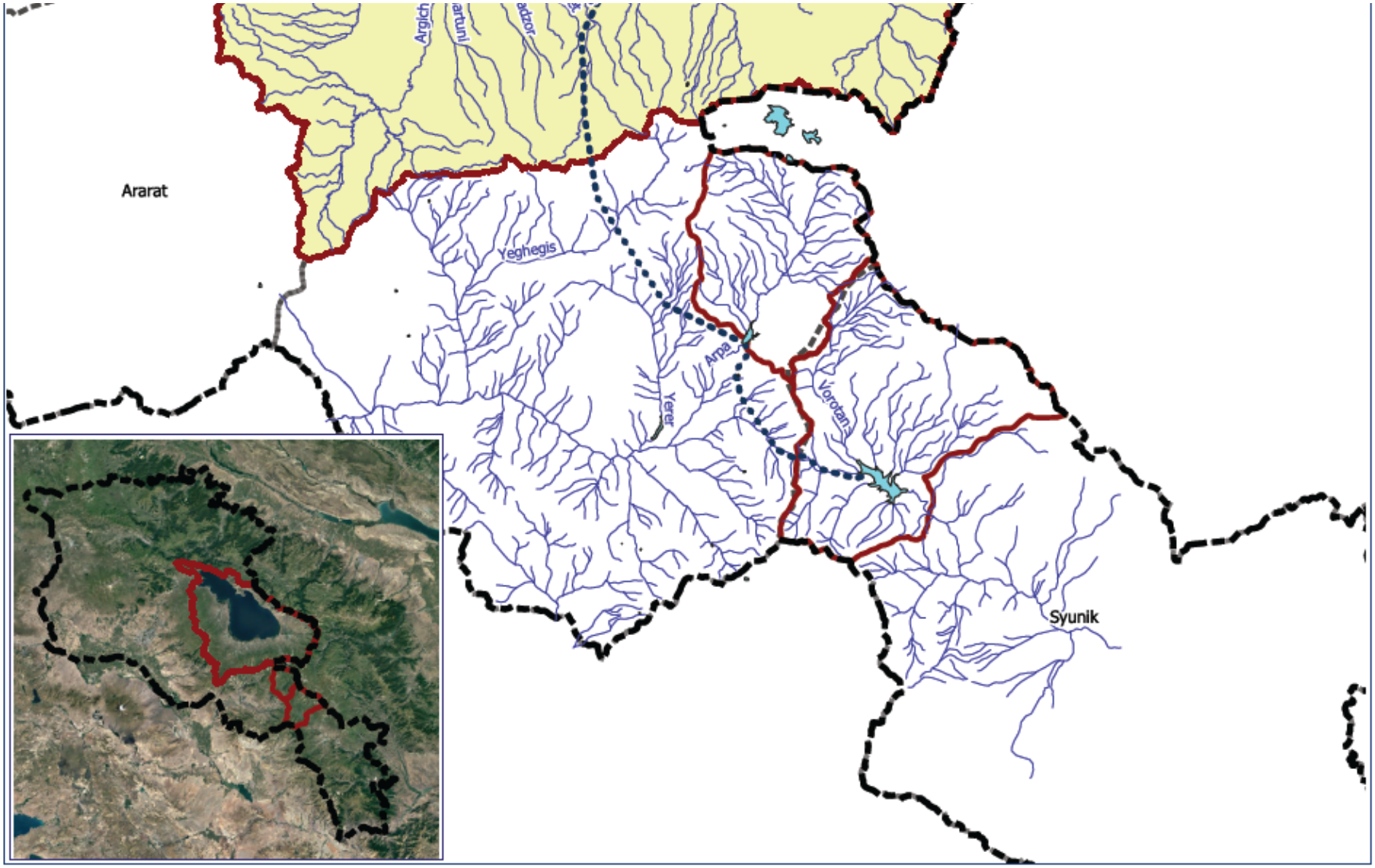
Name	Position	Ministry	Date
Romanos Petrosyan	Minister GEF Political and Operational Focal Point	MINISTRY OF ENVIRONMENT	7/14/2021

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES




Ararat
Yeghegis
Arpa
Yerer
Vorotan
Syunik