

# Integrated Natural Resource Management in Very Humid Climatic Regions of Eastern Black Sea Region in Turkey

**Part I: Project Information** 

GEF ID 10987

**Project Type** MSP

# **Type of Trust Fund** GET

# CBIT/NGI CBIT No NGI No

## **Project Title**

Integrated Natural Resource Management in Very Humid Climatic Regions of Eastern Black Sea Region in Turkey

#### Countries

T?rkiye

Agency(ies) UNDP

**Other Executing Partner(s)** General Directorate of Combating Desertification and Erosion Control **Executing Partner Type** CSO

**GEF Focal Area** Land Degradation

#### Taxonomy

Focal Areas, Land Degradation, Sustainable Land Management, Ecosystem Approach, Improved Soil and Water Management Techniques, Income Generating Activities, Sustainable Forest, Community-Based Natural Resource Management, Integrated and Cross-sectoral approach, Sustainable Livelihoods, Sustainable Pasture Management, Sustainable Agriculture, Land Degradation Neutrality, Land Productivity, Land Cover and Land cover change, Carbon stocks above or below ground, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Stakeholders, Beneficiaries, Local Communities, Communications, Awareness Raising, Public Campaigns, Education, Behavior change, Civil Society, Trade Unions and Workers Unions, Non-Governmental Organization, Academia, Type of Engagement, Participation, Information Dissemination, Consultation, Gender Equality, Gender results areas, Access and control over natural resources, Participation and leadership, Access to benefits and services, Knowledge Generation and Exchange, Capacity Development, Gender Mainstreaming, Women groups, Sexdisaggregated indicators, Gender-sensitive indicators, Capacity, Knowledge and Research, Learning, Theory of change, Indicators to measure change, Adaptive management, Knowledge Exchange, Knowledge Generation, Innovation

Sector AFOLU

**Rio Markers Climate Change Mitigation** Climate Change Mitigation 0

**Climate Change Adaptation** Climate Change Adaptation 1

**Duration** 36 In Months

**Agency Fee(\$)** 118,880.00

Submission Date 4/13/2022

### A. Indicative Focal/Non-Focal Area Elements

Programming Directio	ns Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
LD-1-4	GET	1,251,370.00	11,660,000.00
	Total Project Cost (\$)	1,251,370.00	11,660,000.00

## **B. Indicative Project description summary**

## **Project Objective**

To establish the institutional and technical infrastructure in Turkey to achieve integrated natural resource management (INRM) in regions with very humid climate through demonstration of SLM techniques that blend the new global approaches and traditional knowledge in Eastern Black Sea region of Turkey

Project Compone nt	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
				a		

Project Compone nt	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Integrated nature resource planning in the landscapes with very humid climate	Technical Assistance	Outcome 1. Improved systemic, institutional, and individual capacities for INRM planning in very humid climate zones.	Output 1.1. An inter- agency panel on SLM for Eastern Black Sea region established to coordinate the efforts on SLM among relevant stakeholder organizations.	GET	277,000.00	2,500,000.00
		<ul> <li>? 430 ha of land is under integrated natural resource management</li> <li>? 10,000 ha of forest areas under sustainable management</li> <li>? Inter- sectoral coordination mechanism for SLM is operational</li> <li>(<i>indicators to be</i> validated and complemented at PPG stage)</li> </ul>	Output 1.2. Evidence- based documentatio n of the degree of land degradation in the EBSC Region, the main drivers of land degradation including the ones related to climate change, and the effect on the lowlands of floods caused by land degradation. Output 1.3. An INRM Plan prepared for a pilot sub-basin covering an area of 430 ha that is based on SLM principles. Output 1.4. Identification of policy measures and/or revisions to legislation			

Project Compone nt	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
Component 2 Land based SLM practices in landscapes with very humid climate	Technical Assistance	Outcome 2. Agriculture, pasture and forest lands in the pilot micro- basin of Kire?hane/Salar ha (430 ha) are under SLM practices that integrate new approaches at the global level with traditional agricultural practices ? number of SLM practices applied in the pilot basin. ? Number of people benefit from SLM practices ? Number of market and value chain studies for income generating models	Output 2.1. Traditional land use practices for croplands and pastures that cause zero harm to soil are identified with a specific focus on women farmers. Output 2.2. SLM practices for forests, pastures, and agricultural lands implemented in pilot site. Output 2.3. Training activities and inter-basin peer to peer knowledge sharing activities promoted to enhance the capacities of forest managers, local farmers and farmer associations. Output 2.4. Resilience- building and income- generating models for sustainable value chains for the main products of the EBSC	GET	695,500.00	6,600,000.00

Region are identified and implemented

Project Compone nt	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
Component 3 M&E, knowledge management , and replication	Technical Assistance	Outcome 3. Enhanced gender-sensitive impact monitoring, learning, and knowledge- sharing on SLM practices for agriculture, pasture and forest lands in steep and humid areas <i>Indicators:</i> ? # of events disseminated to share knowledge ? # of communication products shared with the country stakeholders ? Existence of guidance, methodologies and tools for land use planning	Output 3.1. System for monitoring and evaluating project impacts, as well as environmental , social and gender safeguards, is in operation. Output 3.2. Knowledge management system on SLM techniques for humid climate regions with steep topography is in place	GET	165,110.00	1,500,000.00
			Sub To	otal (\$)	1,137,610.0 0	10,600,000.0 0

Project Management Cost (PMC)

113,760.00

1,060,000.00

GET

# Project Management Cost (PMC)

Sub Total(\$)	113,760.00	1,060,000.00
Total Project Cost(\$)	1,251,370.00	11,660,000.00

Please provide justification

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environment Urbanisation and Climate Change	Grant	Investment mobilized	3,000,000.00
Recipient Country Government	Ministry of Environment Urbanisation and Climate Change	In-kind	Recurrent expenditures	220,000.00
Recipient Country Government	Ministry of Agriculture and Forestry	Grant	Investment mobilized	7,000,000.00
Recipient Country Government	Ministry of Agriculture and Forestry	In-kind	Recurrent expenditures	220,000.00
Recipient Country Government	Ministry of Industry and Technology, General Directorate of Development Agencies	Grant	Investment mobilized	1,000,000.00
GEF Agency	UNDP	In-kind	Recurrent expenditures	150,000.00
Civil Society Organization	Nature Conservation Center	In-kind	Recurrent expenditures	70,000.00

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

Total Project Cost(\$) 11,660,000.00

#### Describe how any "Investment Mobilized" was identified

Clarification on the investment mobilized: - The Government component of investment mobilized represents anticipated contribution towards (i) The World Bank Turkey Resilient Landscape Integration Project (ii) The Eastern Blacksea Project (DOKAP) (iii) National Land Cover/Use Classification and Monitoring System (UASIS) - The UNDP component of the investment mobilized represents anticipated contribution towards (i) under the programme Climate Promise and (ii) EU funded climate adaptation project. - The NGO component of the recurrent expenditures represents anticipated contribution towards improved conservation and sustainable use of natural resources within region, and project management cost.

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

Agenc y	Tru st Fun d	Countr y	Focal Area	Programmi ng of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	T?rkiye	Land Degradati on	LD STAR Allocation	1,251,370	118,880	1,370,250. 00
			Total GEF	Resources(\$)	1,251,370. 00	118,880.0 0	1,370,250. 00

E. Project Preparation Grant (PPG) PPG Required **true** 

**PPG Amount (\$)** 50,000

**PPG Agency Fee (\$)** 4,750

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$ )	Fee(\$)	Total(\$)
UNDP	GET	T?rkiye	Land Degradatio n	LD STAR Allocation	50,000	4,750	54,750.0 0
			Total I	Project Costs(\$)	50,000.00	4,750.0 0	54,750.0 0

### **Core Indicators**

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

Ha Pl	a (Expected at F)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
10	430.00	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		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)

## 10,000.00

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

	Ha (Expected at		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	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)
430.00			
Indicator 4.4 Area of Hig	h Conservation Value Fores	t (HCVF) loss avoided	
	Ha (Expected at		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)

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

Title

Submitted

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	500			
Male	500			
Total	1000	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

Core indicator 4: The sum of: 430 ha sustainable agricultural land management regimes; sustainable forest management plans for 10,000 ha forest (to be confirmed during PPG stage) Core indicator 11: To be confirmed during the PPG phase.

#### 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, social and climatic context

The area targeted by the project is the Eastern Black Sea Coastal Region of Turkey (henceforth, EBSC Region) which is located in the north-eastern corner of the country and includes five coastal provinces ? Ordu, Giresun, Trabzon, Rize, and Artvin. The border with the Republic of Georgia forms the eastern boundary of this region. The region is hard to access due to its distance from developed areas and harsh topographical conditions. It has a mountainous shoreline and covers 36,837 km? (4.7%) of the country). The region exhibits great diversity in geological structure, topography, climate, and vegetation cover. Within the region, high mountain ranges run parallel to the Black Sea coast in the north with undulating plateau on the southern foot of the mountains. High ridges trending east-west rise abruptly from the Black Sea coast, and the coastal plain is thus narrow. The mountain ranges get higher, narrower, and steeper toward the eastern area. Less than 50 km from the coast, the Eastern Black Sea Mountains rise to more than 3700 m, with a maximum elevation of 3932 m in the Ka?kar range, one of the steepest topographies in the world.

The EBSC Region is among the areas with the highest amount of precipitation in Turkey, and half of the year is rainy. Due to the topographic properties of the region, the typical precipitation is orographic in nature. The temperature difference between summer and winter is not much. Summers are relatively cool, winters are warm in the coastal area, and snowy and cold in high areas. Every season is rainy and there is no shortage of water.

The population of the EBSC Region is about 2,500,000. Due to the fact that the EBSC Region is isolated from the rest of the country by high mountains and forests, it was connected relatively late to the market economy and lacked infrastructural development. Although within the last twenty years the rate of access to infrastructure has significantly improved on average for Turkey, this ratio is well below the country average in the EBSC Region due to the unique but disadvantageous topographic structure. The economic development of the region is below the national average (see figure below), and the region has the 3rd highest poverty rate (20.9%) in the country. Since the 1950s, a large number of people have emigrated to urban centers due to insufficient economic resources.

Tea and hazelnut production are the main forms of land use in the lower elevations, while cattle breeding is typical in the upper highlands. Mixed humid forest in middle altitudes separate the two. Other income sources include bee-keeping, trout farming and hunting. As tea and hazelnut are very well-established products and major sectors for the region identification of alternative products could be challenging. Global and regional mechanisms for sustainability can open a window for the greater market within country and abroad. Such as adaptation to the Green Deal protocols of the EU, certificated products by Gold Standard and others, integration with the SDG?s and promotion of non-financial reporting system among the private sector.

Agriculture, forest, pasture, and soils continue to form the basis of the region?s socio-economic structure. However, these are being negatively affected by severe environmental challenges. Degradation of agricultural lands and pastures, destruction of forests and natural ecosystems, as well as construction of new roads and illegal second homes, compounded by floods, landslides and avalanches are further contributing to land degradation. Such degradation leads to loss of revenue, which in turn has an adverse effect on farming because revenue losses alter production habits in the short term towards unsustainable methods, closely enmeshing the region?s development and environmental challenges (please see also Annex D *Target Landscape Profile*).

Social?distancing restrictions and health? and economic?driven demand shifts associated with Covid?19 are expected to shutter many small businesses and entrepreneurial ventures, but there is very little early evidence on impacts. However, it is known that since early spring 2022 the region is in recovery in terms of socio-economic impacts and the impacted supply chain.

#### Threats, Root causes and Key Barriers

External drivers of land degradation in the EBSC Region include climate change and natural disasters. Turkey is already experiencing an increase in annual mean temperature and changes in the precipitation regime. A long-term downward trend in average yearly precipitation is projected overall for Turkey, but the distribution pattern varies across locations. The EBSC Region and northeastern parts of the country will likely experience an increase in average annual precipitation, while the southern regions will experience a decrease. Projected climate change impacts include reduction in surface water availability, more frequent and severe incidences of floods, and more prolonged droughts. Increased frequency and severity of droughts and extreme precipitation events will negatively affect water holding capacity of the upper layers of the soil, further exacerbating soil erosion and increasing the

risks of flooding and landslides, particularly in terrains with rough topography such as in the EBSC Region[1]<sup>1</sup>.

The abrasion power of existing streams is high due to the steep terrain structure, also allowing frequent occurrence of flood and landslide disasters caused due to the excessive water resources and precipitation. Flooding is the most commonly occurring natural disaster (39% of the total number of disasters) that has caused the loss of life and property among the local communities. Changes in precipitation induced by climate change will likely further worsen flood risks.

These external drivers are exacerbated by anthropogenic pressures of unsustainable farming practices and negative land use change. Agriculture, forest, pasture, and soils continue to form the basis of the region?s socio-economic structure. Given the steep topography, production landscapes are scarce, and driven by increasing poverty levels, local people heavily utilize limited agricultural lands and pastures (e.g., overgrazing, intensive cultivation on slopes) leading to degradation. Negative land use changes in the region include degradation or loss of forests in the basin due to land clearing for the opening of new farmlands, pastures, roads to highlands, and high demand for fuelwood.

Another key land use change since the 1950s is the transformation of natural vegetation for hazelnut and tea cultivation in the region that has resulted in the formation and increased frequency of landslides. Landslide frequency is higher in the elevation range of 0-500 meters due to slope instability connected to the conversion of forest areas into hazelnut gardens and road construction. A 2008 paper investigated land use land cover (LULC) changes in Rize between 1976 and 2000 using remote sensing and GIS[2]<sup>2</sup>. The LULC changes were analyzed according to both slope and altitude. The main change observed for the time period of 1976-2000 was that the area of agriculture (mostly green tea) increased by approximately 13700 ha, and forest area decreased by approximately 12100 ha. 60% of total tea production in Turkey occurs at the particular study area.

These drivers and pressures are leading to land degradation processes; typical degradation processes for the EBSC Region include soil erosion by water, degradation of forest ecosystems, and surface water pollution. For example, an estimated 457,411 tons of soil is moved annually due to erosion in the Bolaman basin located within the Ordu-Giresun sub-basin.

Anthropogenic factors such as intensive agricultural practices are having an impact on soils in the highland mountain ecosystems of the EBSC Region. A study to compare the soil physical, chemical

and morphological properties modified after natural forestland transformation into cultivated land has found that long term continuous cultivation of the natural forest soils resulted in changes in physical and chemical characteristics of soils[3]<sup>3</sup>. The study examined four soil profiles selected from four sites in each of three adjacent land use types which are native forest, pasture and cultivated fields with corn and hazelnut to compare the soil physical, chemical and morphological properties modified after natural forestland transformation into cultivated land. Disturbed and undisturbed soil samples were collected from four sites. The effects of agricultural practices on soil properties taken from each of the three adjacent land use types were most clearly detected in the past 50 years with the land use change. Land use change and subsequent tillage practices resulted in significant decreases in organic matter, total porosity, total nitrogen and reduced soil aggregates stability. However, contents of available P were improved by application of phosphorous fertilizers in cultivated system. There was also a significant change in bulk density among cultivated, pasture and natural forest soils. Depending upon the increase in bulk density and disruption of pores by cultivation, total porosity decreased accordingly.

#### Key Barriers

While the above-described programs that will take place in the baseline scenario are important elements for addressing land degradation in Turkey more broadly, they do not address the specific land degradation challenges of the EBSC Region (with the exception of the TULIP project that is still under development for Ordu Province), nor will they bring together all the necessary sectors (i.e., forestry, agriculture, pasture, water, disaster management, climate change adaptation, socio-economic development projects for tourism and entrepreneurship, etc.) under one umbrella for a combined effort at tackling land degradation and advancing integrated natural resource management in the EBSC Region. There remains a need to develop a body of experience and practice specifically targeting the unique situation of the EBSC Region, and to integrate this cross-sectoral approach into the internal and individual strategic plans and programs of all key institutions in the region. However, there are several barriers to realizing this long-term solution, as described below:

**Barrier 1:** Lack of cross-sectoral planning, lack of supportive policies/legislation, and lack of expertise for integrated natural resource management (INRM) in humid areas.

Sustainable land, water, forest, and soil management and the conservation of biodiversity depends on various public agencies with overlapping functions, limiting opportunities for joint programming and enforcement. This applies to the EBSC Region in particular that has additional agencies such as AFAD

(Disaster and Emergency Management Presidency under the Ministry of Interior) due to the issue of frequent floods, landslides and avalanches exacerbated by climate change.

Institutions directly involved in NRM include the Ministry of Agriculture and Forestry and its line agencies such as the OGM (General Directorate of Forestry), ?EM (GD Combating Desertification and Erosion), TRGM (GD Agrarian Reform), SYGM (GD Water Management), DS? (GD Hydraulic Works); the Ministry of Environment and Urban Planning; the Ministry of Energy and Natural Resources; AFAD (Disaster and Emergency Management Presidency under the Ministry of Interior); as well as the provincial directorates of these respective ministries, and local authorities and regional development agencies, among others. The main national and regional policies and budgets for major plans/programmes/projects are suggested by these national agencies, discussed and decided in the parliament under the facilitation of the Presidency of Strategy and Budget in a short period of time, without allowing for adequate consideration of major global and game-changing factors such as climate change, degree of land degradation, wars, poverty, etc.

Authorities on forest management, water management or soil management for agricultural purposes are all highly knowledgeable and experts in their fields. However, these institutions do not develop their policies in coordination and they do not have effective mechanisms to collaborate on implementation of their activities on the ground. For instance, the authorities for highways/hydraulic works plan and construct roads/water supply projects simply by consulting the authorities responsible for the management of certain lands (such as forests, agricultural land), but not with an obligation to comply with all their comments /objections. These authorities fail to act seeing the bigger picture since they lack the intersectoral perspective and often do not speak to each other while planning their actions. As a result, the GD of Highways may plan and establish roads, and the GD of State Hydraulic Works may plan and construct major irrigation projects considering impacts at close range, but without considering indirect and cumulative impacts at the wider landscape level.

Another case in point is spatial planning that is undertaken through Spatial Environmental Arrangement Plans. These are coordinated by the Ministry of Environment and Urban Planning, but based on a passive approach. The GD for spatial planning marks designated land uses on spatial maps of Turkey based on requests by national agencies, and without any decision-making or enforcement authority of its own. Therefore, agricultural land can be converted to industrial or settlement areas based on an agreement between two or more national agencies. Similarly, a major road construction project connecting highlands of the Eastern Black Sea can be allowed despite the fact that this may cause disturbance at steep slopes of mountains and result in landslides combined with the increased precipitation amount and frequency due to climate change, or irreversible fragmentation of high conservation value habitats. Decisions affecting vulnerable lands are made without adequate information, communication and cooperation, and therefore lack a multi-sectoral perspective. Thus, the lack of an integrative approach is a critical issue. In Turkey more broadly, and in the EBSC Region in

particular, natural resource management is particularly hampered by a lack of integrated management that takes environmental, economic, and social perspectives into account.

At the local level as well, there is inadequate coordination among the stakeholders. While there are regional planning tools ? such as the Integrated River Basin Management (IRBM) Plans coordinated by SYGM and implemented by River Basin Commissions, forest management plans prepared and implemented by OGM, or agricultural development plans prepared by TRGM for agricultural basins ? these plans and governing bodies are barely in coordination with each other due to differences in base, scale, planning and implementation approaches. There are thus different levels of planning with some of them focused on specific sectors or landscapes, each being led by different institutions. This array of planning processes needs to be better coordinated in order to support INRM in which land degradation management is coupled with land use planning. The institutions at regional and national levels that lead on design and implementation of these plans should be better informed, equipped and coordinated to ensure successful acceptance and integration of the INRM Plans at site level. As land degradation is a multi-sectoral issue, the priorities and needs arising from following an integrated approach in natural resources management have to be reflected in all of the above-mentioned planning and management processes and tools. Addressing the governance problems will require improvement of mechanisms and tools for effective collaboration across these institutions.

The lack of cross-sectoral engagement leads to poorly coordinated policies. All state institutions are obliged to prepare strategic plans for their jurisdiction area and almost all the state institutions mentioned above have their own plans, programs and projects, including flood and landslide control projects by ?EM and DS?. However, every institution is focused on the implementation of their own plans and end up with overlapping and sometimes contradictory actions without an adequate communication and coordination, which is especially critical in very humid regions considering the cost of disasters caused by sudden and heavy rainfalls. Introduction of INRM would help orchestrate already existing strategic plans and development plans into the same direction, allowing all parties to act towards a common objective.

Weaknesses in legislation can also be an impediment to the effectiveness of institutions in addressing land degradation. Turkey has undergone an important process of transformation to a presidential system but this has led to overlaps and gaps in institutional mandates, in addition to already existing ones. An example of this is that flood control works cannot be undertaken at upper basin creeks wider than 3 meters since OGM is responsible by law for rivers in upper basins that are narrower than 3 meters, and DS? is responsible only for lower basins. While such small gaps in the legislative framework do not have a negative effect elsewhere in Turkey, they can lead to disastrous floods in the very humid regions such as the EBSC Region.

?EM has grown as a successful agency within the last decade to effectively coordinate institutions at the national level regarding policy development, and has also set national LDN targets. It has become efficient in coordinating provincial and regional institutions responsible for agriculture and forestry at the micro-basin and regional level, but this has experience has been built up for sustainable land management in drylands of Turkey. Humid climates have their own key institutions ? such as State Hydraulic Works, State Meteorological Works or Presidency of Disaster Management ? due to floods, landslides and other region-specific issues such as production of internationally important export products such as tea and hazelnut in an area where agricultural lands are highly scarce. These Institutions tend to implement quick fixes for issues around land degradation or opt for impractical and overly structural or intensive land rehabilitation investments without an integrated approach, not consulting with other relevant authorities, nor the local communities who have been dealing with similar issues at their own scale. Integrated land use planning and implementation approaches have not been institutionalized in part because there are no practical guidelines for how to do so and no formalized mechanisms to enable local participatory management. This project will provide the basis for formalizing a new participatory mechanism utilizing the expertise and facilitative role of ?EM for sustainable land management in the EBSC Region.

In addition to the above weaknesses in the institutional environment, there is a lack of know-how and capacity both at the institutional (central and local government) and grassroots level (local communities, NGOs, cooperatives, farmer unions) to mainstream and implement INRM in humid climates with steep topography. Although recent developments in related sectors has increased knowledge on combating land degradation and vulnerabilities/risks and measures around climate change in relevant institutions, land degradation and SLM concepts are mostly interpreted as erosion control and/ or decreased productivity in production landscapes. Practical, experience-based training can provide stakeholders with the basic tools and approaches to begin applying a more holistic SLM approach in their work; and this kind of training is lacking among key stakeholder organizations. Technical guidelines based on demonstration practices can also help to increase capacity for SLM. Therefore, in order to better coordinate relevant institutions around INRM at local, regional and national levels, the capacity and awareness of these institutions need to be enhanced.

They also need to be equipped with adequate decision support systems. There are various attempts to assess regional risks (??B climate risks in EBS region, modelling/projections by meteorology, water management, etc.), as well as piecemeal biodiversity or agricultural studies by numerous academic institutions, but a reliable and holistic landscape-scale decision support system would not only enhance effective communication among various level of stakeholders but also joint decision-making and implementation. The lack of such a decision support system hampers the ability of stakeholders to first recognize and then to maximize synergies among various sectors, particularly the ecosystem service values provided by sustainable natural resources management including flood prevention, biodiversity conservation, water quality and quantity, and other reduced downstream negative effects. This ecosystem services ?cost-benefit? calculation gap undermines the ability of local governments and communities to serve as stewards of the natural resources upon which they depend.

# *Barrier 2:* Lack of experience with implementing SLM practices in very humid and steep agriculture, pasture and forest areas

The very humid coastal regions of the eastern Black Sea are confronting severe land degradation and erosion, as well as decline in quantity and quality of production landscapes resulting from intensive and polluting agricultural practices on marginal lands, deforestation and land conversion from forested land to agriculture, overgrazing of highland pastures, unsustainable tourism expansion in the highlands, increased vulnerability to climate change, habitat loss and fragmentation, and degradation of ecosystem services. The lack of technical, analytical and managerial capacity for SLM among decision-makers is one of the critical constraints to addressing these land degradation trends.

The training of technical personnel is crucial, but needs to be supported by hands-on implementation to increase their analytical and planning capacity. One of the key barriers to SLM in the EBSC Region is the unavailability of region-specific solutions and responses to land degradation problems in very humid and unfavorably steep landscapes, their relation with development actions, and the lack of experience around these problems which keep increasing in occurrence and magnitude especially in the mountainous parts of the country.

Land degradation is slow in drylands, but rapid in very humid and steep landscapes. Landslides occur after a few minutes of heavy rainfall and the magnitude of impacts are at a scale that is beyond the handling capacity of small farmlands or pastures, and individual authorities. Therefore, a fast, coordinated and long-lasting response needs to be developed and implemented. Demonstration of SLM and sharing of experiences is crucial for creating a body of best practices.

SLM in drylands may include agricultural practices to conserve and increase extremely low organic matter and water content of soil, water harvesting, management of overgrazing at pastures of extremely low vegetation, etc. Whereas, in very humid climates, there is usually an abundance of soil organic matter and water, which are still not available for crops due to improper and intensive agricultural practices. Not only are there differences in terms of pests or soil structure, but also in the social connections, traditions and behavior of farmers who are typically of various nationalities/origins, speaking multiple local languages, and not fully trusting their neighbors to establish joint and organized actions.

Given these differences between SLM in drylands versus the humid, steep regions of the EBSC, region-specific, practical, experience-based training can provide stakeholders with the basic tools and approaches to begin applying SLM in their work. This kind of training is currently lacking among key

stakeholders? organizations including not only the local authorities but the farmers? organizations, ?AYKUR(Tea Enterprizes General Directorate- a Public Economic Enterprise) F?SKOB?RL?K (Union of Hazelnut Agricultural Sales Cooperatives) and other influential actors such as DOKAP (Eastern Black Sea Project Regional Development Administration under the Ministry of Science, Industry and Technology) and DOKA (Eastern Black Sea Development Agency under the Ministry of Science, Industry and Technology) planners (please see Section 2: Stakeholders for a wider description of these actors).

# *Barrier 3:* Absence of a mechanism for distilling and sharing of knowledge on SLM in steep and humid areas to support replication and scaling

Expert institutions rely on data for their plans/projects. However, in spite of the existence of vast amounts of data for individual plans, there is a gap in knowledge for sustainable land management, especially for tea and hazelnut production areas, as well as pasturelands in higher altitudes. TRGM and ?AYKUR are the highest and sole authorities on agriculture and tea production in the EBSC Region and they are working to increase productivity at tea plantations and support farmers in their struggle with loss of product due to landslides, erosion or pollution. However, their data collection or monitoring programs do not cover the amount and quality of soil losses, which is a critical factor in the fight against poverty associated with land degradation in the medium and long term. Likewise, while AFAD monitors property and lives lost during disasters, the loss of soil resources is not in their monitoring list. Given the special circumstances of the region of hilly lands, heavy precipitation, limited productive lands, poverty, and a population reliant on pastures and agricultural lands, monitoring of land degradation processes needs to take comprehensive factors into account and not be narrowly focused on metrics important to individual actors/institutions. Furthermore, since ?EM?s attention has largely been on drylands, there is no system specifically aimed at building a knowledge base on managing lands sustainably in hilly, wet areas, and the lack of this limits opportunities to share information more widely.

#### 2) The baseline scenario and any associated baseline projects

(Please see Annex E ?Baseline Programmes and Projects?)

There are several development initiatives, conservation efforts, and projects that have recently been completed in Turkey. These efforts created important continuous impacts to address several aspects of land degradation in the region. In addition to national investments made by state authorities like DSI (drainage and flood control structures, riverbank rehabilitations, etc.), ?EM (erosion and flood control implementation plans/projects for selected micro-basins) or DOKAP (a major development programme

focusing on eastern and central black sea region), the relevant multi-sectoral projects (initiated, completed and on-going) are listed in the table below and the most relevant ones are as follows:

- The World Bank Turkey Resilient Landscape Integration Project in Ordu Province (Central Black Sea Region) is under development and aims to strengthen the integrated management of natural resources at the landscape level and to increase access to climate-resilient infrastructure for communities in targeted areas of the Bolaman Basin.

- The GEF funded on going project, i.e. Contributing to Land Degradation Neutrality (LDN) Target Setting by Demonstrating the LDN Approach in the Upper Sakarya Basin Project, aims to set national/regional LDN targets and demonstrate LDN achievement in pilot micro-basins in the Central Anatolia Region.

- The GEF funded Sustainable Land Management and Climate-friendly Agriculture Project, which is about to be completed, has identified several SLM practices in forests and agricultural areas in drylands of the Central Anatolia Region.

- The GEF funded Integrated Approach to Management of Forests in Turkey with Demonstration in High Conservation Value Forests in the Mediterranean Region Project has recently been completed; it identified and demonstrated sustainable forest management indicators, criteria and practices in the Mediterranean Region.

- Technical Assistance to Enhance the Capacity of AFAD in the Adaptation and Reduction of Disaster Risks Resulting from Climate Change Project (Disaster Adapt) aims to improve the quality of life of citizens through enhancing the climate change mitigation capacity and increased resilience to the impact of climate change, which ultimately contribute to the sustainable development of the country, thus contributing to Turkey's membership in the EU.

- The EU funded Enhancing Adaptation Action in Turkey Project aims to establish an enabling environment for climate change adaptation in Turkey by developing policy, technical and operational baselines at a national level, and by also conducting preliminary vulnerability assessment studies for several regions of Turkey, including an urban area in the Black Sea Region.

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

Theory of Change:

To add value to past and ongoing efforts to control land degradation in Turkey, the emphasis needs to be broadened from drylands to include mountainous areas that are affected by high precipitation and where the degradation processes vary from those in drylands. These landscapes suffer from unfavorable topography and climate. Due to steep slopes, difficult accessibility, and many cloudy or precipitation days (half the year is rainy in the EBSC Region), there is scarce productive agricultural land for cultivation and grazing.

Forests are cleared for agricultural purposes (causing a shift from long-rooted natural vegetation to short-rooted tea and hazelnut plantations) leading to degraded forests and erosion. Highland pastures suffer from soil erosion. Agricultural land quality is being affected due to unsuitable, excessive, untimely, or improper use of chemical fertilizers, pesticides, and intensive agricultural practices. Farmlands often have structurally weak or inappropriate measures such as small terraces holding water that needs to be drained, and insufficient drainage channels. In addition, the region suffers from disturbances to vegetation, soil structure, and natural drainage paths throughout the mountains as a result of road construction works.

When these already vulnerable landscapes are then saturated with sudden, local, and high precipitation events (compounded by climate change-induced melting of glaciers within a couple of days), the result is severe erosion, as well as devastating floods, landslides, and avalanches that are increasing in frequency. There is a loss of quantity and quality (increased acidity hinders organic matter intake of crops) of the precious productive layer of tea/hazelnut orchards and natural vegetation.

The human toll is manifested in loss of settlements, livelihoods and even lives in a region where the lack of industrialization means people are dependent on land. There is a loss of alternative income sources such as ski tourism due climate change-induced melting of glaciers. There are also public health issues arising from agricultural pollution, floods, etc. Accelerated population migration to urban centers continues the vicious cycle of abandoned lands with lack of sustainable and responsible stewardship.

To address the unique circumstances of these steep, humid landscapes will require that the barriers to change described above are removed. This will require (a) fostering a system of INRM planning at a micro-basin level (encompassing forests, plantations/orchards, pastures, water management, natural disaster prevention works, as well as socio-economic development) and improving the systemic, institutional, and individual capacities for such a planning approach; (b) under the umbrella of this INRM plan, demonstrate specific SLM actions in forest, plantation and pasture sites in a target microbasin such that new global practices are combined with traditional ones; and (c) enhancing gendersensitive, impact monitoring, learning, and knowledge-sharing expressly for steep and humid areas.

Spatial risk analysis (pls. see Output 1.2.) based on the IPCC methodology will be providing a strong ground to integrate different knowledges. It will be an innovative decision making tool based on the robust scientific ground. Besides it will be useful tool to communicate with different stakeholders in a more objective ground.

By undertaking these measures, the intermediate state expected to be achieved is one where collaborative and systematic integrated natural resource planning and SLM in the EBSC region leads to development of know-how and behavioral change in managers of land and scaling out to other humid areas with steep topography. Collaborative environment is the key for the successful implementation of the proposed activities to achieve LDN. In that regard proposed intersectoral approach will be instrumental to improve these collaborative environment and ensure the sustainability of outcomes. Clear identification of the relationship of different sectors with the different stages of the LDN process will be helpful to prove the value of different stakeholders and understanding the value of the collaborative environment. The expected longer-term impacts include resilient agro-ecosystems, disaster prevention, food security and improved livelihoods, as well as climate change adaptation for these unique landscapes.

The project?s theory of change rests on several key assumptions. It is expected that the government will continue to support an expansion in emphasis from land degradation in drylands to encompass the unique degradation processes in humid, hilly lands. The political support to implement needed legal and policy reforms for the same will be strong, and the institutional support exists for government staff to be active participants in capacity building, cross-sectoral dialogue, and sharing of data and information residing in stakeholder institutions. It is assumed that local decision-makers (local community leaders, mayors, politicians, opinion-makers), as well as local farmer/herder families will be actively engaged in implementing sustainable production and land management practices. For project efforts on exploring sustainable tea/hazelnut value chains and alternative agri-food value chains (such as blueberry, raspberry) to be successful, it is assumed that markets will exist for these products over the medium to long term. Finally, the EBSC Region is already seeing the effects of climate change and variability, and it is assumed that this change and variability remains in the current range. The increasing incidence of heavy precipitation events is leading to more frequent floods, landslides, and avalanches but the project?s efforts to put in place INRM will help promote SLM and build more resilient agroecosystems in steep and humid landscapes, in turn reducing risk to life and property associated with these weather events.



<u>The project objective</u> is to establish the institutional and technical capacities to achieve integrated natural resource management (INRM) in regions with very humid climate through demonstration of SLM techniques that blend the new global approaches and traditional knowledge in the Eastern Black Sea Coastal Region (EBSC Region) of Turkey.

**Component I** ? Integrated natural resource management planning in landscapes with very humid climate.

This component will address the first barrier of an inadequate enabling environment that leads to gaps and overlaps in land management in the EBSC Region, by strengthening the capacities of and coordination among key institutions for successful project implementation in the short- to mediumterm, as well as for long-term coordinated action among leading authorities through an integrated natural resource management (INRM) plan. The component will not only build the technical foundations, but also the legal and institutional structures and processes that need to be established and coordinated in the EBSC Region in a sustainable way to support INRM planning and management in both the project area and other areas with a humid climate. The project will provide technical assistance for developing an INRM Plan, which will include supporting key institutions with adequate data management, planning and monitoring tools at the landscape level that will foster strategic decisions and can be replicated in other basins with similar problems in Turkey; and strengthening of institutional coordination and capacity building to establish a regional institutional structure for INRM to support replicability and sustainability of the integrated approach.

**Outcome 1:** Improved systemic, institutional, and individual capacities for INRM planning in very humid climate zones in line with the national LDN framework of Turkey.

**Output 1.1.** An inter-agency panel on SLM for the Eastern Black Sea Coastal Region is established to coordinate the efforts on SLM among relevant stakeholder organizations.

Development and implementation of INRM is the EBSC Region will require the engagement of actors from diverse sectors. As noted under the barriers to change section above, sustainable land, water, and soil management and the conservation of biodiversity depends on various public agencies with overlapping functions, and the lack of dialog and coordination across these agencies is limiting opportunities for joint programming and implementation.

This output will, therefore, create a platform for inter-agency coordination to enhance synergies and reduce conflicts, as one of the first actions of the project. The ad hoc Eastern Black Sea Coastal Region SLM Commission/ Committee will be composed of key actors of land management such as ?AYKUR, the local branches of OGM, ?EM, DS?, TRGM, AFAD, DOKAP and DOKA to allow for increased communication, knowledge and experience sharing, and discussion around land management in the EBSC Region. (This need for structured and institutionalized communication has been articulated by these actors themselves during project preparation discussions and as explained in the barriers and theory of change sections.) The commission, which will also be supported by the provincial governors for effectiveness, will oversee region-based land management decisions including road rehabilitation, and tea plantation expansion pressures from the land degradation neutrality perspective. Establishment of the commission will be guided by the following activities:

<u>Activity 1.1.1</u>? Organize bilateral meetings and visits to local governors regarding establishment of the commission and define membership. The commission will be free to include all relevant stakeholders, including representatives from disadvantaged groups, to ensure broad-based communication and cooperation in the EBSC Region around land management issues (including landslides, potential flood risks, etc.).

<u>Activity 1.1.2</u> ? Draft and secure stakeholder agreement on a mission statement, a basic code-ofconduct, and terms of reference for the commission.

<u>Activity 1.1.3</u>? Clarify the role of the project in supporting the implementation of national LDN targets with the lead agency coordinating LDN target setting, baseline assessment and target development.

<u>Activity 1.1.4</u> ? Hold structured and moderated meetings for the entire project duration to carry out the commission?s role of overseeing the preparation of a GIS-based database for the EBSC Region as a shared knowledge base for all stakeholders, and the drafting of the INRM Plan for the selected microbasin for SLM demonstrations in particular.

Activity 1.1.5 ? Lead efforts to ensure dissemination of the project?s messages and results within key agencies; promote integration of the project?s approach more broadly, and the INRM plan for the pilot sub-basin in particular, into the internal and individual strategic plans and programs of all key institutions such as DS?, AFAD, DOKAP and DOKA to ensure sustainability of the project results; and spearhead efforts to bring about legislative and policy changes necessary for effective SLM in the EBSC Region based on identification of gaps and opportunities in legislation under Output 1.4.

**Output 1.2.** Evidence-based documentation of the degree of land degradation in the EBSC Region, the main drivers of land degradation including the ones related to climate change, and the effect on the lowlands of floods caused by land degradation.

The EBSC Region suffers from severe land degradation and its social and economic consequences. However, there is no common base of knowledge and understanding about the causes and impacts of land degradation and associated disasters among key expert institutions such as ?EM, OGM, AFAD, DS? and regional influential development agencies such as DOKAP and DOKA. Therefore, despite their significant individual efforts and investments, landslides and destructive floods repeatedly affect the region (for instance DSi designs adequate flood control structures designed to regulate excess water, but these neatly engineered structures still fail as the water carries debris, which alters the dynamics of the fluid).

This output aims to define and determine land degradation and develop a common terminology and understanding about the reasons and impacts of land degradation in very humid regions, by using innovative state-of-the-art imaging and participatory mapping techniques in order to ensure understanding and active participation of all key institutions including farmers or NGOs, and other interest groups for the success of the project and incorporating gender considerations in line with a gender action plan that will be prepared at the PPG stage to make the project?s interventions more socially inclusive.

There have been several attempts by ??B and AFAD to determine climate-associated risks across Turkey, but these have mainly been focused on residential areas with a view to prevent loss of life. SYGM has already studied potential change in the water budget of the Eastern Black Sea River Basin, but without a spatial perspective. Therefore, where the excess precipitation will fall has not been predicted. ?EM prepares landslide risk maps, DS? works on flood sensitive areas, OGM prepares ecosystem-based forest management plans taking ecosystem services such as water retention and flood control into account. However, these individual attempts are rarely known to others, let alone the influential regional development agencies that shape investments in the region. This aim, therefore, is to bring all these efforts together and prepare a synthesis map. A GIS-based geo-spatial database will be produced to serve as a decision support tool for the EBSC Region to address the impact of climate change on the landscape/ecosystems. This will be achieved through the following activities:

<u>Activity 1.2.1</u> ? Collect data and carry out preparatory assessments for the pilot sub-basin (Kire?hane/Salarha-please see Annex F for details) that cover the following aspects: land potential and land stratification, current land degradation status, resilience of current and proposed land uses, socioeconomic context, including assessment of gender equality and barriers to participation of women and youth, cost-benefit analysis of proposed interventions.[4]<sup>4</sup>

<u>Activity 1.2.2</u>? Using participatory sketching and mapping techniques, illustrate ecosystem services such as flood and erosion control function of forests, water provision and treatment function of wetlands, flood control function of natural riverbeds, etc.

<u>Activity 1.2.3</u> ? Produce spatial climate projections as new layers, by downscaling global-scale climate projections to the EBSC scale with the help of climate experts and GIS experts.

<u>Activity 1.2.4</u> ? Superimpose existing information on flood sensitivity; former landslide, avalanche, rock-fall incidents and impacts, as well as landslide risks; road expansion plans of DOKAP; etc.

<u>Activity 1.2.5</u> ? Conduct vulnerability assessment by means of a weighted vulnerability analysis in numeric form in order to pinpoint vulnerable areas and factors leading to those. This assessment will be finalized by a series of technical meetings and workshops among interested parties.

As a result of the above activities, areas in the EBSC Region that are particularly vulnerable to climate change, in addition to vulnerabilities to other existing conditions, will be identified. This spatial GIS-based database will illustrate vulnerable areas that are at high risk not only at present but also for the next 30 years under various climate change scenarios. This will improve the capacity of institutions to take these factors into account into future planning, for instance enabling ?EM to prepare landslide control engineering projects at the most needed critical spots, or allowing OGM and ?AYKUR to detect and initiate monitoring for forest areas at risk of conversion to tea plantations. This spatial database

will serve as a decision support system tool and be the basis for the program of measures under Output 1.3 (Integrated Natural Resource Management Plan).

**Output 1.3.** An INRM Plan prepared for a pilot sub-basin covering an area of 450 ha that is based on SLM principles.

A multi-sectoral, integrated natural resource management plan based on remote sensing data in mapping and geospatial analysis (Output 1.2) will be prepared for the Kire?hane/Salarha micro-basin (please see Annex F for details) through structured stakeholder consultations and workshops based on SLM principles. Similar plans have already proven successful in establishing a common roadmap and monitoring base for authorities in other regions of Turkey, such as the Mount Karacada? Resource Conservation Plan being prepared and implemented as part of a GEF-financed project (Sustainable Land Management and Climate Friendly Agriculture at Konya Closed Basin). The output will serve for testing and implementation of LDN compatible land use planning in Eastern Blacksea provinces.

The INRM Plan, which will be supervised by the EBSC Region SLM Commission (see Output 1.1.), will be integrated into the internal and individual strategic plans and programs of all key institutions in the EBSC Region ? such as DS?, AFAD, DOKAP and DOKA ? to ensure funding and implementation of the plan post-project. The preparation process of the INRM Plan will be guided by the following activities:

<u>Activity 1.3.1</u> ? Hold consultations with agriculture, forestry and biodiversity/ecosystem services experts through bilateral meetings, focus groups, and facilitated workshops under the moderation of strategic planning experts. The main sectors of forestry, agriculture, tourism, and energy will be covered in cooperation with relevant experts.

Activity 1.3.2 ? Evaluate the involvement of disadvantaged groups (such as the elderly, youth, and women) in natural resources management at the micro-basin level by drawing on guidance from specific experts such as gender consultant, issue-specific institutions, and NGOs in particular. This information will support integration of a specific chapter in the INRM Plan on involvement of disadvantages groups.

<u>Activity 1.3.3</u>? Through interviews and meetings with the main actors in the EBSC Region (including private sector institutions and NGOs), identify key elements (practices, indicators, criteria) for sustainable forest management and sustainable tea production that promote SLM; document these as a guide for future forest management and agricultural support plans in the region, at a technical/policy level.

<u>Activity 1.3.4</u> ? Agree on both issue-based and site-based recommendations for INRM and illustrate these on the maps prepared based on the geo-spatial database developed under Output 1.2. This will provide a visual output and establish the basis of the discussion points of the draft INRM Plan with a cross-sectoral perspective.

Activity 1.3.5 ? Based on all of the above and the preparatory assessments under Output 1.2, develop an INRM Plan for the Kire?hane/Salarha micro-basin that seeks to balance at a landscape scale (for the pilot sub-basin) economic, social, cultural and environmental objectives, to achieve a mosaic of land uses across the landscape such that land is used for the purposes to which it is best suited, and allocation takes into account climate change as a driver of land degradation<sup>[5]5</sup>. The INRM Plan will ensure the environmental conditions required to support and safeguard sustainable livelihoods for local stakeholders. For different land uses and land types, the INRM Plan will focus on determining better modalities for managing natural resources such as tea and hazelnut plantations, forests, and highlands in the light of sustainable land management principles to achieve land degradation neutrality targets. The planning process will be designed to integrate all relevant stakeholders for ensuring transparency during the implementation process of the project. Also, a participatory process will be followed to benefit from the relevant stakeholders? knowledge on the state-of-the-art and maximize their ownership by the end of the project.

**Output 1.4.** Identification of policy measures and/or revisions to legislation that are needed to support implementation of the INRM Plan in humid climatic zones.

Turkey has adopted several effective laws and strategic plans to support sustainable land use and natural resource management. However, the country has also gone through an important process of transformation to a presidential system that has led to overlaps and gaps in institutional mandates, in addition to existing ones. An example of this is that flood control works cannot be undertaken at upper basin creeks wider than 3 meters since OGM is responsible by legislation for rivers in upper basins that are narrower than 3 meters, and DSI is responsible only for lower basins. This small gap which does not have a negative effect elsewhere in Turkey, is causing disastrous floods in the very humid regions such as the EBSC Region. Thus, issues such as this need to be identified by evaluating existing legislation from the perspective of SLM in very humid regions, and by consulting on the ground implementing organizations using a holistic approach that is multi-sectoral. The legislative review will be guided by the following activities:

<u>Activity 1.4.1</u> ? Conduct a rapid legislative gap analysis and review of policies for land governance, land-use planning, and natural resource conservation and management through the lens of sustainable land management in very humid regions[6]<sup>6</sup>.

<u>Activity 1.4.3</u> ? Finalize a report identifying the gaps and opportunities in legislation and policies to implement the INRM Plan in the EBSC Region. Facilitate revisions where they are required to provide an effective policy framework for implementation of LDN. For example, this could involve dialogue between the EBSC Region SLM Commission and DOKAP and DOKA to re-shape strategic plans and project financing in the region also to secure the financial sustainability through the innovative programs that will encourage SLM by the local development institutions and local administrations, and dialogue with municipalities to revise strategic plans of municipalities, revisions to the tea law, etc.

Component 2 ? Land-based SLM practices in landscapes with very humid climate.

This component will address the second barrier of lack of experience with implementing SLM practices in very humid and steep agriculture, pasture and forest areas. This component will result in a set of tried and approved, tailored, applicable, and cost-effective SLM practices for local stakeholders to adopt and replicate. Participatory land-use planning under component 1 coupled with demonstrations of SLM under component 2 will lay the foundation for balancing out gains and losses in productivity and income for local stakeholders over the medium to long term. The objective of this component is also to lower the landslide and flood risk by restoring and maintaining the health, function, and productivity of critical ecosystems within the very humid landscapes to not only build resilience against climate-induced hazards, but also improve the sustainability of the natural resource base and enhance the livelihood security of local communities.

In line with the priorities set in the INRM Plan defined under Output 1.3, activities will include a variety of sustainable and risk-mitigating agricultural and forestry practices, land protection measures, and livelihoods diversification strategies implemented by ?EM, OGM, TRGM, AFAD, and DS? through their regional and provincial units, to demonstrate successful SLM practices for DOKAP and DOKA to include and integrate in their future development projects. Integration of flood prevention and water regulation into agricultural and forest management planning can improve the resilience and strengthen the functions of ecosystems and help combat against floods and landslides, in addition to producing long-term climate adaptation and mitigation co-benefits such as soil, water and sediment retention and reducing CO2 emissions.

Value added sustainable, gender-sensitive, and climate-smart income generation models for the most important agricultural products will enhance the livelihood and welfare of the local people while reducing the pressure on the agricultural and forest ecosystems upon which these communities traditionally depend. This will also contribute to reversing the current trend of outward migration of the local population by preservation of agricultural land and enhancing agricultural job security.

The process of implementation of SLM practices will also improve the technical, analytical and managerial capacity for SLM among decision-makers and technical personnel in the EBSC Region.

**Outcome 2:** Agriculture, pasture and forest lands in the pilot micro-basin of Kire?hane/Salarha (430 ha) are under SLM practices that integrate new approaches at the global level with traditional agricultural practices

**Output 2.1.** Traditional land use practices for croplands and pastures that cause zero harm to soil are identified with a specific focus on women farmers.

Throughout the history, EBSC Region has been a home for several civilizations; under smaller or bigger states. Because of such diverse culture and traditions, the region has many examples of traditional land use practices that can be identified by trained eyes (e.g., ancient stone walls to stabilize land for house construction, farming or road building; archaic drainage systems or terraces for plantations established through collaborative work by villagers).

Unfortunately, most of these traditional practices are long forgotten due to the outward migration of people and aging of the population. In addition, the role played by women farmers is key ? women are both the social historians/story tellers of the community as well as the main workforce/mobilizer for agriculture, and can therefore be local guides for this output. The identification and documentation of traditional practices will be guided by the following activities:

<u>Activity 2.1.1</u> ? ?EM landslide experts to identify, collect, and highlight traditional sustainable, costeffective and easy to establish land use practices.

<u>Activity 2.1.2</u> ? Produce a report on traditional sustainable land-use implementation practices with recommended SLM practices for the EBSC Region; produce a short-film and podcast that will be available for dissemination through local TV and radio stations.

<u>Activity 2.1.3</u> ? Share these findings with local land users through ?AYKUR, private sector companies such as Lipton and Do?u?, farming/animal husbandry cooperatives, etc., as well as with decision-making and investing authorities such as Governorships, Municipalities, DOKAP, DOKA, KGM (General Directorate of Roads) for integration into their plans and programs in an attempt to foster development of their own innovative SLM programs in line with their mandates (such as SLM and tourism, SLM for apiculture, etc.) under their investment plans and programs to further support SLM initiatives throughout the region for scaling up and sustainability purposes.

<u>Activity 2.1.4</u>? To raise the visibility and promote further replication of these traditional best practices, hold a region-wide contest among land-users via Governorships, DOKAP and DOKA. Winners will be rewarded with modest support such as repairs or material inputs, and promotional and interpretive signage for sites as per the permission of land users to encourage exchange visits for interested land owners/users in the future.

Output 2.2. SLM practices for forests, pastures, and agricultural lands implemented in pilot site.

In line with the priorities set in the INRM Plan defined under Output 1.3., this output will implement forestry actions to protect watersheds, SLM approaches in tea gardens that increase yield while protecting the soil and water, measures for efficient use of pastures for production of milk and related products, techniques on efficient use of water, etc. This output will benefit from exchange of lessons and experiences with several projects, specifically from new and innovative approaches on forestland rehabilitation, best agricultural practices, fertilizer management, efficient and effective use of water, prevention of water and soil pollution, climate change adaptation and disaster management (for further details, see baseline projects).

The project will implement these SLM practices in pilot sites, namely selected areas of forest, tea plantations, roads, and creeks in the Salarha micro-basin in Kire?hane District, bringing together traditional and new global approaches[7]<sup>7</sup>. The implementation of SLM practices will be guided by the following activities:

<u>Activity 2.2.1</u> ? Joint mapping and selection of all of the best implementation methods and tools based on natural and cost-effective materials and methods that Turkey and countries with very humid climate have implemented. Selection of agricultural production and forestry practices will involve TRGM and OGM; erosion and sedimentation control works will involve ?EM; upstream natural water retention

and storage interventions will involve DSI; drainage and walls to climate-proof and disaster-proof rural road segments will involve KGM and local administrations, etc. Methods and tools will be selected for restoring and sustainably managing ecosystems that provide resources for income generation to local communities and critical services of soil retention and water regulation that contribute to buffering against landslides and floods and regulating the flow and quality of water. Several actions will be selected for forests, pastures and agricultural lands including, but not limited to:

? landslide and avalanche prevention and enhancing water provisioning through terracing and stone walls for stabilization, (flood and landslide prevention actions to be integrated into the forest management plans in the future)

? soil stabilization, afforestation, reforestation or rehabilitation interventions such as drainage ditches and channels, bush fencing

? maintenance activities such as weeding, chopping, shoot control and terrace repair for the regulation of hydrological system

? erosion and sedimentation control works

? upstream natural water retention and storage interventions such as restoration of riparian ecosystems and stream corridors, disaster emergency maintenance of existing infrastructures and repair works

? drainage and walls to climate-proof and disaster-proof rural road segments that are frequently and heavily damaged by landslides, floods, and falling rocks

? drainage and terracing for tea plantations to protect topsoil layer; agroforestry and rainwater harvesting to manage soils and water sustainably; input-free or natural inputs such as compost, mulching, organic farming, good agricultural practices, etc. to reduce the application of pesticides and fertilizers that negatively affect soil structure

? planned and rotational grazing and weed control on pastures

Activity 2.2.2 ? Support land users and land owners with implementing selected measures

**Output 2.3.** Training activities and inter-basin peer to peer knowledge sharing activities promoted to enhance the capacities of forest managers, local farmers and farmer associations.

Capacity development activities supported by the project will ensure (i) increased knowledge about climate change as a driver for land degradation; the link between land-use methods, land degradation and disasters; benefits of moving from conventional methods of local people and actors such as forest

managers to sustainable production methods; and (ii) increased capacity to improve the economic and welfare level of the region and local people with a gender perspective. The aim is to ensure that institutions and people include the concept of SLM in their actions/plans/programs. Training and capacity building will be guided by the following activities:

<u>Activity 2.3.1</u> ? Conduct a rapid training needs assessment to determine which are the most critical training needs of stakeholders focusing on specific interests of vulnerable groups in the target region including youth, women and disadvantage people.

<u>Activity 2.3.2</u> ? Hold informative meetings for central administrative and strategic planners, administrative and strategic planners of local institutions, other government stakeholders, private sector, and NGOs, also in accordance with a gender action plan to be developed at the PPG, in the EBSC Region on climate change, and on the link between land-use methods, land degradation and disasters in the region, to ensure that these issues are owned and integrated into internal training programs.

<u>Activity 2.3.3</u> ? Organize training activities for selected leading/pioneering farmers on a full package of sustainable production methods, with topics ranging from land management (drainage, terracing and other erosion control measures), seed/sapling selection, fertilization, to branding, marketing, and relevant government supports, credits, promotions, opportunities, better working conditions in line with national and international standards, etc. for land degradation-free tea/hazelnut production.

<u>Activity 2.3.4</u> ? Hold training sessions for local decision-makers (local community leaders, mayors, politicians, opinion-makers) on SLM, climate change, ecosystem services and the integration of these concepts into land-use decisions via integrated, participatory and gender inclusive management.

<u>Activity 2.3.5</u> ? Organize meetings, field days, and visits to demonstration sites for tea farmers for hands-on learning about best-practice examples such as plantations with ancient terracing, drainage and stonewalls, as well as modern demonstrations such as ?AYKUR Trial Plantations and good practices of tea farming by the TEMA Foundation.

<u>Activity 2.3.6</u> ? Organize a study visit to a tea producing country/region with similar climate, ecology, and hilly topography (e.g., Thailand, China) to gain and share knowledge and experience about sustainable tea farming techniques in very humid and steep lands prone to landslides and floods.

<u>Activity 2.3.7</u> ? Undertake additional awareness-raising activities about SLM practices to avoid/reduce/reverse land degradation ? together with local NGOs, as well as DOKAP and DOKA ? in vulnerable hotspots (hotspots in the EBSC Region to be identified in Output 1.2).

<u>Activity 2.3.8</u> ? Work with local media channels to provide more effective farmer extension and awareness raising services.
**Output 2.4.** Resilience-building and income-generating models for sustainable value chains for the main products of the EBSC Region are identified and implemented

The main products in the EBSC Region include tea and hazelnut. Despite the importance of the EBSC Region as the main tea and hazelnut producer and numerous studies on the development of this production, there is still considerable room for improvement, specifically from the perspective of climate change and ongoing land degradation associated with changes in land use. There is a need to bring this new perspective in the analysis of market and value chains of key products, in collaboration with actors such as ?AYKUR, F?SKOB?RL?K and private sector companies such as Lipton, Do?u?, Karali, Salarha to devise resilient income generation models for implementation also considering gender perspectives in line with the gender action plan. Promotion of these resilient models will be guided by the following activities:

Activity 2.4.1 ? Analyze the market and value chain for key local products (i.e., tea and hazelnut) for EBSC Region, examine production and consumption patterns between rural and urban areas for each agricultural product, and identify opportunities for making the value chain more sustainable and efficient so as to avoid and/or reduce land degradation. In light of the Covid-19 pandemic, the project will tap into specific opportunities for green recovery to boost the local economy that shrunk considerably during the Covid 19 pandemic and to increase resilience in supply chains. This analysis will cover the baseline inventory including post-COVID situation, export patterns, main actors of production/cultivation with a gender perspective, production/cultivation phases, main problems in production/cultivation, marketing problems, negative effects to land degradation, recommendations for increasing the productivity of the products and income level of the villagers, mitigating the land degradation. This study will also include the opportunities and recommendations for nature- based solutions and green recovery activities which seek alignment with the national green recovery plans and increased resilience in supply chains in terms of Covid-19 pandemic. This analysis will be conducted for the entire EBSC Region. After this study, best pilot models for tea and hazelnut production to diminish the land degradation (such as terracing, stone walls, using manure instead of chemicals etc.) and to increase the income level and providing better and inclusive working conditions through new skills development, occupational health and safety measures, etc. of the villagers will be clarified and put into implementation under Output 2.2.

<u>Activity 2.4.2</u> ? Based on the above analysis and through consultations with local stakeholders, identify viable agri-food value chains that avoid and/or reduce land degradation, are also climate-resilient and gender-sensitive and contribute to the COVID-19 green recovery; and support land users/owners in implementing these. After determining the best pilot models for tea and hazelnut plantations/cultivations, establish or reestablish the tea plantations/hazelnut gardens as pilot base with the support and technical knowledge by the DOKAP, ?AYKUR, F?SKOB?RL?K and local Agriculture

Directorates of the MOAF (Ministry of Agriculture and Forestry). Awareness raising and training activities to the farmers will also be given by the said organizations.

Activity 2.4.3 ? Explore the potential for alternative income generating activities (other than tea, hazelnut) such as utilization of non-timber forest products, medicinal and aromatic plants such as blueberry, raspberry, linden tea etc. for the EBSC Region. Preliminary rapid survey on non-wood forest products and medicinal and aromatic plants which are economically important for the villagers will be conducted in EBSC Region. According to the findings of the survey, most important 3-4 products and plants will be given priority to be implemented in the region. Support will be given to the villagers by DOKAP, MOAF. Under this activity, by giving local people other income-generating sources they may stop out-migration, and stay in the area to manage lands sustainably and also, with other income sources they may not convert more lands to tea plantations or may not have to farm the plantations in intensive ways that lead to further degradation. As a further plus, this activity could help alleviate Covid-related economic hardships faced by local people. Other income generating activities such as beekeeping, organic farming, trout farming etc. will also be assessed during the survey and if they are viable and important for the region, these activities will also be promoted as sustainable value chains. These activities will be supported by DOKAP and MOAF since these organizations have already been promoting these activities and giving support to the villagers. There are successful implementations of these kind of activities in the region and Turkey.

Component 3 ? M&E, knowledge management, and replication

This component will address the third barrier of absence of a mechanism for distillation and sharing of knowledge on SLM in areas with humid climate and steep topography. It will foster sharing of knowledge and information regarding land degradation and its causes, and sustainable land management as a solution. Activities will result in a set of visual and written knowledge materials ? collation of best practices and lessons learned by not only local land users, but also by DS?, OGM, TRGM and AFAD ? and jointly defined and implemented monitoring activities and tools for key authorities and land users. The visual and informative materials will be produced in order to reach a wide audience not only in the EBSC Region, but also other very humid regions of Turkey. This, in turn, will support replication and scaling in humid areas. The experiences will be shared with WOCAT for further dissemination.

**Outcome 3:** Enhanced gender-sensitive impact monitoring, learning, and knowledge-sharing on SLM practices for agriculture, pasture and forest lands in steep and humid areas

**Output 3.1.** System for monitoring and evaluating project impacts, as well as environmental, social and gender safeguards, is in operation.

The project will design and operate a monitoring and evaluation system to track global environmental and socio-economic benefits generated by the project. The M&E system will follow UNDP and GEF M&E policies. It will also be aligned with the LDN monitoring system being developed by ?EM as part of the FAO-GEF LDN Project at Yukar? Sakarya Basin. The system can be used to inform decision-making by government resource managers and private resource users. Establishment of the M&E system will be guided by the following activities:

Activity 3.1.1 ? Hold an inception workshop in line with UNDP-GEF guidance.

<u>Activity 3.1.2</u> ?Track changes in the three global indicators ? land cover (assessed as LCC), land productivity (assessed as NPP), and carbon stocks (assessed as SOC) ? relative to baseline values and relevant complementary indicators[8]<sup>8</sup>. The project?s system will be aligned with the LDN monitoring system being developed as part of the FAO-GEF LDN Project.

<u>Activity 3.1.3</u> ? Collect data to track indicators (as per project results framework, and GEF-7 core indicators) against baseline and target values on an annual basis; prepare annual reports on project progress and impacts.

Activity 3.1.4 ? Implement a gender mainstreaming action plan.

<u>Activity 3.1.5</u> ? Monitor social and environmental risks and implement associated safeguards management plans (for example, a livelihoods action plan if the project could displace economic livelihoods); and put in place a grievance redress mechanism if deemed necessary.

<u>Activity 3.1.6</u> ? Carry out an independent terminal evaluation (per standard UNDP-GEF ToRs) including field visits to demonstration areas and consultations with local stakeholders and national project partners, review of project reports, web-based information, with recommendations for ensuring sustainability of project outcomes.

**Output 3.2.** Knowledge management system on SLM techniques for humid climate regions with steep topography is in place.

Based on experiences in the pilot sub-basin, the project will produce written and audiovisual materials accessible to a broad audience through print, online, and other media outlets. The system will serve as a repository and mechanism for sharing and verification of land degradation data and knowledge products. Knowledge management, communication, and replication efforts will be guided by the following activities:

<u>Activity 3.2.1</u> ? Review, analyze, synthesize, and capture project lessons and experiences gained from pilot sites into different knowledge products ranging from more detailed technical reports to communication and outreach materials (e.g., technical reports, best practice notes, articles for peer-reviewed journals, articles for media, videos/ stories/ posters/ podcasts of project successes)

<u>Activity 3.2.2</u> ? Design and maintain an online web page containing all the audiovisual and written knowledge products produced under the project ranging from activity and progress reports, meeting reports, annual reports, technical briefs, training materials, videos/ stories/ posters/ podcasts of project successes, best practice notes, articles for peer-reviewed journals, articles in media, 3D maps. The website will also include links to other relevant materials produced by key authorities and land users, such as promotional videos, landslide and flood simulations with preventive measures at DSI Flood Museum in Trabzon, ?AYKUR?s Trial Tea Plantations in Rize, etc.

Activity 3.2.3 ? Organize a series of know-how sharing meetings in regions with similar climatic conditions and challenges to lay the groundwork for replication of project successes. The activities will include a set of informative meetings and workshops at similar regions struggling with landslides, floods and avalanches such as Erzurum, A?r?, etc. for upscaling purposes. The knowledge materials produced by the project will be shared with counterparts in these regions, and the meetings will also serve as an opportunity to collect their experiences, best practices and knowledge materials (for further dissemination via the project?s website). A pool of experiences and expertise will, therefore, be formed and made available for sharing with interested parties.

<u>Activity 3.2.4</u>? Design and carry out a communications and outreach plan to disseminate successful SLM approaches and practices that can combat against land degradation causing natural disasters in the long term. The *ad hoc* Eastern Black Sea Coastal Region SLM Commission/Committee will play an important role in this regard (ref. Activity 1.1.4). The dissemination plan may include actively seeking opportunities to share appropriate knowledge products through media outlets (newspapers, magazines, radio, television, internet), as well as school visits to DS? Flood Museum (potentially expanding to cover landslides and avalanches).

Assitance to COVID-19 green recovery:

UN agencies in Turkey have been assessing the impacts of the COVID-19 crisis in Turkey and adjusting their programming to respond to extra demands and emerging needs due to the Covid-19

crisis. The UN Country Team, which is composed of all UN agencies active in Turkey, has established a Task Team to assess the economic and social impacts of the pandemic and to prepare a short to medium-term response offer to support the efforts of the Government of Turkey in its efforts to contain and reverse the negative consequences of the Covid-19 crisis along with the national development priorities outlined in the 11th Development Plan and in line with UN agency mandates and priorities, as well as pave the way for a better recovery, which is inclusive, gender-equal, fair and green.

The Offer is structured under five pillars: (i) Health First; (ii) Protecting People; (iii) Economic Response and Recovery; (iv) Macroeconomic Response and Multilateral Cooperation; and (v) Social Cohesion and Community Resilience. The proposed responses identified under each pillar respond to the specific challenges and needs created by the pandemic in the context of Turkey. In all, the UN in Turkey has identified 27 focus areas under the five pillars.

The project is aligned with the offer mainly by not only directly responding to *Pillar III ?Economic Response and Recovery?*: Item 2. Rural interventions to increase the resilience of producers and improve supply chains in the agrifood system (Output 2.4. Resilience-building and income-generating models for sustainable value chains for the main products of the EBSC Region are identified and implemented) and *Item 6. Protection of natural habitats* (Output 1.3. An INRM Plan prepared for a pilot sub-basin covering an area of 430 ha that is based on SLM principles), but also to indirectly supporting *Item 1. Job retention and job creation for vulnerable groups* and *Item 5. Effective public sector response for an economy resilient to shocks and hazards*. The project also will serve to the *Item 6 of Pillar II-Protecting People* by helping enhancing the skills and resilience of young people against Covid-19 and future shocks.

## 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 Land Degradation focal area.

	<b>GEF-7 Land Degradation Results Framework</b>						
Objective	Sub- objective	Strategic Priority	GEF-7 Sub-indicators				

LD Objective I Support on the ground implementation of L and	Integrated Landscape and Resilience	LD-1-4: Reduce pressures on natural resources from	<ul> <li>4. Area of landscapes under improved practices (million hectares; excluding protected areas)</li> <li>4.3 Area of landscapes under sustainable land</li> </ul>
of Land Degradation Neutrality (LDN)		from competing land uses and increase resilience in the wider landscape	<ul> <li>4.3 Area of landscapes under sustainable land management in production systems</li> <li><u>Project contribution</u></li> <li>430 ha agricultural land under sustainable management and 10,000 ha indirect agricultural impact area covering tea orchards in the target region</li> <li>10,000 ha forest areas under sustainable management (to be determined during PPG) and approx 75,000 ha of indirect forest impact area in the Rize province</li> </ul>

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		

<ul> <li>? Prologned lack of rational approach to sustainable use of existing productive landscape of EBCR</li> <li>? Continued degradation of agriculture lands from ineffective and inefficient farming techniques</li> <li>? Further degradation of scarce agricultural lands, pastures, and forests due to increased floods, landslides, avalanches leading to erosion of productive soil and water resources</li> <li>? Increased pressure to ecosystem led by intensive tea production habits;</li> </ul>	<ul> <li>? New policy measures are identified and legislation revisions mad efor INRM in humid areas;</li> <li>? Evidence based documentatation of degree of land degradation produced and future threats</li> <li>? Coordinative structures developed for sustainable land management</li> <li>? Demonstrated effective SLM practices for productive landscapes for very humid regions</li> <li>? Land users with enhanced capacities to implement SLM.</li> <li>? Income generating models developed for sustainable value chains</li> <li>? Traditional practices for SLM gathered, promoted and disseminated</li> </ul>	<ul> <li>? INRM promotion in a concrete landscape in humid areas</li> <li>? A combitation of innovative and traditional approaches supporting efficient use of land, soil, water, and vegetation in crop and livestock production systems;</li> <li>? 10,000 ha of forest area under sustainable management in climate risk prone areas and approx. 75,000 ha of forect</li> </ul>
		indirect impact area covering a forest management unit; ? Increased agricultural productivity by improved land management on 430 ha irrigated arable land and 10,000 ha indirect agricultural impact area in the target region; ? Stabilized ecosystem services at 430 ha at productive landscape; ? Improved livelihoods of 1,000

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

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

Integrated land management decisions based on collaborative spatial vulnerability analyses: The project will coordinate and gather all attempts of institutions such as landslide risk maps, works on flood sensitive areas, ecosystem-based forest management plans to determine climate-associated risks specific to Eastern Blacksea Region a spatial perspective and produce a GIS-based geo-spatial database to serve as a decision support tool for the EBSC Region to address the impact of climate change on the landscape/ecosystems by using state-of-the-art imaging and participatory mapping techniques. As a result, areas in the EBSC Region that are particularly vulnerable to climate change, in addition to vulnerabilities to other existing conditions, will be identified for the next 30 years under various climate change scenarios based on the IPCC risk analysis procedures. This spatial database will serve as a decision support system tool and be the basis for the program of measures under Output 1.3 (Integrated Natural Resource Management Plan). The outcome of the risk analysis study will be presented to the major private sector actors and their associations with a perspective that it can be incorpotaed into their business plans.

Integrated LDN compliant integrated land use management and innovative SLM techniques: The project is turning the LDN concept into practice in Eastern Blacksea Region of Turkey and will generate innovative approaches to multi-sector land use planning based on remote sensing data in mapping and geospatial analysis (Output 1.2.), testing and implementation of LDN compatible land use planning in Eastern Blacksea provinces. Innovative SLM techniques will be demonstrated and promoted among local communities through competitions and development authorities by adopting and modernising traditional and effective land management tools in contemporary land management (Output 2.1-Activity 2.1.4).

**Sustainability:** The institutional and political sustainability will be ensured through an inter-agency panel on SLM (Output 1.1) for the Eastern Black Sea Coastal Region which will be established to coordinate the efforts on SLM among relevant stakeholder organizations and an INRM Plan to be prepared for the pilot sub-basin (Output 1.3.) both of which will be established through strictly participatory approaches employed by the proposed project and aimed 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. However the main sustainability of this project lies at the existance of an enthusiastic development administration (DOKAP) and development agency looking forward to revise and mainstream their investment strategies towards managing climate and land associated risks. The project results will be owned and continued by these agencies after the duration of the project.

Socio-economic sustainability will be enhanced by improving livelihoods of local communities, through the adopted improved management of their land resources and securing ecosystem services. As project will be informing and technically supporting the private sector on climate risks, adaptation measures through land management practices and the menas of consideration of this issues in their business plans this will be another line of contribution of the project to the socioeconomic sustainability.

Environmental sustainability will be enhanced by LDN compatible land use planning in the pilot area (Output 1.3-Activity 1.3.5), guiding the implementation of concrete SLM measures resulting in improved land and biodiversity condition. The financial sustainability will be ensured through the innovative programs that will encourage SLM by the local development institutions and local administrations (Output 2.1 ? Activity 2.1.3). The local development agencies and administrations as well as provincial administrations within EBSC are anticipated to develop their own innovative SLM programs in line with their mandates (such as SLM and tourism, SLM for apiculture, etc.) under their investment plans and programs to further support SLM initiatives throughout the region.

**Scaling up:** The project is 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 demonstrate the effectiveness SLM at very humid climates through integrated natural resource management, together with its scalable tools countrywide. The decision making tools and structures for LDN compliant land use management, as well as SLM generated experience will be institutionalized, disseminated and therefore could be replicated in other regions. The project will closely coordinate with other ongoing interventions in particular with GEF/FAO ?Contributing to Land Degradation Neutrality (LDN) Target Setting by Demonstrating the LDN Approach in the Upper Sakarya Basin for Scaling up at National Level? which is mainly operating at country level and looking for regional scale applicability of project results, and the World Bank Turkey Resilient Landscape Integration Project (TULIP), in view of scaling up demonstrated LDN implementation at sub-national levels (to be validated at PPG stage).

Furthermore, the innovative SLM techniques and traditional land use practices for croplands and pastures that cause zero harm to soil (Output 2.1.) gathered and demonstrated by the project at very humid climates can be disseminated and scaled up easily through the network of development administrations and agencies.

[1] Enhancing Adaptation Action in Turkey (TR2017 ESOP MI A3 04), (2021). Climate-Adaptation Platforms In The European Union And The Member States And Recommendations For Turkey

https://iklimeuyum.org/documents/Climate\_Adaptation\_Platforms.pdf

[2] Analyzing Land Use/Land Cover Changes Using Remote Sensing and GIS in Rize, North-East Turkey by Sel?uk Reis, *Sensors* 2008, *8*(10), 6188-6202; https://doi.org/10.3390/s8106188

 [3] Effect of modifying land cover and long-term agricultural practices on the soil characteristics in native forest-land, Ceyhun Gol and Orhan Dengiz, Journal of Environmental Biology, September 2008, 29(5) 677-682

[4] Using guidance provided by the GEF-STAP in Appendix 2 of https://stapgef.org/sites/default/files/publications/LDN%20Technical%20Report\_web%20version.pdf

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

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

[7] As an example, stone walls that were established about 200 years ago by the former migrated residents of the area will be identified and studied under Output 2.1., and resized/upscaled using new local material and technology for the Salarha micro-Basin under Output 2.2.

[8] Using guidance provided by the GEF-STAP in Module E of https://stapgef.org/sites/default/files/publications/LDN%20Technical%20Report\_web%20version.pdf

### 1b. Project Map and Coordinates

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

Figure 1b: Project Area -Eastern Black Sea Coastal Region and proposed pilot area-Salarha/Kire?hane MicroBasin (430 hectares at 40,962? N and 40,508? E) (please see Annex F for details)



2. Stakeholders

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

#### **Indigenous Peoples and Local Communities**

**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

The main stakeholders of the project can be listed as the Ministry of Environment, Urbanization and Climate Change and Ministry of Agriculture and Forestry and their relevant general directorates such as ?EM, DS?, OGM, TRGM, SYGM and MGM; Disaster and Emergency Management Presidency (AFAD), ?AYKUR (Tea Enterprizes General Directorate), Eastern Black Sea Regional Development Administration (DOKAP), Eastern Black Sea Development Agency (DOKA), Local Administrations, NGOs, Universities in addition to local residents of Eastern Black Sea Region dealing with land degradation on a daily basis.

The first round of stakeholder consultations for this project began in the summer of 2019 following major landslides and avalanches triggered by heavy rainfall in the EBSC Region. The Ministry?s core interests in combatting land degradation in the Eastern Black Sea Region was communicated by ?EM to leading governmental authorities on forest, water, protected area and disaster management such as OGM, DS?, SYGM, TRGM, MPGM, MGM and AFAD. Upon agreement on a draft project concept, a mission composed of Deputy Minister and GEF OFP Mr. Akif ?zkald?, Desertification and Erosion Control (?EM) General Director, General Director of National Parks and Nature Conservation, and UNDP Turkey senior experts visited the EBSC Region to consult Regional and Provincial Directorates of these authorities and to conduct site visits. This mission revealed potential collaboration areas, components of the project and demonstration sites in Rize and Trabzon Provinces in agreement with key stakeholders, including ?AYKUR, who has readily agreed to fully support the project.

Additional consultations were held with AFAD Rize Provincial Directorate, DOKAP, TRGM, ?AYKUR, TAGEM, OGM and national NGOs such as TEMA Foundation and DKM (Nature Conservation Center in English) in May and June 2020; the discussions were virtual due to travel limitations associated with the pandemic. This was followed by a visit to the region (19-25 July 2020) for more structured stakeholder consultation and to select a demonstration area. The team consisting of ?EM officers and a national consultant visited with and discussed the project concept with key regional and local stakeholders including OGM, AFAD, TRGM, DS?, DOKAP, DOKA, local administrations (local governors and village headmen) and local NGOs. This stakeholder engagement plan has been prepared based on these discussions, as well as the guidance and proposals of key stakeholders.

A full list of stakeholders and their engagement and respective role in the project may be summarized as below:

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
GD Combating Desertification and Erosion (?EM) under the Ministry of Environment Urbanisation and Climate Change (MoEUCC): ?EM is the main coordinating government body for combating land degradation in Turkey, specifically dealing with erosion, avalanche, landslide and flood control and integrated basin improvement.	National mandate- This project is considered by the Ministry as an opportunity to meet the national LDN targets in compliance with the commitment with the UNCCD	+	5	5	?EM will support the design, implementation, financing, and mainstreaming of the strategy, policy improvements and related activities for this project and will be a member of the Project Board. ?EM will also be responsible for establishing the links between baseline projects and relevant government and non-government parties for the successful implementation of the project, and finally for the dissemination and national replication/scaling up of project success.	As a key Project Board member, continuous engagement will be maintained with ?EM through: ? informal and Project Board meetings to get updates on activities and intentions ? consulting and collaborating with them on developing the workplan and expenditures ? consenting with them on the consultations with stakeholders

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
UNCCD National Coordination Body: Formulation and implementation of the National Action Programs and to mobilize national and international resources.	National mandate- ensuring the contribution of the project to the achievement of national LDN objectives	+	3	3	Upscaling the SLM and LDN efforts of the project to the national and international scale.	UNCCD National Council will be informed about the project outputs and outcomes on a quarterly basis and sought for policy guidance throughout the project implementation.
GD Forestry (OGM) under the Ministry of Agriculture and Forestry (MAF): OGM is the main government body for the conservation and management of forests. Its Giresun and Trabzon Regional Directorates fulfill duties and responsibilities at the regional/local level in the project target area.	National mandate- This project will improve the sustainable management of forests in Rize Province and build the capacity of regional directorates/for estry managers and officers.	+	5	4	OGM will provide support and cooperation in sustainable management of forests and integration of SLM principles in forest management planning and operation in the target area. Specifically, the regional and operational directorates will be local members of the project steering committee and will support project implementation through the provision of their facilities, vehicles, personnel and equipment; in addition to sharing of information and local follow-up of monitoring activities.	As a key collaborating institution, the Project will have frequent engagement with OGM and regional directorates through: ? informal and Project Board meetings for updates on activities and intentions ? consulting and collaborating with them on implementing the workplan and expenditures ? seeking their guidance for local operations and consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
GD Hydraulic Works (DS?) under the Ministry of Agriculture and Forestry (MAF): DSI is the main government body for river rehabilitations and flood control infrastructure, including construction of dams and reservoirs. Trabzon and Artvin Regional Directorates fulfill duties and responsibilities at the regional/local level in the project target area.	National mandate- This project will help mitigate the destructiveness of floods through promotion of SLM practices and build the capacity of regional experts.	+	2	3	DSI will make sure its plans and projects (flood management plans and creek and river rehabilitation works) in the EBSC region are guided to achieve SLM objectives and standards. DSI will be a member of the project steering committee and support monitoring of objective achievement and information sharing. DSI will also support the project in the creek rehabilitation works at Kire?hane Creek within the proposed demonstration area (-COFUNDING)	As an influencing stakeholder and key collaborating institution, regular engagement with DS? and regional directorates will be maintained through: ? informal and Project Board meetings for updates on activities and intentions ? seeking their inputs for the spatial database & vulnerability analyses, INRM Plan preparation and implementation process in addition to working in close cooperation for the creek rehabilitation in the demonstration area ? seeking their guidance for local operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
GD Water Management (SYGM) under the Ministry of Agriculture and Forestry (MAF): SYGM is the main government body for river basin management plans and allocation of water supply at basin scale. SYGM is responsible for the preparation of Integrated River Basin Management Plans for Eastern Black Sea and ?oruh administrative river basins, effective operation of Basin Management Councils, and Flood Management Plans under development for these two administrative river basins.	National mandate- This project will provide data, best practices, awareness raising, and an enabling environment for future Integrated River Basin Management Plans for the EBS River Basin	+	3	2	Climate change together with land use changes are negatively affecting the EBSC region?s freshwater resources. The snow/glacier levels keep decreasing in the ?oruh and EBS River Basins. SYGM has studied the impacts of climate change on water resources in 2016, however, on a non-spatial quantitative basis. SYGM will follow the project up in terms of its contributions to the future river basin management planning and support the project database and operations with this perspective.	SYGM will be informed about the project outputs and outcomes on a quarterly basis and its guidance will be sought for data and policy guidance for spatial database/vulnera bility analyses and INRM Plan. The project implementation unit of the project may participate in the EBS river basin council upon invitation to support river basin scale management decisions.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
GD Nature Conservation and National Parks (DKMP) under the Ministry of Agriculture and Forestry (MAF): DKMP is the main government body for nature conservation, sensitive habitats and management planning and utilization of protected areas.	National mandate- This project will provide data, best practices for SLM in agricultural lands, and associated awareness raising which could be useful for biodiversity conservation and protected area management particularly in buffer zones of PAs in the EBSC region	+	1	1	DKMP will follow the project up in terms of its contributions to their mandate and support the project database and operations with this perspective. Noah?s Ark National Biodiversity Database coordinated by DKMP will also be utilized as a biodiversity data source for the project.	DKMP will be informed on a quarterly basis about the project outputs and outcomes regularly and sought for data and policy guidance for spatial database/vulnera bility analyses and INRM Plan.
GD Meteorology (MGM) under the Ministry of Environment, Urbanisation and Climate Change: MGM is the main government body for the regular monitoring and assessment of meteorological events.	National mandate- This project offers an opportunity for MGM to showcase the application of its meteorological expertise to address a key development challenge of the EBSC region.	0	2	2	MGM prepares and makes weather forecasts for use in the affected areas in fighting adverse agricultural conditions and conducting a ?Drought Monitoring System?. MGM will provide all climatic data that will be needed during the implementation of the project.	MGM will be informed about the project and its guidance sought for meteorological/ meteorological event data for the spatial database/vulnera bility analyses and INRM Plan.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
General Directorate of Agrarian Reform (TRGM) under the Ministry of Agriculture and Forestry (MAF): TRGM is the main government body for agricultural areas, managing agricultural product planning activities and related support; enhancing efficiency of agricultural irrigation; ensuring use of proper irrigation methods; carrying out studies relating to global climate change, drought and desertification.	National mandate- conservation and sustainable use of agricultural land in the EBSC Region.	+	2	3	TRGM and its provincial directorates will collaborate with the project in the activities on agricultural land, SLM activities in particular. TRGM?s knowledge-base and experience will be crucial for successful implementation of SLM demonstrations and regularly sought in terms of agricultural practices and farmer training activities.	As an influencing stakeholder and authority, regular engagement with TRGM will take place, especially with its provincial and district directorates through: ? informal and Project Board meetings for updates on activities and intentions ? seeking their input for spatial database & vulnerability analyses, INRM Plan preparation and implementation process in addition to working in close cooperation for the activities on agricultural land ? seeking their guidance for local operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
General Directorate of Agricultural Research and Policies (TAGEM) under the Ministry of Agriculture and Forestry (MAF): TAGEM conducts research studies on vegetable and animal production issues via its research institutes including the F?nd?k Ara?t?rma Enstit?s? M?d?rl??? (Hazelnut Research Institute) in Giresun and also collaborates with international research institutions.	National mandate- access to new SLM implementation practices/knowl edge demonstrated by the project	+	2	2	Research units of TAGEM will assist in monitoring information on soil, including organic carbon levels.	TAGEM, F?nd?k Ara?t?rma Enstit?s? M?d?rl??? in particular, will be informed about the project and sought for relevant research/practice s for the SLM demonstrations, agricultural production issues and INRM Plan.
General Directorate of Crop Production (B?GEM): is mandated to ensure recovery and conservation of grasslands, meadows, summer pastures and winter pastures, and taking necessary measures	National mandate- access to new SLM implementation practices/knowl edge for pastures demonstrated by the project	+	2	1	Pasture units of B?GEM will be consulted in pasture management.	B?GEM will be informed about the project and sought for relevant research/practice s for the SLM demonstrations at pastures and INRM Plan.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Disaster and Emergency Management Presidency (AFAD) & its Provincial Directorates under the Ministry of Interior: AFAD is responsible for disaster (landslide, flood, forest fire, etc.) mitigation and disaster related damage minimization.	Access to demonstration of SLM practices that can help prevent and minimize damage from disasters in very humid and steep regions of Turkey.	+	3	3	AFAD Provincial Directorates are responsible for disaster mitigation and damage minimization in the provinces of the EBSC Region. AFAD will contribute to the project with their knowledge and experience base and benefit from the outputs and outcomes of the project. In addition to the regular work of Provincial Directorates, the Disaster Adapt Project of AFAD (pls. see baseline projects) aims to enhance the climate change mitigation capacity and increased resilience to the impact of climate change through capacity building in Turkey. The project may be implemented to include the EBSC region and if so the AFAD provincial directorate will play a key role in ensuring synergies between this project and Disaster Adapt to amplify impact on the ground.?	As an influencing stakeholder and authority, regular engagement will be maintained with AFAD especially with its provincial directorates through: ? informal and Project Board meetings for updates on activities and intentions ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? seeking their guidance in the collaboration of relevant projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
General Directorate of Environmental Management (?YGM) under Ministry of Environment, Urbanization and Climate Change: They are mandated to conserve underground waters and surface waters, as well as seas and soil resources, preventing or removing of any pollution; ensuring coordination with other institutions and establishments in order to determine plans, policies and strategies aimed at measures against global climate change	National Mandate- Building awareness on adaptation to climate change; ensuring that adaptation recommendatio ns are implemented	+	3	2	?YGM has been working on the impacts of climate change in Turkey, and risk assessments under various scenarios for various regions. They can bring to bear this body of experience and knowledge for application in the EBSC region and the project target area in particular.	?YGM will be informed about the project and sought for relevant overlapping climate change analyses, for Component 1 in particular.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Local Administrations, Governorships, and Municipalities of EBSC Region, Rize and Kire?hane in particular: They are mandated to ensure civil and administrative management and coordination at the provincial level	Local mandate- Meeting local common needs of the province and the residing population; conserving soil resources and preventing erosion, afforestation and continuity/ sustainability of social services	+	4	5	The local administrations are the key to access residents and land users of the region. They will play a community opinion-shaping; informative, coordinative and disseminative role in the project, especially in on- the-ground project activities. These administrations are also the key to influence local policies through their strategic plans; therefore, they will be the key for the sustainability and replication of project outcomes.	As a key influencing stakeholder, regular engagement will be maintained with local administrations through: ? informal and Project Board meetings for updates on activities and intentions ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? seeking their guidance regularly for collaboration on relevant projects in the region and for stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
DOKAP- Eastern Black Sea Project Regional Development Administration under the Ministry of Science, Industry and Technology: They are mandated with developing and implementing action plans in line with regional priorities in order to accelerate regional development, especially in the agricultural sector; monitoring and assessing investment projects carried out by other institutions in the 11 Provinces of Eastern and Central Black Sea Region.	Regional mandate- regional development stake for the EBSC Region	+	5	2	DOKAP has been planning, designing and implementing regional development projects with around 1 million USD/year in the 11 Eastern and Central Black Sea Region Provinces, 4 of which correspond to the EBSC region. DOKAP finances several projects including soil and water quality analyses, alternative income generation activities such as bee-keeping, trout farming, etc., agricultural value- chain improvement actions such as cold storages or frosting facilities, packaging and marketing of medicinal aromatic plants. DOKAP can be considered as one of the main implementing organizations of the INRM Plan of the demonstration area and the replication/dissemi nation of SLM activities throughout the Eastern and Central Black Sea Region, thanks to their mandate and the coordinative and financing role of DOKAP in the region.	As a key influencing stakeholder and future implementing authority for the sustainability of the project outcomes, the Project will have regular engagement with DOKAP through: ? informing them of project activities and intentions (at informal and Project Board meetings); ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation processs ? actively contributing to DOKAP strategic plan revision processes ? seeking their guidance in the collaboration of relevant projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
DOKA- Eastern Black Sea Development Agency under the Ministry of Science, Industry and Technology: Mandated to develop region-specific development strategies mainly focused on tourism sector and improve supporting financial resources through multi-partner projects.	Regional mandate- regional development stake for the EBSC Region	+	4	2	DOKA has been planning, designing and implementing regional development projects with around 1 million USD/year budget in 6 Eastern Black Sea Region Provinces, 4 of which correspond to EBSC region. DOKA has also been a contact point where international and national level financial resources and institutions meet with local administrations. Therefore, DOKA can also be considered as one of the main implementing organizations of the INRM Plan of the demonstration area and the replication/dissemi nation of SLM activities associated with tourism sector throughout the Eastern Black Sea Region, thanks to their mandate and the coordinative and financing role of DOKA in the region.	As a key influencing stakeholder and future implementing authority for the sustainability of the project outcomes, the Project will have regular engagement with DOKA through: ? informing them of project activities and intentions (at informal and Project Board meetings); ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation processs ? actively contributing to DOKA strategic plan revision processes ? seeking their guidance in the collaboration of relevant projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
<ul> <li>?AYKUR (Public Economic Enterprise) -Tea</li> <li>Enterprizes General Directorate; Tea</li> <li>Factories, Marketing and Production Regional Directorates, etc.</li> <li>?AYKUR- Atat?rk</li> <li>?ay ve Bah?e</li> <li>K?lt?rleri Ara?t?rma</li> <li>Enstit?s? M?d?rl???</li> <li>(Tea Research Institute under</li> <li>2AYKUR-</li> </ul>	Conservation of tea orchards for sustainable tea production purposes	+	5	5	?AYKUR is the main authority in tea production; management of tea orchards. This jurisdiction has also been acknowledged by the TRGM and its provincial directorates. Therefore, ?AYKUR plays a critical role in any action regarding tea production and the interaction with tea farmers in the EPSC region	As a key influencing stakeholder and future implementing authority for the sustainability of the project outcomes, the Project will have regular engagement with ?AYKUR through: ? informing them of project activities and interview (ct
Peveloping tea agriculture of Turkey in conformity with the Agricultural Policy, improving tea quality, executing its processing technology according to technical principles, producing dry tea to meet domestic and foreign market needs, importing and exporting it, creating investment resources by helping capital accumulation through management policy which is based on efficiency principles					EBSC region. ?AYKUR agreed to support the project implementation in any respect, become a partner, provide co-funding and utilize and disseminate relevant project outputs in the activities of the institution including trainings, trial orchards, etc. ?AYKUR is also highly supportive the idea of owning the project demonstration area during and after the completion of the project as a ?sustainable tea- orchard management basin? in a similar fashion that it acknowledges/pro motes the Hem?in Basin of Rize Province as a pilot ?organic tea production basin?.	intentions (at informal and Project Board meetings); ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? actively contributing to annual planning/trainin g needs assessment processes ? seeking their guidance in the collaboration of relevant projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Academic Institutions of EBSC and Central Black Sea Region, Karadeniz Technical University of Trabzon, Recep Tayyip Erdogan University of Rize, ?oruh University of Artvin and 19 May?s University of Samsun in particular: Data generation, analysis and research project development and expert training	Knowledge and expertise development on SLM, climate change, disaster mitigation and joint project implementation	+	2	1	The academic institutions can play an important role in the provision of the experience and research capacities and expert pools of the organizations.	Relevant departments of academic institutions will be informed about the project and they will be sought for relevant research/practice s and expertise.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Farmers and farmer associations, tea &hazelnut production and marketing and/or organic agriculture production/developm ent cooperatives/unions in particular whose mandate are providing agricultural or marketing services to members. Including F?SKOB?RL?K- Union of Hazelnut Agricultural Sales Cooperatives with a mandate of purchasing, storing, processing and marketing the hazelnut yield of members as the biggest producer association of the world in its field, with a variable number of partners, from Istanbul to Artvin, with 50 cooperatives.	Conservation of agricultural land for sustainability of production and income	+	5	4	Farmers play a crucial role in the adoption of SLM practices and successful implementation. F?SKOB?RL?K is the leading organization in the EBSC Region in hazelnut production, thus influencing the management of hazelnut orchards. Therefore, F?SKOB?RL?K plays an opinion- shaping role in any action regarding hazelnut production and the interaction with hazelnut farmers in the EBSC region.	As key influencing stakeholders and future implementors of the project outcomes, the Project will have regular engagement with farmers directly and through farmer associations including F?SKOB?RL?K through: ? informing them of project activities and intentions (at informal and Project Board meetings); ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? actively contributing to annual planning/trainin g needs assessment projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Organizations/coope ratives for vulnerable groups such as women, elderly (retired), youth, children, people with disabilities, etc.	Improving the conditions of vulnerable groups	+/-	3	2	The project aims at improving land management for all people, however, it needs guidance and contributions from representatives/opi nion leaders of vulnerable groups for acknowledgement of the role of these groups, as well as for better participation and integration of these groups in sustainable land management. Therefore, these organizations will support the gender and other vulnerable groups? integration into both the project and specific project outcomes.	As an influencing stakeholder, the Project will have regular engagement with these organization through: ? informing them of project activities and intentions regularly; ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? seeking their guidance in the gender action plan development, collaboration of relevant projects and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
The Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats (TEMA): The main aim of TEMA is to create effective and conscious public opinion on environmental problems, specifically soil erosion, deforestation, desertification, climate change and biodiversity loss.	National mandate- Upscaling and training collaboration between existing micro- scale SLM demonstrations in Rize Province in the EBSC region.	+	1	1	TEMA Foundation has been working on land conservation and proper fertilization of tea orchards at micro-scale demonstration areas at Rize (pls. see baseline projects). The Foundation is eager to share and disseminate good practice results and scale them up through this project through trainings/ field visits among farmers.	TEMA Foundation will be informed about the project and sought for relevant research/practice s for the SLM demonstrations at tea orchards and INRM Plan.
Nature Conservation Centre Foundation (DKM): Conservation of biodiversity and sustainable management of natural resources.	Nation-wide interests relating to biological diversity, management of land, forest and water resources, climate change adaptation, site safeguarding, etc. Replication and dissemination of ecosystem- based management planning approach promoted by the organization to EBSC region.	+	1	4	DKM is an expert organization on spatial database and vulnerability analyses, INRM planning with ecosystem-based approaches at forests and drylands (pls. see baseline projects). DKM will be the institution responsible for the implementation of the project and will act as the Implementing Agency. DKM will also support the project activities through its expert pool and knowledge base.	DKM will be the institution responsible for the implementation of the project through a cooperation agreement.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Ye?il T?rkiye Ormanc?lar Derne?i (YTOD): Conservation of forests	Nation-wide interests relating to forest management	+	1	1	YTOD is an expert organization on forest management planning and interaction with forest villagers. YTOD will support the project activities through its knowledge base and experiences on stakeholder interactions.	YTOD will be informed about the project and sought for relevant experiences from other regions of Turkey.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Local environmental NGOs: KarDo?a Federation, Ye?il Artvin Derne?i, Hem?in Ya?am Derne?i, etc.: Mandate is to promote conservation of biodiversity and sustainable management of natural resources	Regional and site-specific interests relating to biological diversity, management of land, forest and water resources, site safeguarding.	+	1	1	The project aims at improving land management for all people; however, it needs guidance and contributions from representatives/opi nion leaders of local people and of environmental concerns for acknowledgement of the importance of local environmental issues, and better integration of these issues in land management. Therefore, these organizations will support the integration of local environmental issues and represent the rights of natural assets into both the project and specific project outcomes.	As influencing stakeholders, the Project will have regular engagement with local environmental NGOs through: ? informing them of project activities and intentions (at informal and Project Board meetings); ? seeking their input to spatial database & vulnerability analyses, INRM Plan preparation and implementation process ? seeking their guidance in the collaboration of relevant project and for other project operations and stakeholder consultations

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Local offices of Chamber of Forest Engineers (OMO), Chamber of Agricultural Engineers (ZMO), etc.: These offices provide professional services according to targets and goals of the government in order to develop the relevant industry, facilitating professional activities and representing relevant target groups.	Improving the enabling environment and thus the quality of professional services of target groups	+	1	1	The project aims at improving land management for all people, however, needs guidance and contribution of representatives/opi nion leaders of relevant expert and coordinating organizations for the better participation and integration of these groups in different aspects of land management, including capacity building. Therefore, these organizations will support the integration of agricultural and forest engineers/experts working in the EBSC region into sustainable land management.	Local offices of OMO and ZMO will be informed about the project and sought for collaboration in all activities including INRM Plan and capacity building activities in particular.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Local communities (villages)	Improving the living conditions of local people	+	2	2	Local people are the main beneficiary of sustainable land management, thus, will play a significant role in the implementation, monitoring and evaluation, and in turn adoption and dissemination of SLM practices proposed by the project in their land use patterns.	Inhabitants of the villages within the selected pilot project areas will be made aware of the issues and invited to take part in the decision-making processes through project outputs. They will be represented in project meetings by village headmen (muhtars) and actively involved in the project activities. Their cooperation will be sought in implementing project activities. The village headmen will be the main counterparts in linking the project objectives and activities to the needs of the people in the project area.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
Regional and local press and media: Serving the interests of a diverse group of viewers/listeners	High quality and reliable informative visual materials on land management issues of EBSC Region	0	2	1	Local and regional media institutions (radio and tv) reach millions of residents/local land users and managers in the EBSC Region. Therefore, these organizations play a significant role in the dissemination of project messages to EBSC residents.	Local offices of key regional and local press organizations will be spotted in the first month of the project, will be informed about the project outcomes and outputs in advance, and sought for collaboration in all project activities through various levels of involvement.
UN FAO ?Food and Agriculture Organization: Build a world without hunger through technical cooperation and assistance	EBSC as a dissemination area for the FAO-GEF LDN Project	+	2	2	FAO, the implementing agency of LDN Project (pls. see Baseline Projects) will follow up the implementation process and determine the EBSC Region as a dissemination area.	FAO SEC (Subregional Office for Central Asia) will be informed about the project and sought for collaboration in all activities including INRM Plan, SLM demonstrations and capacity building activities.

Stakeholder name and mandate	Interest at stake in the project	Effect of proje ct on intere sts (-, 0, +)	Importa nce of stakehol der to project[ 1]	Influenc e of stakehol der on project[ 2]	What specific role they will play in the project	How will they be included
World Bank: Mandate is to end extreme poverty and to promote shared prosperity	EBSC as a collaboration, exchange and dissemination area for TULIP Project	+	2	2	World Bank is the implementing agency of TULIP Project (pls. see Baseline Projects) will follow up the implementation process and may determine the EBSC Region as a dissemination area.	World Bank will be informed about the project and sought for collaboration in all activities including INRM Plan, SLM demonstrations and capacity building activities.

[1] Scale of 1 to 5; 1=low, 5=high

[2] Scale of 1 to 5; 1=low, 5=high

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).

In the coastal eastern Black Sea region, there is a high level of labor force participation of women and most of these women are working in agriculture. Gender inequalities in the Turkish agricultural sector were reported on by FAO in the gender profile of agricultural and rural livelihoods in Turkey (National Gender Profile of Agricultural and Rural Livelihoods Turkey. Food and Agriculture Organization of the United Nations. Ankara). The report concluded that these inequalities take the form of unequal access to real estate, property, livestock, farming equipment, entrepreneurship opportunities and financial resources, all to the detriment of women. The predominant production model relies heavily on non-paid family labor and a seasonal, and often migratory, workforce. Women take on a large share of the agricultural labor but are largely unseen in national statistics, and the informal nature of their employment means that they miss out on critical social benefits, such as accruing pensions. Having said that, programs dedicated to supporting rural women and female farmers specifically demonstrate the tremendous potential for further growth. When provided with training, knowledge and access to credit and technology, women are often quick to adopt innovative approaches and to seek ways to reach new markets. In contrast, women?s limited decision-making over
agricultural production and inadequate control over the returns from their labor serve as considerable disincentives and, ultimately, impede production.

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. A gender action plan will be prepared at the PPG stage which aims to make the project?s interventions more socially inclusive, by ensuring a close fit with local contexts, culture and livelihoods. The objectives of the gender action plan will be to promote gender equity in all practices aimed at addressing land degradation in the EBSC region; given the significant role of women in agricultural and rural livelihoods, to ensure that they are active participants in decision-making on integrated natural resource management; and to monitor the progress of project outcomes disaggregated by gender. The action plan will be guided by the following over-arching principles:

? Pursue efforts to mainstream gender and promote gender equality and the empowerment of women

? Address and do not exacerbate existing gender-based inequalities

? Consider women and men as active agents of change

? Conduct stakeholder engagement and analysis in an inclusive and genderresponsive manner

? Promote women?s access to resilience-building and income-generating models for sustainable value chains for the main products of the EBSC Region

? Ensure women?s access to training, decent work and technology opportunities to facilitate their participation in INRM

? Recognize the knowledge, needs, roles and interests of women and men

? Provide equal opportunities to women and men in terms of decision-making and participation throughout the identification, design, implementation, monitoring and evaluation of project activities

? Capitalize on opportunities to address gender gaps and support the empowerment of women in order to help achieve global environmental benefits

? Provide equal opportunities for women and men to benefit

? Collect gender-disaggregated data and information, use gender-sensitive indicators, gender-disaggregated targets and results, as relevant, and regularly incorporate these in monitoring, evaluation and reporting on activities

? Prepare and disseminate case studies on gender-sensitive INRM solutions to enhance policy guidelines and standards

? Support partners to ensure gender-responsive INRM, including land, water and forests

? Ensure integration of gender equality into legal and regulatory frameworks, policies and institutions addressing INRM in steep and humid landscapes

? Emplace a gender-responsive perspective within the project team through training

? Promote women?s participation and leadership in all forms of decision-making

The gender action plan will be implemented by the responsible institutions with the support of the project team including the project manager, field coordinator, and a gender advisor. The Project Board will be the ultimate project body to resolve any issues arising from the implementation of the gender action plan and will take necessary decisions to successfully implement the plan.

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:

- The inter-agency panel on SLM (Output 1.1) will include at least 30% women representatives.

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

 Gender equality considerations/gender perspectives to be well reflected in the project components, in particular, in Output 1.2 - Evidenced-based documentation, Output 2.3 -Training activities, Output 2.4 - Resilience-building and income-generating models

- Gender balanced approach to selection of the farms to benefit from tailored assistance that will facilitate accessing SLM demonstrations.

- Ensure women are not at a disadvantage in the selection and contracting process for local technical and administrative personnel (e.g., gender-responsive interview and hiring practices).

- 50% of staff recruited by and for the project will be women.

- Adopt participatory approaches where possible to include all relevant social groups, including marginalized people (e.g. unemployed youth), with attention to any special measures that may be required to increase the participation and inclusion of women in targeted communities (e.g., women-only consultation meetings).

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 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 the project gender action plan.

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.

Eastern Blacksea Region is the heart of tea production of Turkey as almost all the tea orchards are at Eastern Black Sea Provinces. The Tea Enterprizes General Directorate (?AYKUR), which is a public economic enterprise and was the monopoly in tea production in Turkey before 1984, is still the highest authoritity on agriculture and tea production in the EBSC Region and plays a critical role in any action regarding tea production and the interaction with tea farmers in the EBSC region. However, as the private sector has been given access to tea production in the region since 1984, resulting in a tripled production at the role and influence of private companies has increased in the last couple of years. Some of these companies established trial tea orchards at the region and work in parallel to ?AYKUR.

?AYKUR has already agreed to support the project implementation in any respect, become a partner, provide co-funding and utilize and disseminate relevant project outputs in the activities of the institution including trainings, trial orchards, etc. ?AYKUR is also highly supportive the idea of owning the project demonstration area during and after the completion of the project as a ?sustainable tea-orchard management basin? in a similar fashion that it acknowledges/promotes the Hem?in Basin of Rize Province as a pilot ?organic tea production basin?. A similar private sector engagement is envisioned for the major tea brands such as Do?u? ?ay, Lipton and local brands such as Karali and Salarha tea enterprises etc. to increase productivity at tea plantations and support farmers in their struggle with loss of product due to landslides, erosion or pollution. Therefore, the project will have regular engagement with private tea companies in addition to ?AYKUR through:

- informing them of project activities and intentions (at informal and Project Board meetings);

 informing them on climate risks and the menas of inclusion issues such as ecosystem services, nature based solutions in their business plans

- actively contributing to annual planning/training needs assessment processes

- seeking their guidance in the collaboration of relevant projects and for other project operations and stakeholder consultations

#### 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
Project may have inequitable or discriminatory adverse impacts on women	Minor	Moderately likely	A gender assessment will be conducted at the PPG stage for the target basin to assess women?s role and situation, project demonstrations will be selected based on the acknowledgement and consent of the land-owners for preventive and compensatory measures for agricultural production so as to minimize adverse impacts on women. The INRM Plan to be prepared as part of the project will have a section specifically addressing disadvantaged and marginalized groups if there are any and will include specific measures to minimize and reverse discriminatory adverse impacts on both women.
Project may potentially limit women?s ability to use, develop and protect natural resources	Negligible	Not likely	The forest authority of Turkey, which is responsible for the management of forests in consideration, already has a vast experience with the involvement of forest users in management actions. This experience and know-how will be brought to the project area by tapping into the expertise and guidelines accumulated at the headquarters through in-house training within stakeholder organizations in the EBSC Region.
Project involves small scale reforestation activities	Intermediate	Moderately likely	The forest authority of Turkey, which is responsible for the management of forests in consideration, has vast experience in ecosystem-based management planning and implementation, and has several guidelines and experts in this field. Forests are managed according to ecosystem-based multi- functional management plans where the GDF will implement forest management plans in the project area in line with SFM criteria and indicators. The details of management plans in the region will be provided during the PPG phase and the experience and know-how of GDF will be brought to the project area by tapping into these resources at headquarters through training and on the ground implementation.

Identified Risks and Category	Impact	Likelihood	Mitigation Measures
Potential outcomes of the Project are sensitive or vulnerable to potential impacts of climate change	Intermediate	Moderately likely	The project will strive to increase awareness among all stakeholders in the region and develop a knowledge base for the potential adverse impacts of climate change for the target area, with the goal being to facilitate decision-making and implementation of actions that take climate change risks into account and address these potential impacts. The spatial GIS- based database to be established under Output 1.2 will illustrate vulnerable areas that are at high risk not only at present but also for the next 30 years under various climate change scenarios, and will be instrumental in this regard. The coordination body to be established by the project (ad hoc Eastern Black Sea Coastal Region SLM Commission under Output 1.1) will also play a critical role in influencing local policies and actions, thus addressing the potential risks.
Proposed Project may directly or indirectly increase social and environmental vulnerability to climate change now or in the future	Intermediate	Not Likely	The project will strive to increase awareness among all stakeholders in the region and develop a spatial knowledge base for the potential adverse impacts of climate change (Output 1.2). The INRM Plan ? Output 1.3 ?which will also be informed by the spatial database ? will indicate ?inappropriate locations? for agricultural expansion, will also be a way to ensure that illegal agricultural expansion onto vulnerable lands does not take place. Then, the coordination body (Output 1.1) will also play a critical role in improving and enforcing local policies and actions which limit illegal agricultural expansion, thus addressing the potential risks.
Elements of Project construction, operation, or decommissioning (stone walls/terraces etc.) may pose potential safety risks to local communities	Intermediate	Low Likelihood	?EM and DSI have vast experience in such constructions and implement occupational health and safety measures strictly as an indispensable part of construction contracts. In addition to mandatory occupational health and safety procedures, the project will use extreme caution during the transportation of materials, and construction of these demonstration SLM practices and use warning signs and tapes during construction and comply with the OHS measures throughout the operation and decommissioning phases.

Identified Risks and Category	Impact	Likelihood	Mitigation Measures
Failure of structural elements (e.g., stone walls, terraces) to be constructed by the Project may pose risks to communities and/or workers.	Intermediate	Low Likelihood	The SLM measures will be implemented in carefully selected demonstration areas with detailed due- diligence considering probability and impact of natural disasters. ?EM and DSI have vast experience in such constructions and implement health and safety measures strictly as an indispensable part of construction contracts. In addition to mandatory health and safety procedures, the project will use extreme caution during the construction of these demonstrations and use warning signs against failure during construction, operation and decommissioning phases.
COVID 19 related risks to the project formulation and implementation: Project delays due to COVID 19 reinstated restrictions	Negligible	Not 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).
The Project may result in short- term economic displacement (e.g. access to resources due to temporary access restrictions	Minor	Low Likelihood	?EM has vast experience in this type of construction and will benefit from its past experience to ensure that access to natural resource areas will not be restricted without prior examination, consultation and consensus building including appropriate compensation with land users.

Identified Risks and Category	Impact	Likelihood	Mitigation Measures
The Project will not, but may lead to the involvement of support for livelihoods that may fail to comply with national and international labor standards and use of child labour; and may have some occupational health and safety risks due to small scale construction works for SLM demonstration.	Minor	Moderately Likely	Generally, seasonal workers from other parts of Turkey, Georgia, Syrian or Afgani refugees work in the tea harvest in the EBSC and there is no child labor problem for tea harvesting. However, in the hazelnut harvest, workers from the Southeastern Anatolia region work and there are children among these workers. The project will take strict measures to avoid child labor, ensure that working conditions meet the national and international standards including occupational health and safety measures, proper wages, etc This risk will be further assessed during PPG stage and included in an Environmental and Social Management Framework (ESMF) for the project.
The Project will not involve but may indirectly lead to application of pesticides for improved agricultural production	Negligible	Low Likelihood	The project will avoid use of pesticides in supported activities. Furthermore, in order to prevent occasional employment of harmful pesticide by local people, Integrated Pest Management (IPM) and Integrated Vector Management (IVM) approaches will be utilized that entail coordinated use of pest and environmental information along with available pest/vector control methods, including cultural practices, biological, genetic and, as a last resort, chemical means to prevent unacceptable levels of pest damage. This risk will be further assessed during PPG stage and included in an Environmental and Social Management Framework (ESMF) for the project.

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 General Directorate of Combating Desertification and Erosion Control is the institution responsible for the implementation of the project and will act as the Implementing Agency. As per discussions with the Government to be yet confirmed by capacity analysis to be carried out during the PPG, the Nature Conservation Center (NCC) will most likely assume an implementing role fort he project. The NCC implemented one component of the GEF project on sustainable forest management in Turkey, namely Integrated Approach to Management of Forests in Turkey, with Demonstration in High Conservation Value Forests in the Mediterranean Region, with a successful implementation of 1,700,000 USD budget through a HACT assessment. The PCAT prepared for the Nature Conservation Center revealed modareta risk, and further assessment will be made during the PPG phase. The proposed project will be implemented within the context of the UN Sustainable Development Cooperation framework and the UNDP Country Programme Document. UNDP Country Office (CO) in Turkey will provide quality assurance, in accordance with requirements of the GEF and UNDP Policies and Procedures. Projectlevel 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 Project Board (also called Project Steering Committee) will be responsible for taking corrective action as needed to ensure the project achieves the desired results. 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.

#### 7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments 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 project is highly relevant to and consistent with Turkey?s national priorities related to land degradation as outlined in key national policy documents. Several measures against land degradation especially at productive agricultural lanscapes have been mentioned in almost all development plans and annual programmes of Turkey. The Eleventh Development Plan of Turkey (2019-2023) currently under implementation clearly prioritizes the prevention of environmental pollution, the conservation

<sup>[1]</sup> See https://www.thegef.org/gef/policies\_guidelines

and sustainable use of biodiversity and natural resources and builds upon the priorities of the tenth development plan which strived for the management of the soil and water Resources through ?management systems? aiming at the sustainable use of water and soil. The eleventh development plan of Turkey also prioritizes disaster risk reduction studies taking socio-economic and physical characteristics of the regions into consideration, prioritizing different types of disasters and by increasing cooperation activities throughout the country. According to the plan, disaster hazard and risk maps will be prepared taking into account scenarios regarding the impacts of climate change throughout the country and risk maps will be prepared according to the types of disasters in places with high levels of disaster hazard.

Turkey undersigned the United Nations Convention to Combat Desertification in 1998 with a view to reducing the effects of land degradation, desertification and drought, and it plays an active role in the implementation of the Convention. In line with this purpose, the Action Plan and National Strategy to Combat Desertification was formulated, and a web-based monitoring-reporting system was established and the national LDN targets were set including forest soil conservation in 9,000 sq km by 2030, rehabilitate 7,500 sq km of pasture by 2030 and Rehabilitate 20,000 sq km agricultural land to improve productivity by 2030.

The project is fully in line with the National Action Program on Combating Desertification, i.e. the National Strategy and Action Plan to Combat Desertification 2019-2030 of Turkey strategic objective 1: To improve the condition of affected and prone to effect ecosystems, combat desertification/land degradation, promote SLM and contribute to LDN and Strategic objective 2: To improve the living conditions of affected and prone to effect populations and the expected impacts 1.1, 1.2., 1.4., 2.1 and 2.3. of these strategic objectives which aim to improve the condition of affected ecosystems, combat desertification/land degradation, calls for identifying the causes of desertification and specifying appropriate responses for addressing the problems caused.

The proposed project will also contribute to the National Climate Change Strategy and Action Plan which specifically addresses land use, agriculture and forestry strategies. The project will support many of the short, medium and long-term strategies identified for mitigating GHG emissions (e.g. improved agricultural techniques, adoption of proven technologies for carbon sequestration and/or absorption in soil). Furthermore, the project will directly address one of the cross-cutting issues requiring capacity development, namely sustainable land management, identified in Turkey?s National Capacity Self Assessment under Rio Conventions.

Moreover, the project will also support implementation of the National Rural Development Plan (2021-2023), which targets conservation of rural environment and natural resources in the view of principles of adaptation to climate change and green growth. The Rural Development Plan underscores the

relationship between rural poverty and natural resource degradation, recognizing a significant increase in recent years in erosion and degradation of land and water resources in the country, in many cases due to improper farming techniques and increasing climate variability (droughts, floods and landslides). To mitigate these processes, the Plan gives priority to strategies, measures and activities that address desertification and promote proper management of land and water land resources. The sustainable land management practices included in the proposed project will directly contribute to the objectives and implementation of this Rural Development Plan.

#### 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 management, land degradation neutrality and sustainable production practices nd 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.

#### 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\*

	CEO Endorsement/Approva		
PIF	1	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.

#### **Supporting Documents**

Upload available ESS supporting documents.

Title

Submitted

Annex 10\_Pre-SESP Turkey INRM

#### 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
Akif	Deputy Minister GEF	MINISTRY OF AGRICULTURE	12/3/2021
OZKALDI	Operational Focal Point	AND FORESTRY	

ANNEX A: Project Map and Geographic Coordinates

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

Kindly refer to GEF Portal - 1b. Project Map and Coordinates