Sustainable and Integrated Water Resource Management in Gediz River Basin in Turkey

Part I: Project Information

GEF ID
10732

Project Type
MSP

Type of Trust Fund
GET

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

Project Title
Sustainable and Integrated Water Resource Management in Gediz River Basin in Turkey

Countries
T?rkiye

Agency(ies)
FAO

Other Executing Partner(s)
Ministry of Agriculture and Forestry (MoAF); General Directorate of Water Management (GDWM)

Executing Partner Type
Government

GEF Focal Area
Multi Focal Area

Sector

Taxonomy

Forest, Land Degradation Neutrality, Land Degradation, Sustainable Land Management, Protected Areas and Landscapes, Focal Areas, Biomes, Biodiversity, Mainstreaming, Species, Financial and Accounting, Influencing models, Stakeholders, Gender Mainstreaming, Gender Equality, Gender results areas, Capacity, Knowledge and Research, Learning, Coastal and Marine Protected Areas, Terrestrial Protected Areas, Tourism, Agriculture and agrobiodiversity, Natural Capital Assessment and Accounting, Threatened Species, Rivers, Grasslands, Wetlands, Improved Soil and Water Management Techniques, Sustainable Livelihoods, Sustainable Pasture Management, Sustainable Agriculture, Income Generating Activities, Restoration and Rehabilitation of Degraded Lands, Land Cover and Land cover change, Land Productivity, Forest and Landscape Restoration, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Beneficiaries, Local Communities, Sex-disaggregated indicators, Women groups, Gender-sensitive indicators, Awareness Raising, Knowledge Generation and Exchange, Access to benefits and services, Capacity Development, Theory of change, Indicators to measure change, Knowledge Generation, Knowledge Exchange

Rio Markers

Climate Change Mitigation

Significant Objective 1

Climate Change Adaptation

Significant Objective 1

Biodiversity

Land Degradation

Submission Date

6/10/2022

Expected Implementation Start

11/1/2022

Expected Completion Date

11/1/2025

Duration

36In Months

Agency Fee($)

108,598.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-1-1	BD-1-1. Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GET	627,011.00	3,750,000.00
LD-2-5	LD-2-5. Create enabling environments to support scaling up and mainstreaming of SLM and LDN	GET	516,128.00	3,122,500.00
		Total Project Cost($)	**1,143,139.00**	**6,872,500.00**

B. Project description summary

Project Objective

Project Objective: To promote Integrated Natural Resource Management (INRM) and mainstream Biodiversity Conservation in the Gediz River Basin with a focus on the sustainable management of land and water resources.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Enhancing collaborative management of the Gediz River Basin (GRB).	Technical Assistance	1.1 Enabling environment to support the implementation of best practices in river basin management and biodiversity conservation aligned with the existent Gediz River Basin Management Plan (GRBMP). <u>Indicators</u>: *Governance mechanism for the GRB and its Ramsar site* *Enhanced capacity in implementing the Gediz RBMP. (Contributes to GEF Core Indicator 11). including % of women participation . Target:* 50 government staff and 200 local stakeholders trained in Gediz RBMP (50 % women) *Number of decisions taken for groundwater artificial recharge and water harvesting based on documentation*	1.1.1. Governance mechanisms (including incentives) developed and a road map provided to support community-based management and decision making at the basin and sub-basin level. 1.1.2. Gediz River Natural Capital Assessed, and scenarios for the incorporation of national capital into policy planning developed. 1.1.3 Hydro Economic Model developed for the GRB to strengthen the National Water Information System to support decision-making. 1.1.4 Stakeholder capacity building program to support the	GET	254,000.00	2,750,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
2. Enhanced sustainable land-use practices and integrated natural resource management.	Investment	2.1 SLM practices upscaled and promoted to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin. <u>Indicators</u>: *Ha of land restored under different types of land cover that integrates biodiversity* *(Targeting GEF Core Indicator 3. Area of Land Restored)* *Target:* restoration of 764 ha of land restored for improved landscape connectivity along riparian zones *Ha of land under SLM to restore ecosystem services and biodiversity (Targeting GEF Core Indicator 4.1. Area of landscapes under*	2.1.1 Demonstrate landscape restoration activities in supporting key ecosystems across different land covers to improve the provision of ecosystem services and biodiversity integration. (E. g., Artificial Water Recharge, Green belt application, Rainwater harvesting) 2.1.2 SLM practices upscaled and promoted in 413 ha to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.	GET	597,729.00	2,935,250.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3.Monitoring, evaluation and dissemination of best practices.	Technical Assistance	3.1. Project implementation based on RBMP and lessons learned/good practices documented and disseminated. <u>*Indicators:*</u> *Results Based Monitoring (RBM) system* *Number of people with enhanced knowledge and awareness. and percentage of women participation. Target: 400 people in the GRB with enhanced awareness of INRM, SLM and biodiversity mainstreaming (50% Women)*	3.1.1 A monitoring system developed for the restored lands within the framework of national LDN and CBD commitments. 3.1.2. Integrated monitoring and evaluation system for the project applied. 3.1.3 Final evaluation conducted and informing replication strategies. 3.1.4 Knowledge tools and information materials for SLM and integration of biodiversity into land-use plans developed and disseminated based on best practices.	GET	187,550.00	500,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
				Sub Total ($)	**1,039,279.00**	**6,185,250.00**
Project Management Cost (PMC)						
				GET	103,860.00	687,250.00
				Sub Total($)	**103,860.00**	**687,250.00**
				Total Project Cost($)	**1,143,139.00**	**6,872,500.00**

Please provide justification

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Agriculture and Forestry	In-kind	Recurrent expenditures	2,000,000.00
Recipient Country Government	Ministry of Agriculture and Forestry	Public Investment	Investment mobilized	4,300,000.00
GEF Agency	FAO	Grant	Investment mobilized	572,500.00
			Total Co-Financing($)	**6,872,500.00**

Describe how any "Investment Mobilized" was identified

Investment mobilized from the MoAF correspond to programs and project implemented in the target region (eg. restoration activities) and resources allocated to SLM activities in the framework of the Gediz RBMP FAO cofinancing corresponds to several projects and regular programme activities implemented under FAO T?rkiye Regular Program

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	T?rkiye	Biodiversity	BD STAR Allocation	627,011	59,566	686,577.00
FAO	GET	T?rkiye	Land Degradation	LD STAR Allocation	516,128	49,032	565,160.00
				Total Grant Resources($)	**1,143,139.00**	**108,598.00**	**1,251,737.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

43,162

PPG Agency Fee ($)

4,100

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
FAO	GET	T?rkiye	Biodiversity	BD STAR Allocation	23,674	2,249	**25,923.00**
FAO	GET	T?rkiye	Land Degradation	LD STAR Allocation	19,488	1,851	**21,339.00**
				Total Project Costs($)	**43,162.00**	**4,100.00**	**47,262.00**

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
14,900.00	14,900.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

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

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

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
14,900.00	14,900.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Gediz Delta	**125689** 166884	**Select**Others	14,900.00	14,900.00			72.00		

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
450.00	0.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
SelectRangeland and pasture	100.00	764.00		

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
250.00	0.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Select	100.00			

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

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

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
250.00	413.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
250.00	413.00		

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

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

Type/Name of Third Party Certification

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

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

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

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

Indicator 4.5 Terrestrial OECMs supported

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

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

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	100505	334848	0	0
Expected metric tons of CO?e (indirect)	0	0	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	100,505	334,848		
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting	2021	2022		
Duration of accounting	13	13		

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

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

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

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

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

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

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	205	325		
Male	195	325		
Total	400	650	0	0

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

Part II. Project Justification

1a. Project Description

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

1. The Government of T?rkiye is carrying out significant efforts to sustainably manage its water resources in line with the EU Water Framework Directive (WFD).[1][1] In this context, T?rkiye uses hydrological basins as the basis for the management of natural resources. As discussed below, the proposed project will support government efforts to implement key aspects of the Gediz River Basin (GRB) Management Plan developed in 2018. GEF resources will be used to strengthen the enabling environment and showcase strategic practices to induce a change in the way natural resources are currently managed in the GRB. By ensuring local stakeholders are part of the decision-making processes, the proposed project will develop a model that ensures GEF-financed interventions are accepted by project beneficiaries. As project interventions show the benefits of improved management, best practices will be disseminated to ensure the proposed models are upscaled not only to the GRB but to other basins in T?rkiye, leading to improvements in the status of natural resources in the country.

General background

2. River basins are used in T?rkiye as the main unit to manage natural resources in order to achieve sustainable development.[2][2] The country uses integrated basin management to (i) protect and improve water ecosystems and other related ecosystems, (ii) and to prevent degradation by encouraging the sustainable use of water and soil resources. Integrated basin management enables different sectors and users to work together to analyze the long-term threats, to agree on interventions, and to monitor positive or negative impacts of such interventions. T?rkiye has 25 river basins with a total water flow of 186 billion m^3. More than half of the surface flow originates from five main basins: -Firat-Dicle, East and West Black Sea, Antalya and West Mediterranean. Annually, rivers discharge 41 billion m^3 of freshwater to the Black Sea and 36 billion m^3 to the Mediterranean. Groundwater reserves are estimated at 14 billion m^3.[3][3]

3. T?rkiye?s rivers and lakes cover an area of about 10,000 km2, which represent very important inland water resources to maintain biological diversity. In studies conducted so far, 59 wetlands of national significance and 13 wetlands of local significance have been identified and 14 of them have been designated as Ramsar sites. Deltas are very important for biodiversity, especially regarding waterfowl. The deltas formed by the Meric, Gediz, Buyuk Menderes and Kucuk Menderes rivers that are flowing to the Aegean Sea and the Goksu, Seyhan, Ceyhan Deltas formed by the respective rivers are suitable habitats for a large number and different species of waterfowl as the Anatolian plain freezes during winter. The average annual rainfall in T?rkiye is about 574 mm, roughly one-third of which reaches water reserves and thus contributes to the maintenance of wetlands.

4. T?rkiye?s inland waters and marine environment generate important national and global social, economic and environmental benefits (biodiversity, carbon storage, products and other ecosystem services). Although water systems are essential for socio-economic development especially in arid and semi-arid regions where agriculture is the major industry, and despite concerted efforts at the national level, inland waters and water catchments still face several threats. River basins in most of the Eastern and Southern Mediterranean countries suffer from water scarcity due to (i) rapid demographic and economic development particularly in the coastal zone, (ii) urbanization, (iii) industrialization, (iv) tourism, and (v) an often-inefficient agricultural sector as the dominant water user. Low availability of renewable water, overexploited groundwater, pollution, inefficient infrastructure, pronounced seasonality with unfavorable demand patterns different from the seasonal supply aggravate the situation. Although collaborative and effective water resources management play a crucial role in these areas, there are still some difficulties to support sustainable water resource management and environmentally friendly applications and practices inside the catchments.

5. According to the 11th National Development Plan (NDP) covering the period of 2019-2023,[4][4] the total available water resources in T?rkiye add up to 112 billion m3, of which 43 percent is currently used; 74 percent in irrigation, 15 percent as tap-water and 11 percent in industrial use. T?rkiye is listed among water-scarce countries[5][5] with a water potential of approximately 1,500 m3 per capita in 2013. By 2030, available water per capita is expected to decrease to 1,100 m3 and T?rkiye might be exposed to water scarcity. Agriculture is one of the three ?Priority Development Areas? (together with Tourism and the Defense Industry) included in the 11th NDP. In the context of natural resource management, 11th NDP centers on the axes: ?A Stable and Strong Economy?, ?Competitive Production and Efficiency?, ?Qualified People, A Strong Society?, ?Livable Cities, Sustainable Environment?. Within the scope of conservation, development and sustainable use of water resources; plans, strategies and action plans made based on watersheds will be put into practice in integrity and Measures to prevent agricultural water pollution will be extended.

6. Similarly, T?rkiye?s Land Degradation Neutrality Report (LDN Report) highlights the importance of applying sustainable water management practices to reduce the risk of drought and

impact on livelihoods and food security. The LDN Report identifies the following drivers of land degradation in T?rkiye: (i) drought risk and irregular precipitation regime, (ii) extreme and inappropriate irrigation systems, (iii) overuse of fertilizers and pesticides pollute the soil and inland waters, increasing eutrophication. Fortunately, potential solutions exist, including establishing irrigation systems in rain-fed agricultural lands will facilitate increased productivity and reduced drought risk., Shift to pressurized irrigation systems and refraining from over-irrigation will prevent salinization of land.

7. According to T?rkiye National Water Plan[6][6]; T?rkiye?s 2023 targets. reducing water consumption to 64% in agriculture, to 20% in industry, and 16% in drinking-domestic water within the scope of using the existing available water, and improving irrigated farming lands to be brought into use. Within this scope, targets foresee the provision of irrigation to a wider range of areas in agriculture through modern irrigation techniques such as pressurized irrigation system, and allocation of 72 km^3 of water to irrigation works. Estimates for domestic water consumption for 2023 suggest, considering other sectorial dynamics such as population growth, urbanization, and rapidly increasing tourism sector will triple to 18 km^3 from 2008 value of 6 km^3. As for the industrial water demand, it is expected to increase to 22 km^3 from the current value of 5 km^3

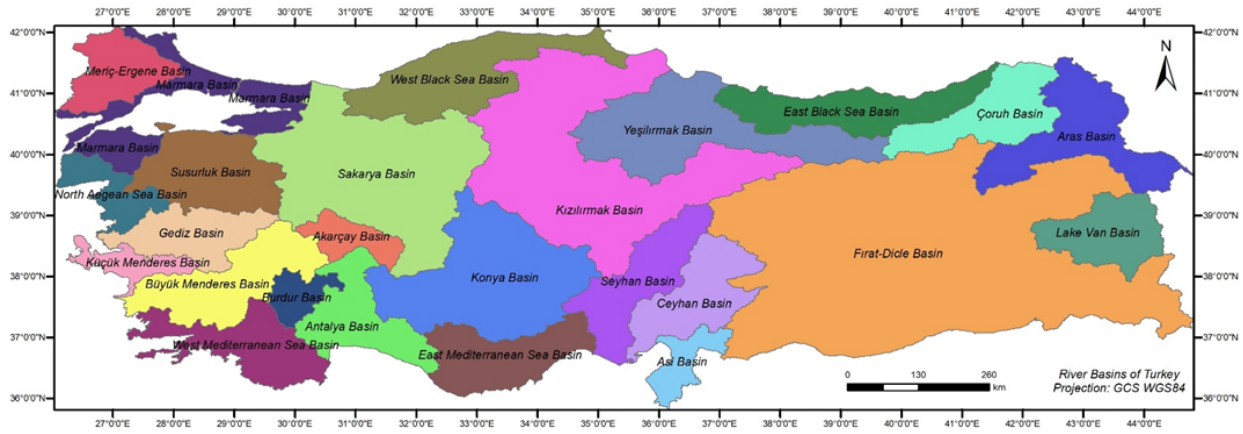
8. In order to enhance the efficiency of water management under watershed-based integrated protection and controlled use principles, Protection Action Plans were prepared for all 25 river basins in T?rkiye between the period of 2009-2013. The list of these basins has been given in Table 1 and Figure 1. Water allocation, according to the purpose of use, is done within the scope of the management plans by taking into account the needs and water use priorities, and also by assessing surface and ground waters together.

Table 1. River basins of T?rkiye

No.	Name of Basin	Precipitation Area (km?)	Annual Average Flow (km^3)	Annual Average Yield (l/s/ km?)
1	Meri?- Ergene Basin	14,560	1,84	4
2	Marmara Basin	24,100	7,54	10,3
3	Susurluk Basin	22,399	4,23	5,5
4	Kuzey Ege Basin	10,003	1,5	4,8
5	Gediz Basin	18,000	1,54	2,9
6	K???k Menderes Basin	6,907	0,53	2,4

No.	Name of Basin	Precipitation Area (km?)	Annual Average Flow (km3)	Annual Average Yield (l/s/ km?)
7	B?y?k Menderes Basin	24,976	2,97	3,6
8	Bat? Akdeniz Basin	20,953	6,97	10,4
9	Antalya Basin	19,577	11,25	17,5
10	Burdur G?ller Basin	6,374	0,26	1,3
11	Akar?ay Basin	7,605	0,33	1,9
12	Sakarya Basin	58,160	5,16	2,6
13	Bat? Karadeniz Basin	29,598	9,91	10,9
14	Ye?il?rmak Basin	36,114	6,58	5,3
15	K?z?l?rmak Basin	78,180	6,12	2,4
16	Konya Kapal? Basin	53,850	2,65	1,7
17	Do?u Akdeniz Basin	22,048	8,24	12
18	Seyhan Basin	20,450	6,79	9,7
19	Asi Basin	7,796	0,89	3,6
20	Ceyhan Basin	21,982	7,37	10,8
21	F?rat-Dicle Basin	184,918	49,91	9.0
22	Do?u Karadeniz Basin	24,077	14,93	20,7
23	?oruh Basin	19,872	7,05	11
24	Aras Basin	27,548	4,18	4,7
25	Van G?l? Basin	19,405	2,26	4
	Total	**779,452**	**171,00**	**164,00**

Figure 1. Distribution of the river basins of T?rkiye



9. T?rkiye?s inland surface waters as well as transitional and coastal waters are affected by major modifications, such as water abstraction, water flow regulations (dams, weirs, sluices, and locks) and morphological alterations, straightening and canalization, and the disconnection of flood plains. Diffuse pollution from agriculture and livestock affects several water body categories from rivers to groundwater as well. The most important pollutants affecting water supply are nitrate contamination of groundwater supplies, nutrients that affect levels of phytoplankton in reservoirs, and microbiological contamination from animal waste. Key contaminants include nitrates, bacteria (e.g. Escherichia coli) and pesticides.

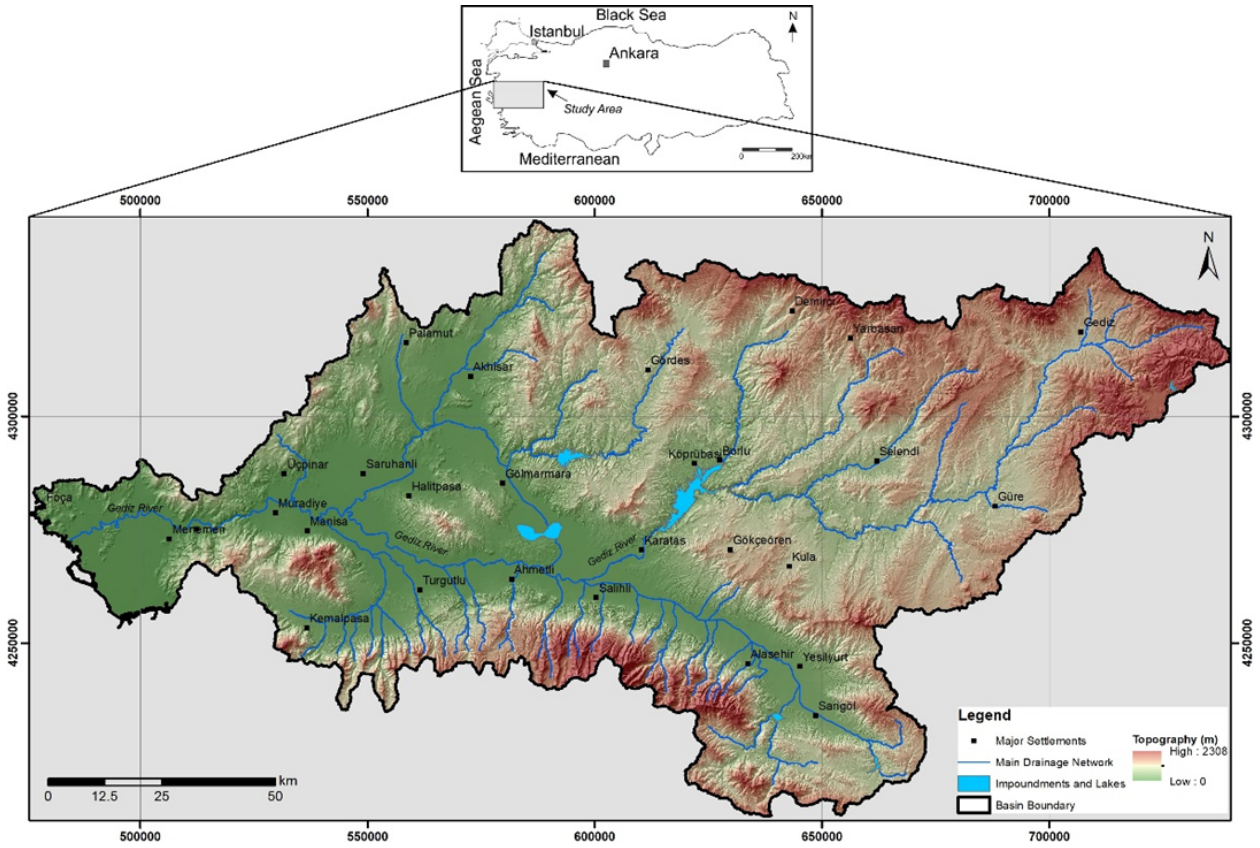
10. At the most basic level, three related global trends greatly exacerbate the water crisis. These trends relate to climate change, the rapid increases in population growth and economic development, all of which strongly increase water demand as well as pollution. Especially, increasing temperatures coupled with decreasing precipitation are leading to serious water stress, particularly in the southern and western parts of T?rkiye which includes the Gediz River Basin. This situation will be exacerbated by sharply rising demand, particularly from farmers.[7][7] It is projected that nearly 20% of the surface water in some basins will be lost by 2030.[8][8] The results of climate change will also seriously affect land use and land cover of the basins. In the Mediterranean coastal zones, the water demand is lowering the water table and leading to seawater intrusion in most coastal aquifers. On the contrary, the quantities of water that any country can economically develop, unfortunately, continue to decrease or remain limited. For the above and a variety of other reasons like climate change, improved living standards, urbanization, and industrialization, water managers have been faced with more complex and difficult problems in the early 21st century, and it is expected that coping with water problems will be harder in the future.

Project site

11. Gediz River Basin is geographically located between 38?04?-39?13? northern latitudes and 26?42?-29?45? eastern longitudes (Figure 2). The basin is surrounded by Kuzey Ege Basin to the north, K???k Menderes and B?y?k Menderes Basins to the south, Sakarya Basin to the east and the Aegean Sea to the west. From a topographical point of view, the highest points in the basin are Murat, Bozda?, Koca, K??la, Umurbaba, Uysal, ?al, ?ulha, Mamut, Nif, Spil, Yamanlar, Demirci, Simav, Karao?lan, K?l??, Dumanl? and Kara mountains (SYGM, 2019). The topographical elevation of the basin lies between 0 and 2308 m. The Gediz River Basin was selected for this project for the following reasons:

i. The basin has a River Basin Management Plan (RBMP) approved by the Water Management Coordination Committee convened under the premises of the Ministry of Agriculture and Forestry
ii. GRB is identified as an LDN hotspot in T?rkiye?s National Land Degradation Neutrality (LDN) Report.[9][9] Land degradation in the basin is due to inappropriate land use, urbanization, industrialization, tourism and particularly intensive agricultural activities. Erosion is also a serious problem, particularly on agricultural lands.
iii. Water scarcity and pollution are the two major problems identified in the Gediz RBMP. significant problems in the basin.[10][10],[11][11] The Gediz RBMP identifies greenbelt applications, groundwater artificial recharge, and rain harvesting potential supplementary measures to support IWRM, even though these are not defined in legislation. The proposed GEF project will implement these measures at a small scale and prepare them for upscaling using co-financing resources.
iv. GRB is very vulnerable to drought, a problem that is expected to be exacerbated by climate change.[12][12] A recent drought risk assessment using socio-economic data as well as drought hazard and drought vulnerability indices in T?rkiye concluded that the GRB?s vulnerability to drought is very high in the west (mainly Izmir province) and high in the eastern part of the basin (Manisa province). Drought is directly correlated with municipal and agricultural water shortages, which severely affects agricultural areas.
v. The GRB includes the entire range of prototypical water management problems in the region therefore their potential solutions could be upscaled to other basins.

Figure 2. The Gediz River Basin.



12. The basin includes areas predominantly from four provinces including Manisa, ?zmir, K?tahya and U?ak. The total population of the settlements entering the basin of the province in 2019 was about 2.2 million people. Approximately, 1,091,844 hectares of Manisa are in the basin (64% of the basin); the share of the basin belonging to U?ak is 214,193 ha (13%) and for ?zmir and K?tahya this amount is 181,474 ha (11%) and 151,838 (9%) respectively[13][13]. More specifically, Table 2 shows the sites that the project will target. These sites were selected during the preparation phase of the project taking into account the results and findings from the environmental Baseline Report (Annex M) and were validated during the Project Validation Workshop.

Table 2. Selected sites in the Gediz River Basin for Project Implementation.

Site Name	Province	District	Predominant Land use and Land cover	Area (ha)	Site #	Target Outcomes/ Outputs
Irlamaz Creek	Manisa	Turgutlu	Stream bed and floodplain	Area to be confirmed during project implementation	1	Outcome 1.1
Tabak Creek	Manisa	Salihli	Stream bed and floodplain	Area to be confirmed during project implementation	2	Outcome 1.1
Kula-Güvercinlik Village	Manisa	Kula	Shrubland	Area to be confirmed during project implementation	3	Output 2.1.1
Kula-Sandal Village	Manisa	Kula	Rangeland	164	4	Output 2.1.2
Menemen-Yanıkköy Site:2	İzmir	Menemen	Rangeland	33	5	Output 2.1.2
Menemen-Yanıkköy Site:3	İzmir	Menemen	Rangeland	13	6	Output 2.1.2
Foça-Yenibağarası Village	İzmir	Foça	Agriculture	Area to be confirmed during project implementation	7	2.1.2
Kum Creek (Channel from Çömlekçi Diversion Weir to Marmara Lake)	Manisa	Gölmarmara	Stream bed and floodplain	203	8	Output 2.1.2
Gölmarmara Lake Northern Shoreline Forestration	Manisa	Gölmarmara	Lake area (below max. Water level)	764	9	Output 2.1.1
Subtotal				1,462		
Gediz Delta - RAMSAR Site	İzmir	Menemen	Reed	14,900	10 y 11	Outcome 1.1

The Global environmental Problem:

13. The Gediz River Basin (GRB) is a typical case where four major drivers, climate change, water scarcity, land degradation, and pollution, need to be addressed to ensure sustainable management of its water and land resources, including biodiversity.

14. The GRB has significant importance for T?rkiye from an agriculture, industry and service sector perspective and sustainable management and development of resources of the Basin is crucial. Within this context, direct discharges, wastewater treatment plants, dumpsites, organized industrial district zones and individual industrial plants are considered as main stress factors in the Basin. For instance, process waters and wastes sourced from metal, leather, paper-cardboard-packaging, chemistry, marmalade, textile, food, ceramic, vegetable oil, etc. are directly discharged into the Nif Stream without any treatment procedure. Especially, the olive oil industry and its treatment by-product olive oil mill cause serious environmental problems such as acute high-loaded discharges and there are currently 167 actively existing olive oil plants. However, most of the industrial plants have industrial wastewater treatment plants, but the river cannot tolerate the load anymore because of the high number of discharge points. In addition to this, wastewater treatment plants are not regularly operating or by-passing the wastewater to the river.

15. The Gediz River Basin has very suitable climatic conditions for growing a wide range of crops and has suitable agricultural lands. Therefore, it plays an important role in the Aegean Region.

Agricultural lands constitute 53% of the total area of the basin and contribute 10% of the total agricultural production of T?rkiye. Additionally, 5.6, 10, and 16 percent of the land in T?rkiye planted with vegetables, olive and vineyards, respectively, are located in the GRB. Agricultural pollution is distributed across a large spectrum due to use of fertilizer and pesticides in agricultural facilities. Moreover, the groundwater level is falling because of irrigation. Animal husbandry, the second most important source of livelihoods for local people, corresponds to 25% of agricultural production. Manure production and its uncontrolled usage and disposal cause increases in area source emissions.

16. The existing water resources are under pressure because of the above-mentioned reasons that can be summarized as rapid industrial development, population growth, related increases in agricultural production, and pollution. The long-term impacts of existing trends and possible future tendencies in water uses have to be evaluated to develop sustainable water policies. This is necessary for maintaining the sustainable development of the region. The importance of the institutional and regulatory framework and the need for direct participation of major actors and stakeholders in the planning and decision-making processes should be strengthened.

17. Social, economic and environmental targets within the scope of sustainable water management must include clean drinking water and domestic water, regional development, agricultural and industrial development, water quality, support to habitats and ecosystems, and preservation of aesthetic and natural values. In addition, T?rkiye is currently working on a national water information system and a basin monitoring system in order to ensure sustainable water management.

18. Another goal is to allocate sufficient water to riverbeds, natural lakes and wetlands to ensure preservation and sustainability of the water balance to protect natural habitats and biodiversity. Control and prevention measures should be taken related to pollution of water resources, while the reuse of waste discharge waters in industry and agriculture should be promoted. Overuse of fertilizers and pesticides in agriculture should be mitigated to prevent the pollution of agricultural lands as well as water pollution, and focus will be put on developing clean production technologies in the industry in order to reduce water demand and protect water quality

Barriers

19. The main barriers that need to be addressed to overcome the problems described above are as follows:

Barrier #1: Lack of an effective water management system for Gediz River Basin

The GRB is under water stress and is sensitive to drought and the existing water management system needs to be improved to solve the challenges. Although Sectoral Allocation Plan (SSTP) has been prepared in order to ensure the sustainable use of water in GRB, all sectors (environment, drinking, agriculture, industry energy, mining, fisheries and aquaculture//etc) have to consider the plan, In this sense, there is a requirement for a functional water allocation system which contains basin-based monitoring of the implementation of SSTP

20. Coordination among the responsible units needs to be enhanced. Two public agencies are responsible for in-stream and treated wastewater discharge monitoring, In-stream monitoring is done by State Hydraulic Works, and treated wastewater discharge monitoring is executed by the Ministry of Environment and Urbanization. Provincial Directorates of Environment and Urbanization have enforcement power. Governors are subject to competing pressures and are generally unable to ensure effective enforcement programs. Responsibilities for basin planning and monitoring are re-arranged in a way that covers different dimensions such as ground and surface water, water quantity and water quality.

21. As the management system and implementation are not participatory enough, the engagement of local stakeholders remains one of the significant barriers. Participation of local-level stakeholders is minimal at the management stage. Increasing the awareness of the private sector regarding the pollution sources of the River Basin such as area sourced wastewater, and the emergence of effective NGO-based advocacy for environmental concerns in the basin will strengthen the coordination mechanism. NGOs have no role in performing essential management functions, but clearly have an important role to play in overall basin governance. Local-level support and engagement are essential for any successful conservation and resource management effort.

Barrier #2: Weak balance among conservation and utilization of natural resources in the river basin

22. Biodiversity beneftis are not sufficiently taken into account in production (agricultural and forestry) landscapes in the basin. For example, biodiversity is not sufficiently considered in afforestation activities and in establishing riparian forests, as afforestation can alter the habitat features of some of the species which are of conservation concern. Some highly rare and threatened plant species are subject to overgrazing or under the pressure of construction and land conversion.

23. Forests of the basin have critical importance in regulation of the hydrologic regime and water provision services for various purposes, such as potable, irrigation and industrial production. On the other hand, forests are mainly managed for timber production and protection purposes. These protection measures include erosion control and preventive measures against landslides but do not include water protection directly. The existing forest management and planning paradigm provides opportunities to manage the forests for different social, ecological, and economical functions.

However, lack of know-how of systematic inclusion of water provision services into forest management and planning is a critical gap, especially considering the increasing impact of climate change.

24. Institutional and technical capacities, mainly at sub-regional and sub-district levels, are very limited to ensure effective management and holistic river basin management, conservation of natural resources and sustainable and nature-friendly activities. This barrier is significant, as these institutions have the primary mandate of planning, coordinating and monitoring the river basin activities, and are required to work with multi-stakeholders and provide technical leadership to support sustainable resource management and conservation of the values and assets.

Barrier #3: Limited knowledge about innovative approaches and tools for sustainable use of water resources

25. One of the significant barriers in ensuring natural resource management and conservation of the water resources in the river basin is insufficient knowledge and experience on innovative approaches and alternative solutions to effective use of the resources. Nature-friendly practices and alternative solutions will increase the quality and sustainability of the resources. For example, improvement of the irrigation schemes, either in conveyance systems or in the method of field irrigation, is positively reflected in the water budget of the basin. If improvements can be realized in the irrigation schemes, these will positively affect the wetland-bird habitat as well. It has been demonstrated around the world that local communities would be willing to participate and engage in the sustainable management of natural resources if adequate economic incentives are provided. Though at present, in the project region, communities are engaged in activities that provide them with a certain level of income, this is neither sustainable nor adequate and results in over-and unsustainable utilization of natural resources.

Barrier #4: Lack of a quality monitoring program for the river basin

26. The major water-related problem facing the Gediz Basin presently is the poor and deteriorating quality of its surface water. The deterioration is mainly caused by intensive agriculture and high pollutant loading to the surface and underground waters; lowering of the groundwater table and over usage of surface water due to irrigation, and increase in usage of agricultural chemicals for more productive agriculture. With the addition of rapid growth in population and the even more rapid growth in the local industry, a vicious circle is faced in the Basin. Failure to control this growing problem at its several sources leads to large requirements for in-stream flows for dilution ? flows which are then unavailable for other uses. Currently, a monitoring program have been carried out by the General Directorate of Water Management, however, the problem stems from several sources such as weak enforcement, weak coordination among involved agencies, limited availability of data,

haphazard monitoring of wastewater discharges, inadequate funding for wastewater treatment plants, and limited public awareness of the problem.

Barrier #5. Lack of an analytical framework

It follows from the above discussions that the project aims to tackle a wide array of identified development objectives. Hence, concerted efforts and coordination are required to synchronize activities and avoid conflicting interests. The project will, therefore, benefit immensely from a decision support tool (DST) that accurately presents the socio-economic and biophysical processes in the GRB to inform policymakers on the impact of their decisions and ensuing interventions. The DST is based on a multidisciplinary engagement strategy that serves to align flows of information from all GRB land and water users and other stakeholders involved from grassroot to ministerial levels. Harmonizing these different data increases the credibility of the tool and ensures that outcomes are better understood. The developed tools may include illustrating the results of interventions in synoptic tables and colorful maps that are interpretable for a large audience and makes comparisons between various options possible.

The baseline scenario and any associated baseline projects.

27. The current legislative structure of water management in T?rkiye exhibits a scattered structure, with many institutions being responsible for the tasks regarding land and water management, including:

? Ministry of Agriculture and Forestry (General Directorate of Water Management, General Directorate of State Hydraulic Works, General Directorate of Agricultural Research, General Directorate of Agricultural Reform, General Directorate of Fisheries and Water Products, General Directorate of Plant Products, General Directorate of Nature Conservation and National Parks,)

- ? Ministry of Environment and Urbanization (Directorate-General for Environmental Management / Directorate-General for Environmental Impact Assessment, Permit and Inspection
- ? Municipalities/ Water and Sewerage Administrations
- ? Ministry of Energy and Natural Resources
- ? Ministry of Health (Public Health Institution of T?rkiye)

28. The Ministry of Agriculture and Forestry is authorized for the coordination of management of water resources in the river basin. There is also a provision on the drafting of a National Water Plan including the water management policy to meet the social, ecological and economic needs, by taking

into account the current and future situation of the water resources for integrated management of water resources in terms of quality and quantity, along with the participation of relevant stakeholders.

29. The programs implemented by the General Directorate of Water Management (GDWM), would form the main baseline for this project. The regular program of GDWM focuses on the planning and management of the water basins in T?rkiye. Under the program, the GDWM has been working for the planning and monitoring of the Gediz River Basin since 2019 with a total investment of USD 710.000. GDWM also carries out the national catchment planning and monitoring programme (supported by the national budget of T?rkiye) to prepare water Catchment plans for the 25 River Basin in T?rkiye. The objectives and key focus of this program are: (i) preparation of the river basin management and action plan for each river basins, including strategies, policies, and management objectives together with investment and monitoring, (ii) raising awareness on river basin management and sustainable resource management, and (iii) increasing the collaborative management of the river basins together with key stakeholders.

30. Other river basin management and conservation-related baseline activities include:

i. **Basin Protection Action Plans (BPAPs)**: BPAPs are one of the most important activities carried out to manage water resources, one of the most important components of the sustainable development ofT?rkiye. BPAP use the basin as the basis for planning and fulfill the requirements of the EU Water Framework Directive (WFD).[14][14] In 2010, 11 BPAPs were prepared, and the remaining 14 BPAPs were completed in 2013. BPAP is the first and important approach to the management of water resources in the basin from the WFD point of view. This plan is the basis of future work (River Basin Management Plan) thanks to the characterization and diagnosis work carried out at the basin level. This includes the following information:

- Characterization of existing situation (identification of the characteristics of surface water and groundwater resources as well as pollution within the river basin; identification of pressures and impacts caused by urban, industrial, agricultural, economic, etc. activities in the river basin; examination in detail of identified pollution sources and loads; identification of water potential, utilization purposes and environmental infrastructure status)
- Describing important pressures within the river basin and listing required precautions for reaching good water quality; preventing pollution; calculating environmental flows.
- Carrying out studies and planning with regard to short, medium and long term measures with the participation of all stakeholders in order to protect

and improve river basins. Ensuring participation of all stakeholders in the process.

ii. **River Basin Management Plans (RBMPs)**: Through publishing a By-law on Preparation, Implementation and Follow up of RBMPs in the Official Gazzette dated 17 October 20172 numbered 28444 it was obliged to develop River Basin Management Plans for 25 basins.

- In RBMPs, studies are carried out for the protection and planning of surface waters and groundwater following a holistic approach. Since 2013, 11 River Basin Management Plans have been completed and 7 River Basin Management Plans are still being prepared. The remaining 7 River Basin Management Plans will be completed by 2023. These plans include (i) identification of the river basin district, (ii) an Article 5 Report on each river basin district, (iii) a ?significant water management issues? report for each river basin district, (iv) a programme of proposed measures for each river basin district, (v) environmental objectives for a selected number of water bodies, and (vi) a monitoring programme and status classification according to the WFD.
- RBMP differs from the BPAP in their broader consideration of biological issues, as well as hydro-morphological and chemical issues. RBMPs consider water bodies and typology, classification, objective setting, and economic analysis and are built from a thorough understanding of communication processes, pressures and impacts, and monitoring data.
- Finally, as a complementary stage of BPAPs, RBMP are foreseen as one of the main intervention areas to reduce impacts of climate change, enhance efficient water management allocation. and enhanced ecosystem services

Gediz Drought Management Plan

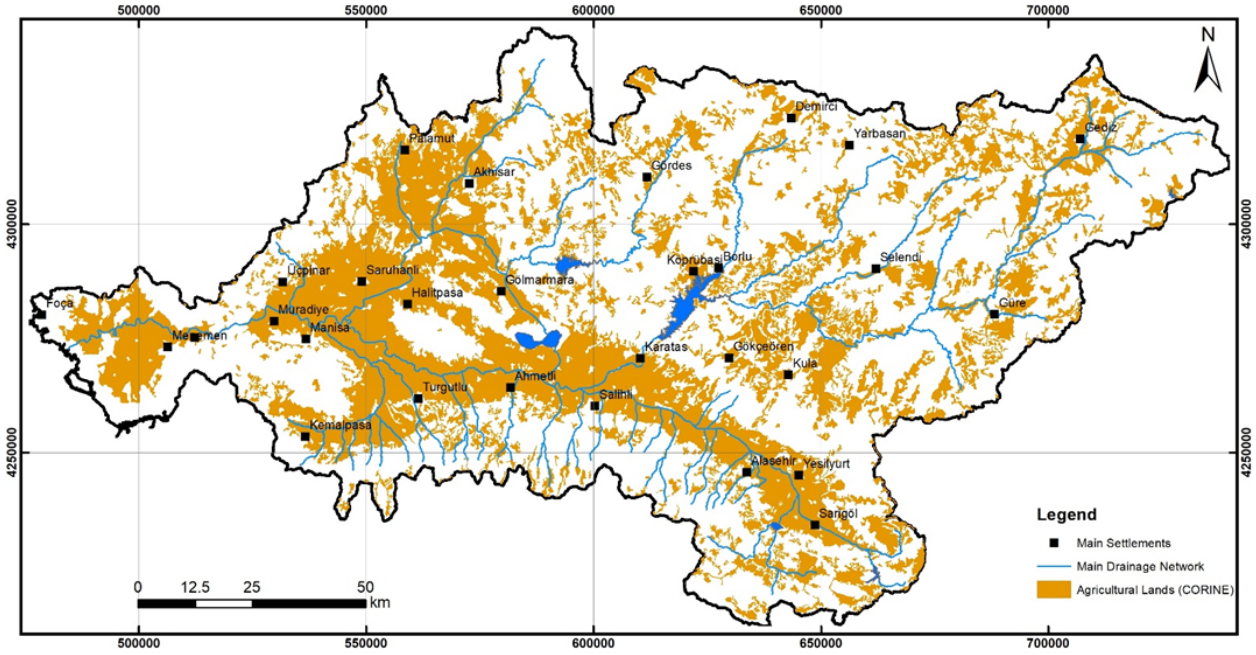
Considering the water budget of the basin and its sensitivity to drought, it is aimed to reduce the negative effects of drought on production resources and socio-economic life, and to ensure rational and sustainable use of limited water resources in the basin. To achieve these goals, drought indices, indicators and threshold values are determined with the integrated watershed management approach, and accordingly, before, during and after the drought. In this sense, Gediz River Basin Drought Management Plan was prepared in 2019 by the DG Water Management of the ministry of Agriculture and Forestry which the studies to be done and the measures to be taken will be revealed. In this direction, the drought management cycle is followed.

General Baseline:

31. Agricultural and industrial activities within the boundaries of the Gediz River Basin are significant. There are large urban settlements and agricultural lands in this region (Figure 3). Woodlands and shrubs only cover the 35.5% of central plain. The lakes and salt marshes covers smaller part of the central plain which is 1.9% of central plain area. In total, 37.4% of central plain area has remained as natural areas. The remaining 62.6% of the central plain area is covered by agricultural and urban areas. Agricultural lands have a share of 53.2% in this region. The remaining 10% is covered by industrial zones, urban infrastructure areas and residences. It is seen that agricultural lands play a significant role in the Gediz Basin land-use. In terms of T?rkiye's total

agricultural land, 10% of the total agricultural production value is obtained from the Gediz Basin. 16% of T?rkiye's total vineyard areas, 10% of the olive fields, and 5.6% of vegetable fields are found in the region[15][15].

Figure 3. Agricultural lands in the Gediz River Basin (GRB)



32. At present, in the project region, communities are engaged in activities that provide them a certain level of income. However, current management is not sustainable and results in over-utilization of natural resources. The water systems are essential for sustainable socio-economic development especially in arid and semi-arid regions where agriculture is the majorlivelihood. Although collaborative and effective water resources management plays a crucial role in this Basin, there is still some difficulties to support sustainable water resource management and environmental friendly applications and practices[16][16].

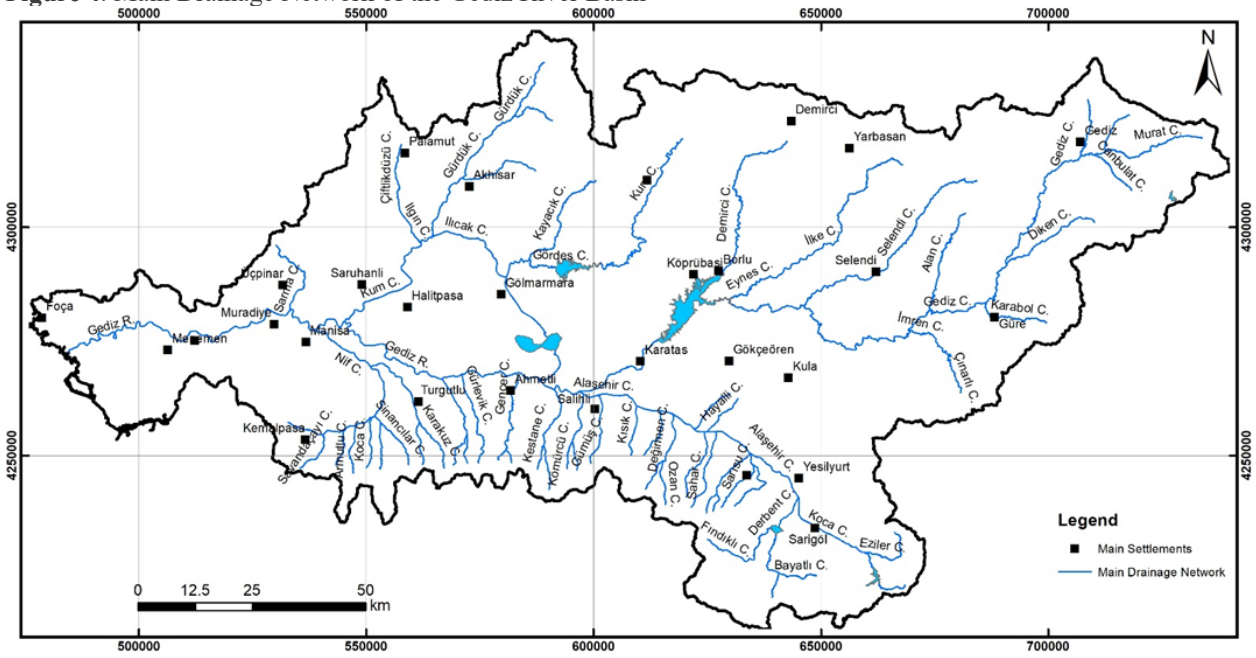
33. Although 53.2% of the basin is used for agricultural production, the basin is also an important site for industrial development, tourism and other businesses. The industrial development in the basin can be highlighted by various cases. The biggest Organized Industrial Zone in the Basin is located in ?zmir, ?i?li that houses 572 companies providing an employment of 40.000 people in textile, readymade garments, machine, automotive, metal, plastics, chemicals, food, electric and electronics sectors. Annual turnover, exports and imports of companies value 7.8 billion, 2.5 billion and 1 billion USD respectively. The annual consumption of natural gas is approximately 120 million m3, that of electricity is 700 million kWh and of water is 4 million m3. Another Industrial Zone in the basin is ?zmir, Kemalpa?a Organized Industrial Zone has 431 companies. ?zmir Menemen leather free

zone consist of 189 units exists just east section of the delta. U?ak Organised Industrial Zone has 341 companies, and Manisa has 165 companies and the annual water consumption just for this zone is 13.5 4 million m3. There are further organised industrial zones in Akhisar, Turgutlu and Salihli; leather zones in Manisa, Salihli and Kula; and carpet zone in Demirci[17][17].

Hydrological Baseline:

34. Gediz River and its tributaries form the main drainage network (Figure 4) of the basin which has an extension of aproximateley 17,000 km2 and corresponds to about 2.2% of the entire area of T?rkiye (Gediz NHYP, 2019). The River is 275 km long and its long-term total water potential is about 2270 million m3.

Figure 4. Main Drainage Network of the Gediz River Basin



35. The most important lake in the basin is the G?lmarmara Lake situated at the center of the basin. This natural lake was converted to a secondary storage facility in the basin after Demirk?pr? Reservoir. G?lmarmara Lake is a very shallow lake that originally serve as a wetland habitat and a sanctuary for migrating birds prior to its anthropogenic modifications. The maximum elevation of the lake has been increased by an artificial embankment to store more water. Currently, the lake can store 320 million m3 of water at its maximum level. The extended surface area of the lake is about 70 km2. This high surface area and shallow depth results in significant evapotranspiration from the lake. In

addition to G?lmarmara, other natural lakes of the basin are G?lc?k Lake at the Bozda? mountain range on the watershed boundary and the Karag?l Lake on Yamanlar Mountain near Izmir. These are very small lakes with surface areas less than 1 km2 (SYGM, 2019).

36. On the Gediz River Basin there are numerous diversion weirs that are used to divert the irrigation waters released to the streambed towards the irrigation channels. The water inventory of the basin reveals that about 58% of the precipitation that falls on the basin is lost to evapotranspiration. About 13% of the precipitation becomes surface runoff and the remaining 29% seeps into the groundwater (Eser, 2014).

37. The Basin is rich in terms of groundwater resources. Alluvial plains and karstic formations are considered significant groundwater aquifers in the basin. The majority of groundwater is extracted from these two formations. In particular, alluvial aquifers are quite widespread in the basin and are mostly found under the fertile Gediz plains. There is also regional aquifers that provide limited groundwater for local use. These units are spread in the basin and are strongly related to the moderately productive geological formations. The southern and central parts of the basin are locally considered unproductive in terms of groundwater. However, groundwater in the basin demonstrates a constant declining pattern. The overextraction from agricultural, industrial and domestic users resulted in not only the decline of average groundwater heads but also the drying of a number of natural springs. According to Eser (2014), the average groundwater levels in the basin ranged between -30 m to 1300 m above mean sea level. In the most downstream parts of the basin, the groundwater levels are below the mean sea level and this causes salt water intrusion mainly in the Menemen plain near Gediz delta.

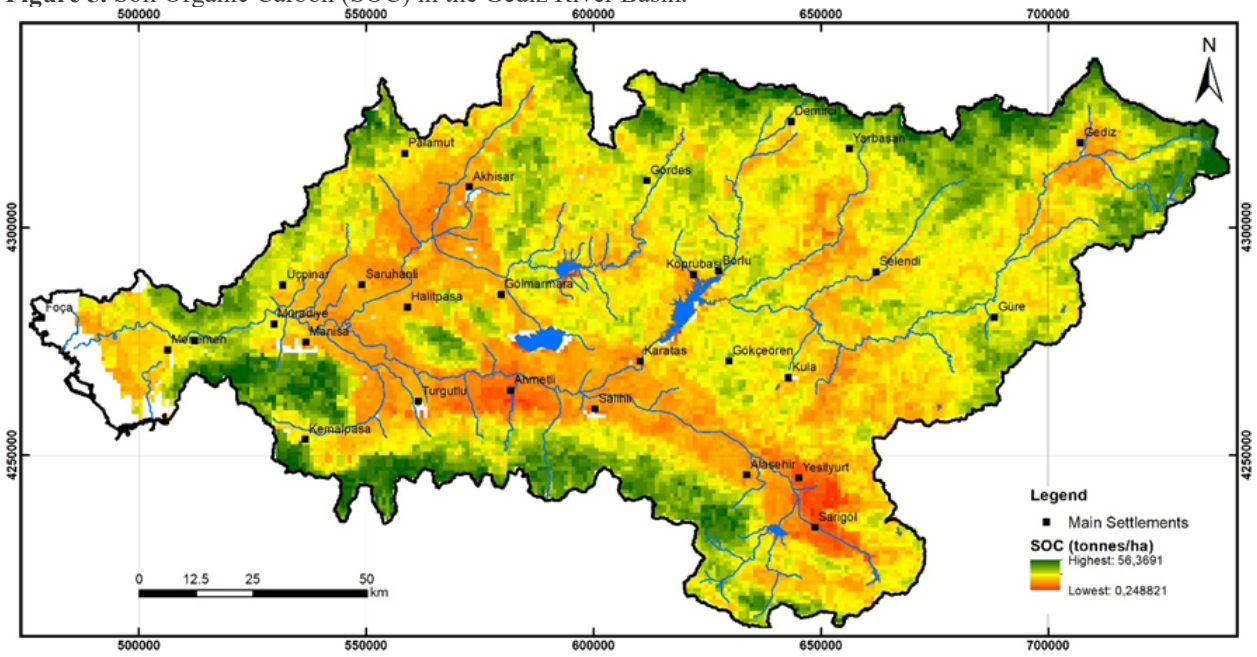
Land Degradation Main Indicators Baseline:

38. According to CORINE (2018)[18][18],the dominant landuse classes in the basin are agriculture, with significant areas of natural vegetation; transitional woodland/shrub; complex cultivation patterns; coniferous forest; and non-irrigated arable land with respective area percentages of 16%, 15%, 13%, 13% and 11%. These five landuse classes totally sum up to 68% of Gediz River Basin area. The majority of the basins land resources are considered unsuitable for tillage farming. Only 25.20% of the basin?s land resources are suitable for tillage farming. This high quality land is mostly found in the lowland plains where topographical slope is low, drainage conditions are good and erosion is minimal. In this regard, the fertile plains of the Gediz River Basin essentially correspond to the highest quality soils where high income agriculture can be practiced[19][19].

39. Limeless Brown Forest Soils, Brown Forest Soils, Limeless Brown Soils, Alluvial Soils and Redzinas are the dominant soil types in the basin with respective percentages of 24.6%, 20.22%, 14.64%, 9.61% and 8.33%, which sum up to 77.16% of total basin area. In addition, about 3.86% of the basin correspond to a non-applicable group that primarily consist undefined soils as well as built up residential areas[20][20]. The lowest soil organic carbon in the basin is observed in the area where intense agriculture is practised. The irrigated lands in the so-called Gediz plains have the lowest organic carbon values. In particular, the lowest values are seen in the Sar?g?l-Ala?ehir plain where grape orchards are dominant. On the opposite extreme, the highest organic carbon levels are seen in highland areas with natural vegetation[21][21]. Only 25.67% of the basin?s soils are under no or low risk

of erosion whereas 44.16% and 26.31% have moderate to high risk of erosion. The majority of high erosion risk soils are located in highlands where the topographical slope is high. On the contrary, soils with low erosion risk are mostly found in the lowland plain areas of the basin (Figure 5).

Figure 5. Soil Organic Carbon (SOC) in the Gediz River Basin.



Biodiversity Baseline:

40. Based in the Aegean region, the Gediz River Basin is part of Mediterranean Global Hotspot (2014 CI). The basin is not only significant for human-based activities but is also crucial for biodiversity and water-related values. The Gediz Delta/Bird Paradise[22][22] is an important nature reserve and has -been designated in 1998 as s a Ramsar site to protect rare bird species. Besides the Gediz Delta, there are other Protected Areas such as Gol Marmara[23][23], Sipil Mountains National Park, Foca Specially Protected Area. Other important areas for global biodiversity are highlighted through two large-scale assessment studies in the region, the Key Biodiversity Areas (2006), and the Coastal Aegean Systematic Conservation Planning (2004). These include: Murat Mountain, Nif Mountain, Bozda?lar and Yamanlar Mountain.[24][24]

41. The biodiversity of the basin can be assessed in three main parts:

? High mountains with important endemic plant centers such as Bozda?, Nif, Spil and Murat Mountains. They host rare and threatened plant species.

? Low mountains and hills where natural vegetation and orchards are intermixed, are good representatives of the sylvo-pastoral systems which is assumed as one of the main source of biodiversity in the Mediterranean Basin.

? Freshwater system of Gediz river and the Gediz Basin. These areas host many important populations of bird and inland fish species.

Climate Baseline:

42. The climate characteristics of the Gediz Basin show different features in the upper and lower regions of the basin. In the lower part of the basin, typical Mediterranean climate characteristics are generally observed. In the upper parts, climate parameters such as temperature, pressure, wind and precipitation demonstrate fairly distinct patterns. As one moves inland in the basin, Central Anatolian climate characteristics become more dominant. In this regard, the basin is situated on a transition zone from Mediterranean climate to Central Anatolian climate.

43. According to the long-term meteorological station observations in the basin, the annual average temperature values vary between 12-18?C. In this regard, the temperature values in the basin are lower than the Mediterranean climate but higher than the Marmara and Black Sea regions. The basin is under the influence of the Mediterranean precipitation regime. The summers are dry and the winters are wet. Precipitation is mostly in the form of rain but in highlands snow is seen in winter months. Total precipitation average values in the basin vary between 424-1240 mm.

44. Climate change is expected to affect vulnerable sectors in T?rkiye.[25][25],[26][26],[27][27] While the annual mean temperature is expected to increase by 1.5C by 2050, precipitation is expected to decrease by 1.5mm per year. It is expected that climate change will have the following impacts (with a medium level of severity):

? Declining availability of surface waters in West Anatolia, which would affect agriculture and the water distribution network. The decreased availability of water will be most felt in Izmir, Kutahya, Manisa, which are regions targeted by this project.

? Decreased agricultural productivity in the Mediterranean and Aegean, which will impact agriculture employment and food security

? Loss of soil in southwest Anatolia and

? Forest fires in Western Anatolia, which will affect tourism and agriculture.

45. Finally, climate change is also expected to have the following additional impacts in T?rkiye, albeit with a lower level of severity: (i) changes of river/basin regimes across the country, (ii) soil losses/increased salinity particularly in the Mediterranean, Aegean and Black seas, (iii) disruption of marine ecosystems, and (iv) coastal erosion. A preliminary climate risk screening was carried out by FAO and is appended to the project documentation in the GEF PMIS.

46. The river basins of T?rkiye face many problems such as water scarcity, land degradation, pollution and unsustainable use of water resources. There are serious institutional, legal, social and economic drawbacks, which enhance water allocation, degradation, and environmental pollution problems as well.

Socio-economic Baseline:

The below data on the general socio-economic baseline of the main populations (villages) adjacent to proposed project sites was gathered through telephone interviews conducted with the mukhtars of the settlements during the month of March in 2022.

Sandal Village (Kula, Manisa)

47. The population of the village is 1,327 (March 2022). There are about 300 households. Almost 23% of the population is aged 65 and above. Particularly in the last 5 years the village has been witnessed some outgoing migration. Mukhtars reported that young members of 16 households had migrated during this time. The main economic activities in the settlement include animal husbandry and seasonal agricultural work. Due to an increase of animal foodstuff and other related items, some villages started to abandon animal husbandry due to lack or very low level of profit. This reinforced the migration of young people, as there is no alternative livelihood opportunities in the settlements apart from agriculture and animal husbandry. However, in summer months the village experiences return migration due to labour intensive tobacco plantation. The education level in the village is relatively high compared to the Turkish general. There is an elementary school in the village and pupils attending education beyond elementary have to travel to the District of Kula. Apart from that, there is a vineyard and vinery just next to the village (Yan?k?lke). In total 6,000 decar of land used is for barley and wheat cultivation. A further 1,200 decar is used for lentil and sesame cultivation. The remaining land of the village is left unfarmed and not arable, mainly due to the lack of water and low productivity in farming.

48. The income level of the village is very low. Households who combine income from animal and land farming and agricultural wage labour still earn around 9,000 TL a month, which is below the poverty line. Households who just rely on wage labour earn around 4,000TL a month. All the women in the village are regarded as housewives, but 20 of them often work as wage labourers in the vineyard and vinery. During the grape season, around 400 women go to next district of Salihli to undertake daily work in the wine yards. As emphasised, around 405 of the households engage in dairy farming and the milking of cows, with related work being considered, in the village, as women?s work.

G?vercinlik Village (Kula, Manisa)

49. The total population of the settlement is 450 and there are altogether 102 households, which make the average household size of around 4 people. The average household size is bigger than the Turkish average of 3.30, which indicates that the settlement still preserves a traditional way of living. In the last 3 years, outgoing migration started in the village and this has been accelerating with young people between the ages of 25 and 40. This might result in lower birth rates in the coming future and increase the average age of the population. The majority of the population in the settlement is aged between 40 and 65. The rate of elderly people (sixty-five and over) is comparable to the Turkish average.

50. The main reason for the outgoing migration of young people is stated to be due to increasing expenses and a lowering income level of animal husbandry, which is the main economic activity in the settlement. No incoming migration is reported. There is no school in the village and pupils in education go to Kula by means of a bussed education system.

51. Agriculture and animal husbandry are the main economic activity in the village. Due to high inflation of the product input costs, the profitability of these activities has reduced immensely. The village has started to experience the selling of agricultural lands to the developers. Almost every household in the village benefits from retirement pension. An average income per household in the village is 5,000TL per month, which is well below the poverty line. There are some exceptional cases, such as households with numerous cattle, whose average monthly household income could fetch up to 15,000TL.

52. The villagers grow melons and watermelons in the summer months, which are not cash crops. Small land ownership in the village is prevalent, as the total area of farmland of the village is around 10,000 *donums*, and only around 700 *donums* of it is irrigated. The remaining land is used barley and rye cultivation, mainly used for animal feeding.

Yeniba?aras? (Fo?a, ?zmir)

53. The total population in the settlement is 3,209. There is a high proportion of males compared to females. This is the result of incoming male migration to the settlements, due to the settlements being close to the sea and the economic advantages that this offers. The population structure of the

settlement is well balanced, as a high proportion of young population and low proportion of elderly is prevalent. There is only one elementary school in the village and pupils attending beyond elementary school are go Fo?a.

54. Agriculture and animal husbandry are the main economic activity in the settlement. Olive groves, cotton, corn and wheat are the main agricultural products. There is also some forage crops production and total area of 18000 decar is farmed in the settlement. Due to cash crop and animal farming, household income is relatively high compared to the other project sites and it stood around 14,000TL. Poultry farming in the settlement is also in development stage.Yeniba?aras? is a well organised and up and running dairy milk products cooperative. The main brand of the cooperative is yogurt marketed as ?Fo?a Yogurt?, which is distributed to all the major supermarkets and local shops in T?rkiye. The village also has an irrigation cooperative.

55. All women in the village are considered as housewomen or housewives. However, looking after the farm animals and milking the cows is regarded as women?s work. It has been reported that when the farming used to be labor-intensive, women used to perform more labour intensive tasks, but because of the mechanisation in farming, women?s manual labour activities has reduced over the years. Women also sell house products such as dried soup, olives, homemade jam in the weekly markets of Yeniba?aras? and Fo?a.

Yan?kk?y (Menemen, ?zmir)

56. The population of the settlement is 900 and there are 280 households. The population structure is about to change, with a gradual increase of the people at the age of 65 and above. There is no impact of migration over the population structure. However, as stated by the mukhtar of the settlement, daytime and the evening time of the population varies as many young people as possible of the village commute to work to nearby District centre of Menemen. People working in Menemen also have farmland in the village.

57. The main economic activity in the village is agriculture. The irrigated agriculture area is 4,212 decars and 302 decars is used for the farming of animal foodstuff. The main products include grapes, cotton, corn, vegetable, and fruit gardens. There are 237 cattle and around 2,000 sheep. Meat farming is prevalent, and the dairy milk production is about 500 litres. Monthly average household income is around 10,000TL, which is around just poverty line. The relatively low income level is associated with an accelerating cost of farming, otherwise lands around the village are fertile and suitable for multiple crops around the year.

58. There are few people who are in wage or salaried employment. There are no cooperatives in the village as many villagers have direct access to the markets. The villagers are also able to sell products in weekly local markets.

The proposed alternative scenario with a brief description of expected outcomes and components of the project and the project?s Theory of Change.

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Proposed approach and theory of change

59. The proposed project focuses on integrated natural resource management interventions to enhance water and land governance at policy and local levels in the agriculture sector, and to mainstream biodiversity protection in priority sectors within the basin. This will ultimately assist in improving socio-economic well-being of the local community, and mitigating the impacts of Climate Change. To improve the ecosystem in the GRB, it is important to understand the linkages between land, freshwater and biodiversity.

60. Integrated natural resource management constitutes a dynamic interface between land, water, ecosystem and human life that captures a key development and environmental challenge of our time. Indeed, the integrated approach is an opportunity to address the increasing pressure and related degradation processes of the land and water resource base, which especially affects poor women and men who cannot mask resource deterioration with expensive inputs. External factors like mounting population, the fast rise of urban areas and agricultural overexploitation affect the quality and biodiversity of the basin. with degraded forests, mine pollution and eroded croplands and downstream affected deltas and marine environments as the most visible symptoms. These negative developments go beyond the individual land user and justify the calls for coordinated action at the basin level.

61. Water monitoring models serve as decision support tools and can provide an adequate answer to these threats as it accounts for land and water users in up- and lowland areas as well as for fishers in the delta and bordering open sea. Data collection and harmonization can support identification of the sources of pollution by specifying hydrological effects under natural shocks (climate change) and anthropogenic interventions (increased pumping, new infrastructure). These models accommodate a set of structural water response functions that reflect farmers? behavior to changing water availability, covering natural and artificial water flows and water uses. A suitable fit for purpose water monitoring model for T?rkiye, considering local condition and expertise, and international standards and innovations, will be calibrated and applied as a tool for the decision support system.

Project objective and components

62. The project will build on the baseline projects and add value to the existing Gediz RBMP implementation process by focusing on the interaction between the water and agriculture sectors. The objective of the project will be **to promote Integrated Natural Resource Management (INRM) and mainstream Biodiversity Conservation in the Gediz River Basin with a focus on land and water**

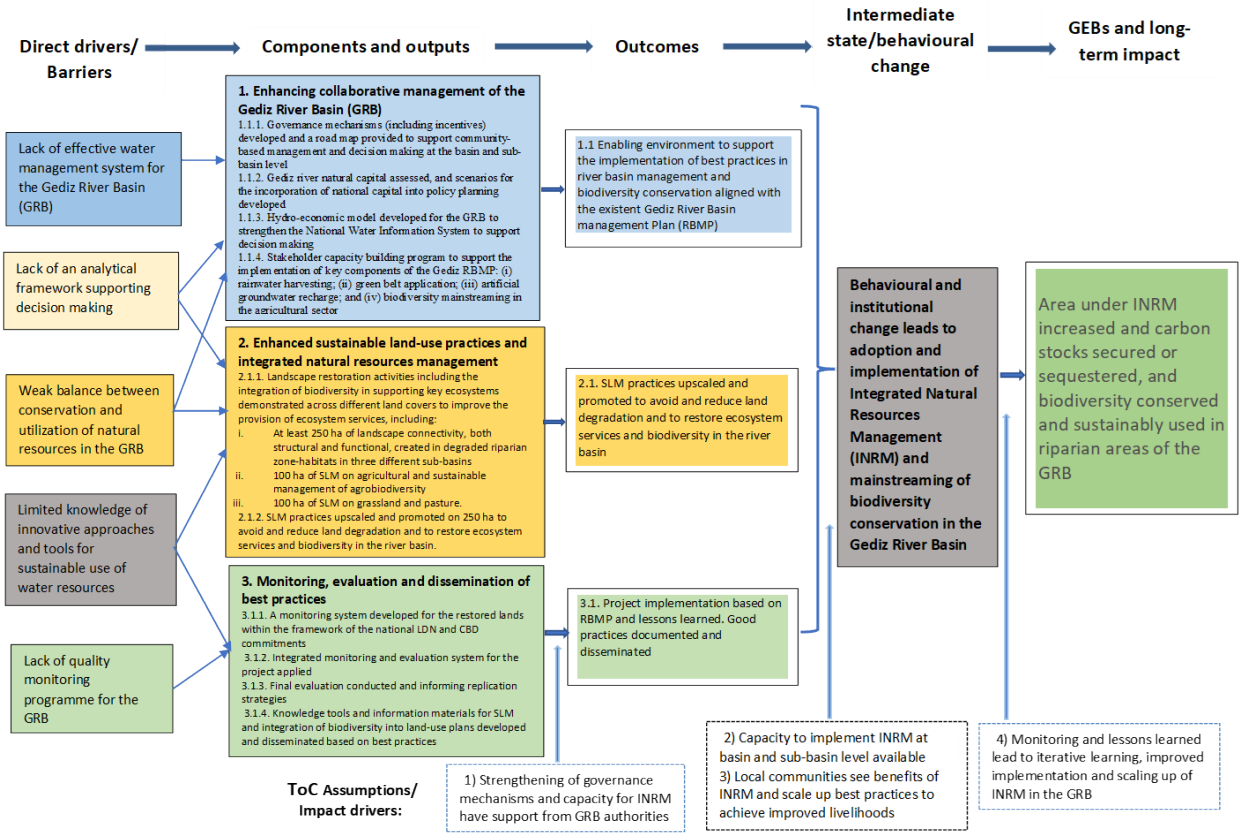
resources to ensure the socio-economic well-being of local communities and the sustainability of natural resources. The integrated watershed management approach within GRB resonates with the integrated approach that respects characteristic interdependencies between upstream land and water management, and downstream quality of deltas and coastal areas, interconnected through the surface, subsurface flows, rivers, canalized networks and infrastructural routings.

63. GEF resources will be used to strengthen the enabling environment and showcase strategic practices to induce a change in the way natural resources are currently managed in the GRB. By ensuring local stakeholders are part of the decision-making processes, the proposed project will develop a model that ensures GEF-financed interventions are accepted by project beneficiaries. As project interventions show the benefits of improved management, best practices will be disseminated to ensure the proposed models are upscaled not only to the GRB but to other basins in T?rkiye, leading to improvements in the status of natural resources in the country.

64. To promote Integrated Natural Resource Management (INRM) and mainstream Biodiversity Conservation in the Gediz River, the project takes a river basin approach, linking sectors and stakeholder groups. It addresses several drivers and barriers that threaten the environmental and socio-economic sustainability of the basin. Component 1 on enhancing collaborative management of the GRB will address the lack of an effective water management system for the basin and analytical framework for decision making, through strengthening of governance mechanisms, assessments of natural capital and hydro-economic modelling, as well as capacity building of stakeholders. Component 2 on implementation and scaling up of SLM and INRM will improve the balance between conservation and sustainable use of natural resources in the GRB, while strengthening knowledge about innovative approaches and tools for sustainable use of water resources. Component 3 on monitoring, evaluation and dissemination of best practices will address the lack of a quality monitoring programme for the basin. This project is designed to ensure that behavioural and institutional change takes place that leads to adoption and implementation of more sustainable INRM practices and mainstreaming of biodiversity in implementation as well as in the river basin management plan. The project Theory of Change (ToC) and impact pathway is based on the assumptions that:

- ? Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities
- ? Capacity to implement INRM at basin and sub-basin level becomes available
- ? Local communities see benefits of INRM and scale up best practices to achieve improved livelihoods
- ? Monitoring and lessons learned lead to iterative learning, improved implementation and scaling up of INRM in the GRB

65. The ToC is summarised in the figure below using the logic model for the development of ToCs.


Direct drivers/ Barriers
Components and outputs
Outcomes
Intermediate state/behavioural change
GEBs and long-term impact
Lack of effective water management system for the Gediz River Basin (GRB)
Lack of an analytical framework supporting decision making
Weak balance between conservation and utilization of natural resources in the GRB
Limited knowledge of innovative approaches and tools for sustainable use of water resources
Lack of quality monitoring programme for the GRB
1. Enhancing collaborative management of the Gediz River Basin (GRB)
1.1.1. Governance mechanisms (including incentives) developed and a road map provided to support community-based management and decision making at the basin and sub-basin level
1.1.2. Gediz river natural capital assessed, and scenarios for the incorporation of national capital into policy planning developed
1.1.3. Hydro-economic model developed for the GRB to strengthen the National Water Information System to support decision making
1.1.4. Stakeholder capacity building program to support the implementation of key components of the Gediz RBMP: (i) rainwater harvesting; (ii) green belt application; (iii) artificial groundwater recharge; and (iv) biodiversity mainstreaming in the agricultural sector
2. Enhanced sustainable land-use practices and integrated natural resources management
2.1.1. Landscape restoration activities including the integration of biodiversity in supporting key ecosystems demonstrated across different land covers to improve the provision of ecosystem services, including:
i. At least 250 ha of landscape connectivity, both structural and functional, created in degraded riparian zone-habitats in three different sub-basins
ii. 100 ha of SLM on agricultural and sustainable management of agrobiodiversity
iii. 100 ha of SLM on grassland and pasture.
2.1.2. SLM practices upscaled and promoted on 250 ha to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.
3. Monitoring, evaluation and dissemination of best practices
3.1.1. A monitoring system developed for the restored lands within the framework of the national LDN and CBD commitments
3.1.2. Integrated monitoring and evaluation system for the project applied
3.1.3. Final evaluation conducted and informing replication strategies
3.1.4. Knowledge tools and information materials for SLM and integration of biodiversity into land-use plans developed and disseminated based on best practices
1.1 Enabling environment to support the implementation of best practices in river basin management and biodiversity conservation aligned with the existent Gediz River Basin management Plan (RBMP)
2.1. SLM practices upscaled and promoted to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin
3.1. Project implementation based on RBMP and lessons learned. Good practices documented and disseminated
Behavioural and institutional change leads to adoption and implementation of Integrated Natural Resources Management (INRM) and mainstreaming of biodiversity conservation in the Gediz River Basin
Area under INRM increased and carbon stocks secured or sequestered, and biodiversity conserved and sustainably used in riparian areas of the GRB
ToC Assumptions/ Impact drivers:
1) Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities
2) Capacity to implement INRM at basin and sub-basin level available
3) Local communities see benefits of INRM and scale up best practices to achieve improved livelihoods
4) Monitoring and lessons learned lead to iterative learning, improved implementation and scaling up of INRM in the GRB

Component 1. Enhancing collaborative management of the Gediz River Basin

66. The integrated management of natural resources is based on the construction and effective implementation of public policies and norms within the governance framework, under the principles of inclusive participation. The outcome of this component will be a strengthened enabling environment that is conducive to the implementation of the Gediz RBMP.

67. The project will improve the management effectiveness of the river basin by establishing and implementing a collaborative river basin management model (Output 1.1.1). It will support the engagement of all key stakeholders to strengthen collaborative management and establish a good governance model for the basin. Based on this assessment, the river basin management plan and governance model will be updated and implemented with the project. This will include an assessment of Gediz River Natural Capital and the development of the scenarios for the incorporation of national capital into policy/planning (Output 1.1.2). It will support the capacity building of the key stakeholders to support the implementation of key components of the Gediz RBMP: (Output 1.1.4) and to make them part of the monitoring process (Output 1.1.3). In particular, the GEF will finance the following outputs and activities:

Outcome 1.1 Enabling environment to support the implementation of best practices in river basin management and biodiversity conservation aligned with the existing Gediz River Basin Management Plan (GRBMP).

68. The existing governance model will be strengthened and incentives introduced to mainstream biodiversity and other natural capital into the RBMP. Decision-making will be made more participatory and also supported and improved through hydro-ecologic modelling. 14,900 ha of the Gediz Ramsar site will be under improved management for conservation and sustainable use of biodiversity by the end of the project.

Output 1.1.1. Governance mechanisms (including incentives) developed and a road map provided to support community-based management and decision making at the basin and sub-basin level.

69. GRB has been under heavy human influence for centuries. Habitat loss and fragmentation due to agriculture, livestock keeping, and forestry has caused loss of many species while there are others highly threatened. Preparation of action plans to ensure the conservation of these species is important. The project will support the preparation of Species Action Plans for the selected highly threatened species. Participation of representatives of relevant institutions and sectors has critical importance for the effective implementation of these plans. The process of preparation of the Species Action Plans will also help to improve the governance and collaboration among different institutions for biodiversity conservation in GRB.

70. Throughout improved biodiversity governance, nature based solutions with biodiversity perspective and promotion of sustainable land management practices the project will contribute better management of forests, freshwater system and also to the sustainability of agriculture and livestock keeping. These practices will improve the conditions of many different *taxa* but most importantly; birds, inland fishes, amphibians and endemic plant species. Besides promotion of sustainable land use practices, the project will directly target the conservation of following species through preparation of Species Action Plans and early implementation activitis.

? *Myomimus roachi* Mouse tailed dormouse (EN) ? Small Mammal

? *Knipsowitschia mermere* Gediz dwarf goby (VU) ? Inland Fish

? *Lycaena ottomana* Grecian Copper (VU) - Butterfly

? *Gegenes nostrodamus* Mediterranean Skipper (DD) - Butterfly

? Pyrus anatolica (EN) ? Tree

? Chionodoxa sardensis (CR) ? Plant

? Prangos hulusii (CR) ? Plant

? Minuartia nifensis (EN)

? *Knautia goecmenii* (newly identified species, so it does not have redlist status assessment, but as it is extremely rare and known from only one location it has will has status of CR) - Plant

Activities:

? The existing river basin management plan and governance model will be reviewed and assessed to identify weaknesses and areas of improvement.

? Based on this assessment, a governance mechanism will be designed and implemented which will support decision making and sustainable management of the River Basin. This will include training of government staff at the General Directorate and Provincial Division Directorate level, and other local stakeholders in best practices in river basin and biodiversity conservation and management. (under output 1.1.4)

? Participatory Preparation of a Species Management Action Plan for the Ramsar site in the Gediz delta within the scope of the GRB management plan to improve the governance and conservation of biodiversity

Output 1.1.2. Gediz River Natural Capital assessed, and scenarios for the incorporation of natural capital into policy/planning developed.

71. Forested watersheds adjacent to cities have an impact on water quality and availability by regulating precipitation, evaporation and flows. Trees and other vegetation can improve water quality by preventing erosion, breaking down pollutants and providing shade. Forests and their soil also act like sponges that absorb water when it is plentiful and release it when it is scarce. They do this partly by increasing water infiltration into the soil, helping to recharge vital groundwater supplies. In that regard water provision services of the forest ecosystems have paramount importance, especially forests adjacent to the big cities as in GRB. Although, the existing forest management paradigm -Ecosystem Based Functional Forest Management and Planning- provides an important opportunity to manage forests for water provision ecosystem services, timber production is still a priority management objective. A natural capital assessment, with inclusion of the water provision services will provide an important insight to prioritize among the different services of the forests. A forest planning, with water provision services as priority objective, will improve capacities for more effective management of the forest for water security in T?rkiye.

Activities:

? Gediz River natural capital will be identified, measured, and valued, centered on ecosystem services including provision of habitat for biodiversity, to integrate the understanding of this value into decision making and policy instruments. This will ultimately lead to: 1) mitigation or elimination of harmful incentives leading to the degradation of natural capital assets or to identification of positive financial and other policy incentives for the maintenance or enhancement of these assets; and 2) enhanced financing for sustainable management and restoration of natural capital, including through affecting public and private financial flows.

? This will follow GEF recommendations in conducting a baseline diagnosis of institutional capacity to undertake natural capital assessment and accounting; review of expenditures on natural capital management, assessment of finance needs for natural capital management; implementation of natural capital assessments and accounting; and planning of natural capital into policy, planning, and decision-making.

? Developing a forest management plan with hydrological function as priority objective for a selected site to improve the water provision service context in forest management.

Output 1.1.3. Hydro-Economic model developed for the GRB to support decision-making and monitoring.

72. Hydro-Economic Models (HEMs) are useful tools to assess water-resource management. In recent years, HEMs achieved significant advances regarding the assessment of the impacts of water-policy instruments at a river basin/catchment level in the context of climate change (CC). Under this component, the creation of a Decision Support Tool (Output 1.1.3) considering local condition, and existing successful models and national expertise, and international standards and innovations, is planned. First, data is collected in the project area for an accurate representation of the socio-economic

and biophysical landscapes of the GRB with a special focus on water flows. Where needed data are complemented. Consultation rounds with stakeholders should assure that specific interests of water users are correctly represented and pondered. Second, data are harmonized in an analytical framework that interconnects natural and controlled water flows (volume and quality) over time and in different layers. Third, water balances are prepared in different dimensions, considering also the impacts of Climate Change. Fourth, the framework is designed, calibrated and converted into a decision support tool. The base run of the DST will represent current conditions, and upon consolations with stakeholders, prospective scenarios are run to analyze the impact on the socio-economic and biophysical connections of specific interventions.

Activities:

? Biophysical and soci-economic data collection on the GRB.

? Design, and calibrate a suitable Hydro-Economic Model for the GRB.

? Elaboration of decision support tool for decision-making and monitoring.

Output 1.1.4. Stakeholder capacity building program to support the implementation of key components of the Gediz RBMP: (i) rainwater harvesting, (ii) green belt application, (iii) artificial groundwater recharge (iv) biodiversity mainstreaming in the agriculture sector

Activities:

? Capacity needs assessment and development of associated capacity building plan.

? Leadership training, with a focus on women and youth, to ensure participation in decision-making processes, including training of at least 50 government staff and 200 local stakeholders at the General Directorate, and Provincial Directorate level and local stakeholders from pilot sites (at least 50% women)

? Training material developed to sessions organized to support the implementation of Gediz RBMP, including:

o Feasibility assessment for the rehabilitation of aquifers by artificial recharge to groundwater such as catch drain and pools among the river

o Feasibility assessments for models of rainwater harvesting to support rehabilitation and enhancement of water quality in the basin forests, pastures and agricultural lands (to be implemented under component 2)

73. Proposed outcome indicators include:

? Governance mechanism for the GRB and its Ramsar site.

Target: GRB governance mechanism in place that integrates local participation and biodiversity conservation and supports decision making

? Enhanced capacity in implementing the Gediz RBMP. (Contributes to GEF Core Indicator 11).

Target: 50 government staff and 200 local stakeholders trained in Gediz RBMP

? GEF Core Indicator 1.2: Terrestrial protected areas under improved management effectiveness (14,900 ha of the Gediz Ramsar site under improved management for conservation and sustainable use of biodiversity)

Target: Increase in METT score from 72 to 78

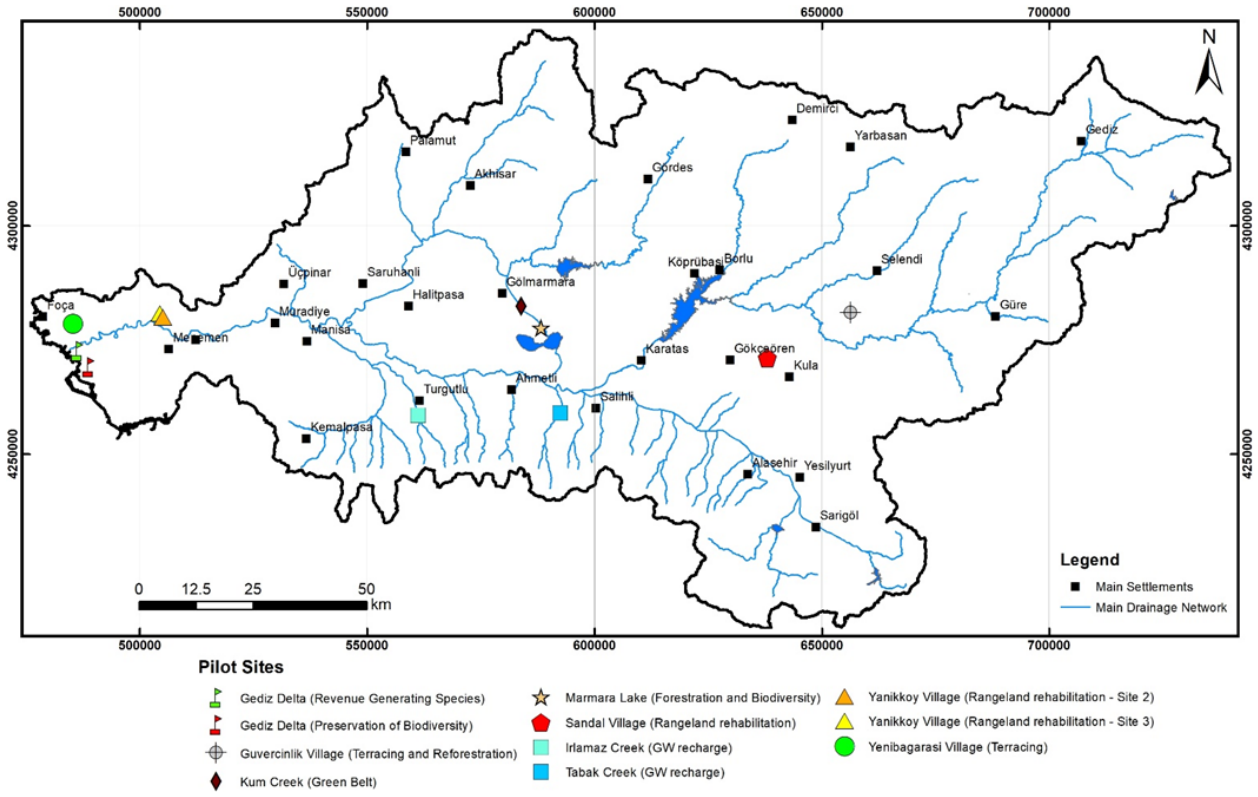
Component 2. Enhanced sustainable land-use practices and integrated natural resource management

74. This component will ensure a sustainable living environment for water-related resources inside the river basin. Innovative approaches and technics will be used to decrease the pollution and ecological effectiveness, a handbook will be developed for restoration and rehabilitation of the degraded landscapes and wetland ecosystems in T?rkiye for effective river basin management and natural resource conservation in the project region will be ensured through the restoration of at least 950 ha of the degraded riparian zone of the River (include degraded riparian zone-habitats, agricultural land and production landscapes). The activities under this component will be upscaled by using co-financing resources.

Outcome 2.1 Sustainable land management (SLM) practices upscaled and promoted to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.

75. The project will implement landscape restoration practices and scale up SLM at 11 representative sites across the Gediz River basin, from upstream to downstream areas (Figure 6) to balance losses and gains of productive land in the GRB.

Figure 6. Target Project Sites.



Output 2.1.1 Demonstrate landscape restoration activities in supporting key ecosystems across different land covers to improve the provision of ecosystem services and biodiversity integration.

76. The main activity under the implementation of the river basin management plan will be landscape restoration. Local livelihoods will be enhanced through support to non-wood forest products (NWFP). The project will provide the necessary inputs for restoration and rehabilitation of the degraded lands and to ensure project activities are carried out promptly while ensuring significant participation of women and youth. These activities will improve the vegetation cover and will support the provision of ecosystem services in the basin. When upscaled, these activities will strengthen the ecological integrity and available living environment and will be the basis for additional local livelihood improvement opportunities. This includes the Restoration of 764 ha of land for improved landscape connectivity along riparian zones

Output 2.1.2. SLM practices upscaled and promoted in 413 ha to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.

This is aimed to prevent soil degradation, increase vegetation cover improve the water conservation and water usage efficiency, and reduce diffuse pollution caused by agriculture, including sedimentation in a river basin, restoring ecosystem services and biodiversity.

Four pilot sites have been selected where the activities will be implemented:

1. Sandal Village (Kula, Manisa): The pilot project of rangeland rehabilitation will reduce the cost of animal feeding and increase the productivity and profitably of the households who are already engaged in dairy farming. There are around 70 household members in the village who have taken certificates in herd management and there is a great interest in the village for animal farming. This activity will increase the livelihood opportunities for the entire village community. The project would also mitigate the outgoing migration consequent fragmentation of families. The villagers are also planning to market dairy products and this would create further employment opportunities. Many women who commute long distances to work as wage labourers in vineyards of the neighbouring district in the season would become entrepreneurs and own their family businesses. Furthermore, it has been reported that many animal farmers lose animals, especially sheep due to wild cat attacks. The development of rangeland rehabilitation and related enclosure activities would prevent this type of attacks on farm animals and promote a more harmonious co-existence of livestock and wildlife.

Figure 7. Sample Image of Sandalli Village Project Site.

2. G?vercinlik Village (Kula, Manisa): Terracing and reforestation will increase animal and agricultural farming activities and this would mitigate outgoing migration, which is currently a problem, due to the betterment of agricultural related livelihood activities. Because of the declining agricultural income due to the cost of related activities, people started to sell farmland. However, the project could reverse this pattern. The project will also reduce the cost of animal foodstuff and overall would improve the livelihood potential of the entire village population.

Figure 8. Sample Image of G?vercinlik Village Project Site.

3. Yeniba?aras? (Fo?a, ?zmir): Terracing and rehabilitation of abandoned agricultural land will improve the cultivation of suitable pharmaceutical plants which will improve the livelihood opportunities of the local community. The mukhtar of the settlement emphasised that there would be future tendencies of unemployment in the settlement and the project-supported livelihood opportunities would mitigate this tendency.

Figure 9. Sample Image of Yeniba?aras? Project Site.

4. Yan?kk?y (Menemen, ?zmir): Rangeland rehabilitation will create additional sources of livelihood and animal farming in the region will become more sustainable thanks to the project interventions.

Figure 10. Sample Image of Yan?kk?y Project Site.

Activities at the pilot sites are summarised below

Site Number	Site Name	Province	District	Application Type	Planned Activities at the Site	Target Outcome/ Outputs

1	Irlamaz Creek	Manisa	Turgutlu	Groundwater Recharge Planning	1. Conducting a feasibility and design study and application project in Irlamaz Creek on groundwater recharge with particular focus on alternative recharge methods. 2. Nature-based planning of the flood plain area (and a 250 m buffer zone on both shores) of Irlamaz Creek up to 3 km upstream from the ?zmir-Ankara State highway from landuse management viewpoint. 3. Hydrological monitoring of surface and subsurface waters at the site during the project time period. 4. Capacity building activities for Turgutlu municipality technical personnel on sustainable water resources management and sponge city concept for groundwater recharge of rainwater harvested from city's impervious areas. 5. Capacity building activities for the Irlamaz Village farmers on effective use of irrigation water. 6. Support to selected farmers in Irlamaz Village to demonstrate the use of drip irrigation for minimizing groundwater use.	Outcome 1.1

2	Tabak Creek	Manisa	Salihli	Groundwater Recharge Planning	1. Conducting a feasibility and design study and application project in Tabak Creek on groundwater recharge with particular focus on alternative recharge methods. 2. Investigation and preliminary assessment of using the nearby pond/lake as temporary storage site for diverted waters of the creek. 3. Hydrological monitoring of surface and subsurface waters at the site during the project time period. 4. Capacity building activities for Salihli municipality technical personnel on sustainable groundwater management. 5. Capacity building activities for the farmers of ?alt?l? and Caferbey villages on effective use of irrigation water. 6. Support to selected farmers in ?alt?l? and Caferbey villages to demonstrate the use of drip irrigation for minimizing groundwater use.	Outcome 1.1

3	Kula-G?vercinlik Village	Manisa	Kula	Terracing and reforestation	1. Support for the implementation of terracing activities (Technical assistance, procurement of seeds and inputs, and renting technical equipment) and rainwater harvesting. 2. Organization of capacity building activities for the Regional Department of Forestry with particular reference to water conservation and erosion prevention. 3. Supporting inhouse research activities of local forestry personnel for testing the suitability of alternative tree species to be used in reforestation activities. 4. Integration of activities related to increasing the hydrological functions of forests. 5. Providing alternative support mechanisms for forest villagers for alternative income generation (supporting the non-forest livelihoods of the rural population).	Output 2.1.1

4	Kula-Sandal Village	Manisa	Kula	Rangeland rehabilitation	1. Providing Support (Technical assistance, equipment, seeds and other inputs) to District Directorate of Rangeland Management or Sandal Village administration (mukhtarship) for rangeland rehabilitation. 2. Technical assistance (through the municipality or the ministry) and equipment/support for connecting groundwater well to the rangeland irrigation pond filtering water with arsenic content. 3. Conducting laboratory analysis of water quality and accordingly construction of watering setup fed from the pond for grazing animals in the rangeland 4. Providing support to delimit rehabilitated rangeland zones (fencing). 5. Capacity building activities for Sandal villagers on rangeland protection and suitable animal grazing. 6. Research about suitable seed species with high nutritional value and yield that can adapt to the region under climate climate conditions. 7. Providing fodder crop seed and fertilizer support to farmers who are involved in animal husbandry.	Output 2.1.2

5	Menemen-Yan?kk?y Site:2	?zmir	Menemen	Rangeland rehabilitation	1. Providing Support (Technical assistance, equipment, seeds and other inputs) to District Directorate of Rangeland Management or Menemen-Yan?kk?y Village administration (mukhtarship) for rangeland rehabilitation. 2. Providing support to delimit rehabilitated rangeland zones (fencing). 3. Technical assistance and equipment support to the village for using Emiralem Irrigation Canal waters to irrigate rangelands expanding drip irrigation to ensure efficiency of using water 4. Capacity-building activities for Yan?kk?y villagers on rangeland protection and suitable animal grazing. 5. Providing fodder crop seed and fertilizer support to farmers who are involved in animal husbandry.	Output 2.1.2

6	Menemen-Yan?kk?y Site:3	?zmir	Menemen	Rangeland rehabilitation	1. Providing Support (Technical assistance, equipment, seeds and other inputs) to District Directorate of Rangeland Management or Menemen-Yan?kk?y Village administration (mukhtarship) for rangeland rehabilitation. 2. Providing support to delimit rehabilitated rangeland zones (fencing). 3. Technical assistance and equipment support to the village for using Emiralem Irrigation Canal waters to irrigate the rangeland with expanding drip irrigation to ensure efficiency of using water. 4. Capacity-building activities for Yan?kk?y villagers on rangeland protection and suitable animal grazing. 5. Providing fodder crop seed and fertilizer support to farmers who are involved in animal husbandry.	Output 2.1.2

7	Fo?a-Yeniba?aras? Village	?zmir	Fo?a	Terracing, retrival of unused agricultural land	1. Support to the District Directorate for the implementation of terracing (and the other microcatchment water harvesting techniques compatible with geographical and soil conditions) activities (Technical assistance, procurement of seeds and inputs, and renting technical equipment). 2. Recover unused agricultural land 3. Capacity building for the villagers of Yeniba?aras? to teach revenue generating species cultivation, processing and marketing, and study tours especially for women (at least 50%) to see the best practices on site. 4. Technical assistance on finding ways to use the wastes of animal breeders as natural fertilizers for the retrieved land.	Output 2.1.2

8	Kum Creek (Channel from ??mlek?i Diversion Weir to Marmara Lake)	Manisa	G?lmarmara	Streambed green belt	1. Planning land use/landcover of the streambed and floodplain of Kum?ay? creek (G?lmarmara channel). 2. Technical assistance to 2nd Regional Directorate of State Hydraulic Works, Regional Directorate of Forestry and Provincial Directorate of Agriculture and Forestry on greenbelt formation. 3. Providing seedlings of revenue-generating shrub species to be used in greenbelt application. 4. Feasibility study on the use of G?lmarmara District wastewater treatment plant treated effluents to provide irrigation water for the greenbelt site and later to the neighboring agricultural lands. 5. Equipment support for selected farmers from Beyler, ?smetpa?a and K?lcanlar residential areas to promote drip irrigation of agricultural lands. 6. Assessment of decommissioning/closure of the sand and gravel pits upstream the ??mlek?i Diversion Weir.	Output 2.1.2

9	G?lmarmara Lake Northern Shoreline Forestration	Manisa	G?lmarmara	Forestration, biodiversity (migrating birds)	1. Joint planning of the forestation site and the greenbelt site for enhancing biodiversity. 2. Assistance to Regional Directorate of Forestry on the selection of species with low water requirements. 3. Capacity building for villages around G?lmarmara in terms of sustainable water resources management. 4. Organization awareness raising activities at local, regional and state-wide levels to draw the attention of public on drying of G?lmarmara and vanishing fishery in the lake. 5. Providing support to delimit reforested area and limiting unauthorized access to dried lake area. 6. Organization of a workshop on G?lmarmara Lake and Vanishing Water Resources in the area to increase public awareness and to search for alternative mitigation plans to enhance biodiversity of the wetland thru alternative ways for increasing farmer income.	Output 2.1.1

	10	Gediz Delta - RAMSAR Site	?zmir	Menemen	Preservation of biodiversity	1. A scientific feasibility study for the determination of additional water supply to 500 ha of the Gediz Delta area for mitigating drying reeds. 2. Technical support for Gediz Delta Managers on effective water use. 3. Organization of an international bird survey for Gediz Delta Bird Sanctuary and fundraising activity to support financing additional water supply plans to the reed area. 4. Supporting Gediz Delta Management on rehabilitation and/or extension of new reed areas for increasing biodiversity. 5. Strengthen the Gediz Delta Management and rehabilitation of existing artificial flamingo islands. 6. Providing support to the Gediz Delta Management for devolving bird viewing activities for visitors. 7. Determination of monthly ecological water requirements of the reed area in the delta through a scientific survey and analysis. 8. Capacity Building on the Reduction of fertilizer and pesticide usage in agricultural lands near the delta area. 9. Assessment of the potential use of treated effluents of ?i?li Wastewater Treatment Plant after the implementation of additional advanced treatment methods in the delta area for reed	Outcome 1.1

11	Gediz Delta - RAMSAR Site	?zmir	Menemen	Production of revenue generating species	1. Assessment of the implementation of potential eco-tourism applications for providing additional income to villagers living near the delta area. 2. Organization of farmers market at the entrance to the delta area for providing extra source of income to villagers near the delta area.	Outcome 1.1

77. Proposed outcome indicators include:

? Ha of land restored under different types of land cover that integrates biodiversity (Targeting GEF Core Indicator 3. Area of Land Restored).

Target: 764 ha of land restored in the GRB

? Ha of land under SLM to restore ecosystem services and biodiversity (Targeting GEF Core Indicator 4.1. Area of landscapes under improved management to benefit biodiversity)

Target: 413 ha with improved connectivity benefitting biodiversity

? GEF Core Indicator 6.1 Carbon sequestered or emissions avoided in the AFOLU sector

Target: 334,848 tons of carbon sequestered in the GRB

? GEF Core Indicator 11. Number of direct beneficiaries disaggregated by gender

Target: 400 people benefit from INRM and SLM in the GRB (205 Female and 195 Male).

Component 3. Monitoring, evaluation and lessons dissemination

78. This component will focus on both the establishment of a comprehensive monitoring system for the restored landscapes to monitor progress and ensure the project?s progress is tracked and periodic evaluations are conducted for adaptive, results-based management. Similarly, project results,

key lessons learnt, and achievements will be documented and disseminated for replicability and scaling up in T?rkiye and beyond.

Outcome 3.1 Project implementation based on results-based management and lessons learned. Good practices documented and disseminated. Project monitoring and evaluation of global environmental benefits as well as socio-economic benefits disaggregated by gender will inform implementation and ensure that lessons learned are documented and shared.

Output 3.1.1. A Comprehensive monitoring system established and piloted for the restored lands within the framework of national LDN and CBD commitments. LDN in terms of balancing of losses and gains of productive land will be monitored together with area under biodiversity mainstreaming where some indicator species will be selected for monitoring Activities:

? Monitoring of area restored, SLM, LDN and biodiversity mainstreaming (using indicator species) - remote sensing of the three LDN indicators: land cover, land productivity and SOC will be used for monitoring as well as field surveys.

? Assessment of area restored, SLM, LDN and biodiversity mainstreaming for reporting to the national LDN mechanism and UNCCD and CBD focal points, using the indicators monitored in the activity above.

Output 3.1.2. Integrated monitoring and evaluation system for the project applied. A Project M&E system will be established to measure project progress and impacts in terms of multiple GEBs, and social and economic benefits. Baseline and targets for project indicators will be refined and used for monitoring project progress and impacts and reporting through three (3) annual project reports (PIRS) submitted to GEF Secretariat and six (6) semi-annual project progress reports submitted by the Project Management Unit (PMU) to the Lead Technical Officer (LTO) and FAO/GEF unit.

A mid-term evaluation will be carried out with field visits to selected sites and consultation with local stakeholders and project partners. A final evaluation will also be conducted and will include review of project reports, web-based information, and field visits to selected project sites, with recommendations for ensuring sustainability of Project outcomes and the Decision Support system. Both evaluations will be carried out by teams that include gender expertise.

Activities:

? A Gender-Sensitive Project Monitoring & Evaluation Plan and a relevant system established

? Project mid-term evaluation with a section reporting on the implementation of the Gender Action Plan (GAP) of the project.

? Assessment of GEBs and co-benefits disaggregated by gender for reporting to the GEF and for the mid-term and final evaluations

Output 3.1.3. Final evaluation conducted and informing replication strategies.The project final evaluation will pay special attention to the sustainabiity of the monitoring of LDN and biodiversity as well as the replication of best practices.

Activities:

? Project final evaluation with a section reporting on contribution to national LDN and biodiversity commitments.

? Final project report with recommendations developed to ensure sustainability and replication of best practices.

Output 3.1.4. Knowledge tools and information materials for SLM and integration of biodiversity into land-use plans developed and disseminated based on best practices.

Activities:

? Development and implementation of project communication strategy

? Sharing of lessons learned through production of project knowledge material on best practices, policy briefs, etc. for dissemination through digital platforms, public campaigns, etc.

79. Proposed outcome indicators include:
? Results Based Monitoring (RBM) system.

Target: RBM system in place that monitors area restored, SLM, LDN and biodiversity mainstreaming

? Number of people with enhanced knowledge and awareness.

Target: 400 people in the GRB with enhanced awareness of INRM, SLM and biodiversity mainstreaming

Alignment with GEF focal area and/or Impact Program strategies

80. The project is aligned with two GEF Focal area objectives as follows:

BD-1-1. Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors: The first entry point through which the project will

target GEF Objective BD 1-1 is the revision, design and implementation of the governance mechanism for the Gediz River Basin (Output 1.1.1). This governance mechanism will be complemented with tools such as the assessment natural capital (Output 1.1.2) and a decision support tool for water-resource management (Output 1.1.3) to provide the relevant stakeholders in T?rkiye with information for evidence-based decision making for spatial use planning, design of regulatory frameworks, and sustainable production in the agriculture sector. This will be complemented with Capacity building and demonstration of SLM Practices (Outputs 1.1.4 and 2.1.2 respectively). All of this work will also contribute to improve the management of the Gediz Delta Ramsar Site which is a Protected Area locatea on the area of influence of the project.

LD-2-5. Create enabling environments to support scaling up and mainstreaming of SLM and LDN: to contribute to this objective, the project will also build on the governance mechanism to provide support for policy planning and improve capacities. In addition, output 2.1.1 will work on the physical restoration of degraded land to support the provision of ecosystem services at 11 representative sites across the GRB with different types of land cover. This will be done considering an improvement in water management practices and the possibility to improving the livelihoods of surrounding communities.

Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF,

LDCF, SCCF, and co-financing;

81. The Government of T?rkiye has been active for decades investing in addressing all river basin planning and management issues. More recently it has embarked on adopting new approaches and tools for natural resource management and conservation. The MoAF has been carrying out management and monitoring activities within the river basin, in coordination and collaboration with other relevant government institutions. These activities vary from planning and management to implementation on the ground The GEF resources will build on all related baseline activities to generate global environmental benefits.

82. Under component 1, the project will demonstrate how to build a mechanism from top to bottom in River Basin Management. GEF resources will be used to create a governance system that integrates monitoring, community-based planning and decision making at the basin and sub-basin level. Through these practices, local actors including many women and youth will participate in the decision-making system in the River Basin.

83. Under component 2, GEF incremental financing will be used to demonstrate socially and economically viable actions in the different sites. These activities will be up-scaled using co-financing. The project will support planning activities (inventory and participatory management plans) that will

lead to the development of business models and further investments (including household investments) in new technologies and approaches.

84. Finally, under Component 3, the GEF incremental financing will support activities related to the development of the project's M&E system (including staff and data collection), the preparation of training and awareness-raising materials, and organizing meetings and travel for the capacity building program.

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

85. By extending the ecosystem coverage through buffer zones and incorporating biodiversity conservation concerns into productive land and forest management and planning, conservation of globally significant species will be enhanced:

? Specific species and targeted increase in respective populations

? Through improved landscape restoration techniques and restoration, carbon stocks will be enhanced and sequestered

? The flow of important wetland ecosystem services and goods (e.g. NWFPs) is sustained through improved sustainable land management

86. The project is expected to achieve the following Global Environmental Benefits in relation to the GEF Core Indicators

Table 5. Global Environment Benefits (GEB) and GEF Core Indicators.

GEF Core Indicator	**Site**	**Type of Activity**	**CEO Endorsement Target**	**Target Outcome/Outputs**
1. Terrested protected areas created or under improved management for conservation and sustainable use (Hectares)	Gediz Delta Ramsar Site (Sites 10 an 11)	Improved management to Benefit Biodiversity as measured by the GEF Protected Area Management Effectiveness Tracking Tool (METT)	14,900 Ha	All activities from Outcome 1.1

4.1. Area of landscapes under improved management to benefit biodiversity	Golmarmara (site 8)	Reforestation, Greenbelt and imporved irrigation	203 Ha	Output 2.1.2
3.2 Area of forest and forest land restored	Golmarmara (Site 9)	Biodiversity mainstreaming, Reforestation, Greenbelt and imporved irrigation	764 Ha	Output 2.1.1
4.1. Area of landscapes under improved management to benefit biodiversity	Kula and Menemen (Sites 4,5,6)	Rangeland Rehabilitation	210 Ha	Output 2.1.2
6. Carbon sequestered or emissions avoided (AFOLU)	Co-benefit of Reforestation and rehabilitation activities		334,848 tCO2eq	Output 2.1.1 and Output 2.1.2
11. Number of direct beneficiaries, by gender	Irlamaz and Tabak Creeks, Kula-G?vercinlik and Fo?a-Yeniba?aras? Sites (1,2,3,7)	Capacitiy Building	50 (20 female and 30 male) government staff with improved capacities for the implementation of the GRBMP 200 (100 female and 100 male) local stakeholders trained with improved capacities for the implementation of the GRBMP At least 400 (205 female and 195 male) people benefit from the adoption of INRM and SLM practices in the GRB Total direct beneficiaries: 650 (50% female).	Output 1.1.4 (Capacity Building) and Output 2.1.2 (SLM practices with local beneficiaries).

Innovativeness, sustainability, potential for scaling up and capacity development[28] . ?

87. Innovativeness: In the context of T?rkiye, the project is innovative as it is implementing approaches that are new to the country. Landscape restoration and collaborative management, as well as green belt applications in river basin management will become more integrated with water resources management. In the future, ecosystem services (including biodiversity) considerations will become an integral part of wetland and river basin management in T?rkiye based on the approach developed in the GRB.

88. Sustainability and Potential for scaling up: The institutional and local level capacities built, the governance models setup, and livelihood activities implemented will ensure the overall sustainability of the results achieved through this project. The landscape restoration, plantation of green belts, improved rangeland management, and groundwater recharge in river beds, and other pilot activities under this project will provide a blueprint for GDWM to scale up the piloted activities throughout the country under their regular programmatic efforts in other river basins.

Opportunities to mitigate impacts, deliver GEBs and contribution to green recovery and building back better

89. This project will build on the efforts from the Turkish Government to build back better considering that the Water Service has been designed as a key executing agency for post COVID-19 economic recovery activities with the implementation of water management and natural resource protection activities to be developed during 2021-2022. This project will take the lessons learned from that experience and build on them to promote sustainable practices and business models for the forestry and agriculture sectors. The project will partner with the private sector, local communities and stakeholders to implement good practices, and partnerships. These activities will be a part of a river basin management strategy that will contribute to the conservation of biodiversity and ecosystem services and achieve T?rkiye?s LDN targets trought the restoration of at least 764 ha of the degraded riparian zone of the River (including degraded riparian zone-habitats, agricultural land and production landscapes). SLM practices will be upscaled and promoted to prevent soil degradation, increase vegetation cover, improve the water conservation and water usage efficiency, and reduce diffuse pollution caused by agriculture, including sedimentation in the Gediz river basin, restoring ecosystem services and biodiversity and in parallel, improving the livelihoods of smallholder farmers who will directly benefit from these practices

[1] EU WFD 2000/60 of 22 December 2000.

[2] 2018. Gediz River Basin Management Plan

[3] http://www.dsi.gov.tr/toprak-ve-su-kaynaklari

[4] https://www.sbb.gov.tr/wp-content/uploads/2020/06/Eleventh_Development_Plan-2019-2023.pdf

[5] https://www.wri.org/publication/aqueduct-projected-water-stress-country-rankings

[6] T?rkiye National Water Plan (2019-2023), https://www.tarimorman.gov.tr/SYGM/Belgeler/NHYP%20DEN%C4%B0Z/ULUSAL%20SU%20PLANI.pdf

[7] FAO AQUASTAT?Total water withdrawal in T?rkiye increased by roughly 56% between 2000 and 2015, driven mainly by agricultural uses. Agricultural water withdrawal increased from 31.5 to 50.1 billion m^3 in this period.

[8] reference

[9] http://extwprlegs1.fao.org/docs/pdf/tur175972.pdf

[10] Link for Gediz RBMP

[11] https://www.academia.edu/15725850/Gediz_Basin_Management_Problems_and_Possible_Remedies

[12].Dabanli, I. 2018. Drought risk assessment using drought hazard and vulnerability indexes. Natural Hazards Earth System Sciences. https://doi.org/10.5194/nhess-2018-129

[13] Data on populataion retrived from TURKSTAT 2020, and on the geographical coverage from Gediz River Basin Management Plan, Ministry of Agriculture and Forestry, 2018.

[14] The legislation in the field of water quality built upon Water Framework Directive (2000/60/EC) during Acquis Alignment process and a comprehensive Draft Water Law has been developed based on a holistic water management approach. Considering the importance of river basin management approach River Basin Protection Action Plans (RBPAP) have been developed for 25 river basins

[15] Gediz River Basin Management Plan, Ministry of Agriculture and Forestry, 2018

[16] Gediz River Basin Management Plan, Ministry of Agriculture and Forestry, 2018

[17] Information on the general characteristicts of the industrial settlements are retrieved from specific websites of the industrial zones in February 2022, including : http://www.iaosb.org.tr/, http://www.kosbi.org.tr/anasayfa, https://uosb.org.tr/, https://www.mosb.org.tr/.

[18] Source: CORINE (2018). Corine Land Cover (CLC) Database version 2020. European Environment Agency (EEA) Copernicus Land Monitoring Service, EU.

[19] Source: Source SYGM (2019). Gediz River Basin Management Plan. Ministry of Agriculture and Forestry, General Directorate of Water Management, Ankara.

[20] Source: SYGM (2019). Gediz River Basin Management Plan Soil Database. Ministry of Agriculture and Forestry, General Directorate of Water Management, Ankara.

[21] Source: FAO (2020). Global Soil Organic Carbon Map (GSOCmap) Version 1.5, Technical report, Food and Agriculture Organization of the United Nations, Rome.

[22] The Gediz Delta has been identified as an important Bird and Biodiversity Area, as well as a Key Biodiversity Area based on significant populations of globally threatened species, significant populatoia of endemic species known to be found in a limited area, and significant congregations of one or more bird species at certain times in their lifecycle or seasonal migration. Ibat-alliance.org/kba-factsheet/787 https://www.protectedplanet.net/166884

[23] Ibat-alliance/kba-factsheet/762

[24] Fish catches have declined in the Gediz Delta, possibly due to increasing salinity in the lagoons as a result of reduced freshwater inflows (BirdLife International, 2020. Important Bird Areas factsheet: Gediz Delta)

[25] ,MoEU (2012). T?rkiye?s National Climate change adaptation strategy and action plan (2011-2023). (link)

[26] Bozoglu et al (2019). Impacts of climate change onTurkish Agriculture. Journal of Env. Application and Science, v14(3): 97-103.

[27] Dellal et al (2011). The economic assessment of climate change on Turkish agriculture. Journal of Env. Protection and Ecology, v12: 376-385

[28] System-wide capacity development (CD) is essential to achieve more sustainable, country-driven and transformational results at scale as deepening country ownership, commitment and mutually accountability. Incoporating system-wide CD means empowering people, strengthening organizations and institutions as well as enhancing the enabling policy environment interdependently and based on inclusive assessment of country needs and priorities.

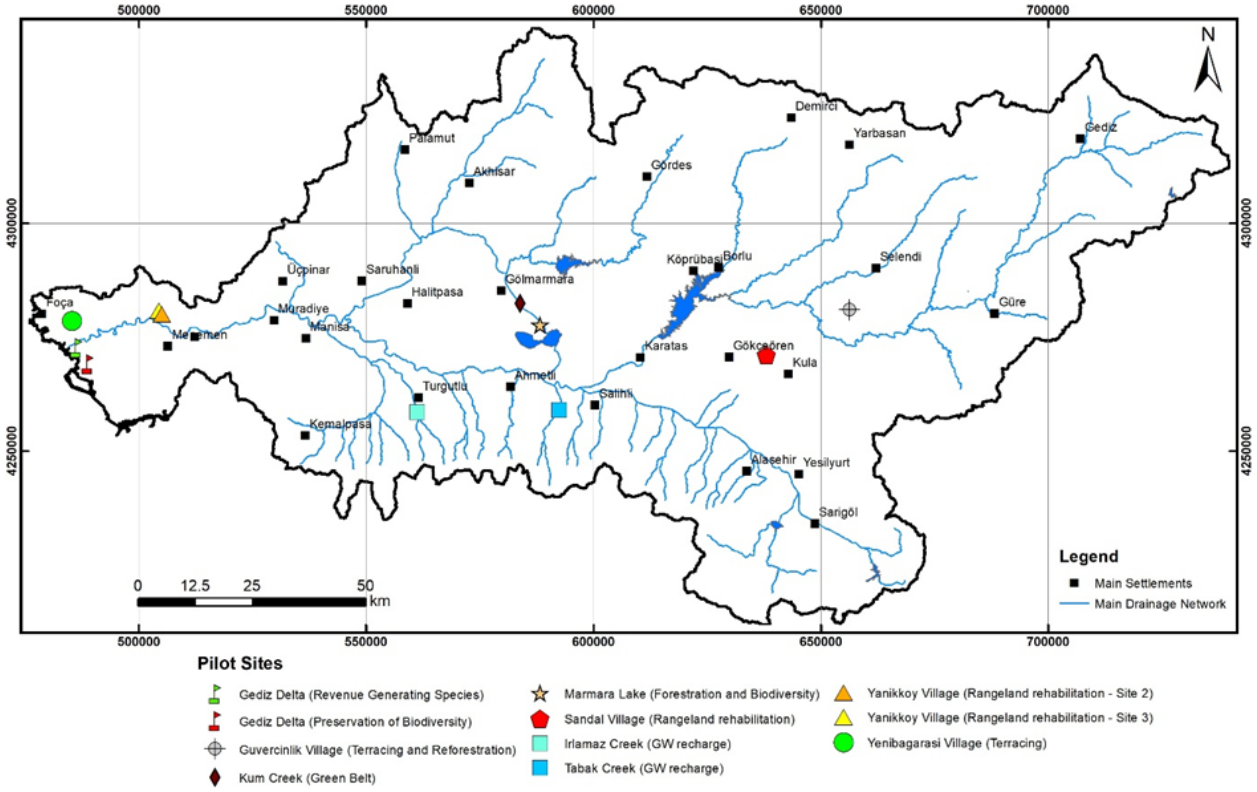
- Country ownership, commitment and mutual accountability: Explain how the policy environment and the capacities of organizations, institutions and individuals involved will contribute to an enabling environment to achieve sustainable change
- Based on a participatory capacity assessment across people, organizations, institutions and the enabling polivy environment, describe what system-wide capacities are likely to exist (within project,

project partners and project context) to implement the project and contribute to effective management for results and mitigation of risks.

- Describe the project?s exit / sustainability strategy and related handover mechanism as appropriate.

1b. Project Map and Coordinates

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



#	Site Name	Projected Coordinates (UTM Zone 35 ED1950)
1	Irlamaz Creek	561264E 4258629N
2	Tabak Creek	592533E 4259117N
3	Kula-G?vercinlik Village	656353E 4281097N
4	Kula-Sandal Village	638047E 4271136N
5	Menemen-Yan?kk?y Site:2	505186E 4280028N
6	Menemen-Yan?kk?y Site:3	504484E 4280854N

7	Fo?a-Yeniba?aras? Village	485404E 4278646N
8	Kum Creek (Channel from ??mlek?i Diversion Weir to Marmara Lake)	583924E 4282470N
9	G?lmarmara Lake Northern Shoreline Forestration	588302E 4277762N
10	Gediz Delta - RAMSAR Site	488834E 4269174N
11	Gediz Delta - RAMSAR Site	486411E 4272674N

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Stakeholder Name	Stakeholder Type	Stakeholder profile	Consultation Methodology	Consultation Findings	Date	Comments
	Direct beneficiary	*Non-Gonvernmental Organization*				
	Indirect Beneficiary	*National Government Institution body*				

General directorate of water management	*Direct beneficiary*	*National Government Institution body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings.*

?zmir General Directorate of Agriculture and Forestry	*Direct beneficiary*	*Regional Government Institution/body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Manisa General Directorate of Agriculture and Forestry	*Direct beneficiary*	*Regional Government Institution/body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

General Directorate of Nature Conservation and National Parks	*Direct beneficiary*	*National Government Institution body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

General directorate of state water works	*Direct beneficiary*	*National Government Institution body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Forest regional directorate	*Direct beneficiary*	*National Government Institution body*	*Online and face to face meetings and meetings on project sites*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc.*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Local community members around Irlamaz Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtars of the Settlements around Irlamaz Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Local community members around Tabak Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtars of the Settlements around Tabak Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Local community members around Tabak Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtar of the Kula-G?vercinlik Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Community members of the Kula-G?vercinlik Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtar of the Kula-Sandal Village		*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Community members of the Kula-Sandal Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtar of the Menemen-Yan?kk?y Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Community members of the Menemen-Yan?kk?y Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtar of the Fo?a - Yeniba?aras? Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Community of the Fo?a - Yeniba?aras? Village	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the desi Potential risks and benefits of*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Local community members around Kum Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtars of the settlements around Kum Creek	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Local community members in the settlements around G?lmarmara lake Northern shoreline forestration	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtars of the settlements the settlements around G?lmarmara lake Northern shoreline	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Muhtars of the Settlements around the Gediz Delta RAMSAR site	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Community members of the Settlements around the Gediz Delta RAMSAR site	*Direct beneficiary*	*Local community*	*Face to face meetings on project sites and consultation over the phone by randomly selected households*	*Questions raised by stakeholders were answered by the FAO Team and the Experts, as much as possible. Otherwise, detailed questions and demands from the stakeholders were noted. Many stakeholders greatly contributed to the initial list, by sharing names and contact information of several local actors that should be included in the stakeholder engagement process, both within the PPG phase and during the implementation of the Project. Stakeholders had enough opportunity to raise their concerns about the Project area, human activities in the region, and the threats stemmed from them; stakeholders also provided the Project Team with valuable information on their priorities and solution proposals, that will contribute to the design of the ProDoc. Potential risks*	*Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation*	*All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings*

Governor of Manisa	*Indirect Beneficiary*	*Local Government Institution/body*	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings.

Mayor of Manisa	*Indirect Beneficiary*	*Local Government Institution/body*	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via ad-hoc meetings.
District Governors of Turgutlu, Salihli, Kula and G?lmarmara	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

District mayors of Turgutlu, Salihli, Kula and G?lmarmara	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
Manisa Chamber of Commerce and Industry	Indirect Beneficiary	Non-Gonvernmental Organization	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

Manisa Muhtars Association	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
Manisa Producer Women?s Association	Indirect Beneficiary	NGO	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

Turkish Women?s Union Association Manisa Branch	Indirect Beneficiary	NGO	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
Director Ships of the Industrial Zones of Turgutlu, Salihli, Kula and G?lmarmara	Indirect Beneficiary	Private Sector	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

The Governor of Izmir	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
Major of the Izmir Metropolitan City	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

District Governors of Menemen and Fo?a	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
Mayors of Menemen and Fo?a	Indirect Beneficiary	Local Government Institution/body	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

Izmir Chambers of Commerce and Industries	Indirect Beneficiary	Private Sector	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via
?zmir Producer Women?s Association	Indirect Beneficiary	NGO	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

Turkish Women?s Union Association ?zmir Branch	Indirect Beneficiary	NGO	Online and face to face meetings and meetings on project sites	Questions raised by stakeholders were answered by the FAO Team and the Experts.	Between 28th November and 3rd December 2021; between 12th and 18th April 2022; and various other dates during the project document preparation	All contacted stakeholders were informed about the Project (most of the time with a presentation and sometimes verbally) by the FAO Project Coordinator and other team members. Experts Team members carried out this task via prearranged meetings with the key stakeholders, and via

Please provide the Stakeholder Engagement Plan or equivalent assessment.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Stakeholder	Type of engagement in project implementation.
Ministry of Agriculture and Forestry (MoAF)- General Directorate of Water Management (GDWM)	Project proponents. Will be the main Executing partner and chair of the Project Steering Committee.
Other Directorates under MoAF and other relevant govt. Ministries and respective Directorates (especially State Hydrology Works, General Directorate of Forestry, General Directorate of Nature Conservation and National Parks, General Directorate of Agricultural Reform, General Directorate of Agricultural Research and Policy)	Will be consulted and engaged effectively for inputs and comments on the development of activities during project implementation

Stakeholder	Type of engagement in project implementation.
Regional and sub-regional Directorates and Province Directorates of MoAF	Local-level executing partners, and will play a key role in developing project activities.
Academic and research institutes, Municipalities	Will play a key role in capacity building and information management activities will provide inputs in developing the relevant project activities
CSOs and local cooperatives (e.g. Irrigation Unions, Farmer Unions)	Will play a vital role in organizing local level consultations and providing feedback and inputs into the project design
Local communities (Women and men farmers, land users etc.)	Direct project beneficiaries.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

1. Gender is central to the Food and Agriculture Organization of the United Nations? (FAO?s) mandate to achieve food security for all by raising levels of nutrition, improving agricultural productivity and natural resource management, and improving the lives of rural populations (FAO 2013, p.1). The goal of FAO?s Policy on Gender Equality is to achieve equality between women and men in sustainable agricultural production and rural development for the elimination of hunger and poverty. FAO is working with countries, other UN agencies, civil society organizations (CSOs) and bilateral and private sector partners to make progress toward achieving objectives by 2025.

2. The GEF recognizes that, for its Project interventions to achieve their global environmental objectives, particular attention should be paid to enhancing both women?s and men?s contributions. The GEF was one of the few international financial institutions to develop early-on an independent public participation policy, including provisions on gender issues. In addition, the GEF Operational Strategy provides ten operational principles and overall direction to the GEF focal areas to maximize global environmental benefits. Principle 7 relates directly to public participation, including gender, and states that ?GEF projects shall provide for full consultation with, and participation as appropriate of, the beneficiaries and affected groups of people? (GEF 2008, p.7,15,16).

3. Gender equality is protected by international and national legal regulations in T?rkiye. In 1985, T?rkiye signed and ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), and in 2000, the country signed the Additional Protocol to CEDAW. In 2002, T?rkiye signed the Optional Protocol (of CEDAW) that allowed the right of individual petition to the Convention?s Committee on the Elimination of Discrimination against Women. In addition, in 1995, the Turkish government signed the Beijing Declaration of the Fourth World Conference on Women, and committed itself to its Action Plan.

4. In T?rkiye, the Constitution is the fundamental document regulating and guiding all issues relating to gender equality. In addition to the Constitution, the main legal documents regulating gender policy are: the Turkish Civil Code, Labour Law and the Penal Code. Mainly the Ministry of Family, Labor and Social Policy and other governmental bodies are jointly working on women?s empowerment in their socio-economic lives. A Directorate for women?s rights and gender equality was established in 1990: the General Directorate of Women?s Status, (Kad?n?n Stat?s? Genel M?d?rl???, KSGM). Its main mission is to promote gender equality in T?rkiye by developing programs and policies to reduce all forms of gender-based discrimination. On 8 June 2011, the KSGM was restructured as one of the main units under the Ministry for Family and Social Policies. In addition to the KSGM and the Ministry for Family and Social Policies, there are a number of platforms composed of governmental units, civil society actors and stakeholders that are working in the field of gender equality policy.

5. According to, a new measure, 2017 Gender Development Index (GDI), T?rkiye?s GDI value is 0.755 out of 164 countries. This rate placing the country into Group 4 which covers medium-low equality in Human Development Index achievements between women and men.

6. Another tool reflecting gender situation is Gender Inequality Index (GII). T?rkiye ranks 69th out of 189 countries in terms of gender-based inequalities in three dimensions ? reproductive health, empowerment and economic activity. The GII can be interpreted as the loss in human development due to inequality between female and male achievements in the aforementioned three dimensions (UNDP, 2018). According to UNDP data, female participation in the labour market is 32.4% compared to 71.9%for men. Additional GII data is structured as follows:

	GII value	GII rank	Maternal Mortality Ratio	Adolescent Birth Rate	Female seats in parliament %	Population with at least some secondary education %		Labour force participation rate %	
						Female	Male	Female	Male
T?rkiye	0.317	69	16	25.8	14.6	44.9	66.0	32.4	71.9
Europe and Central Asia	0.270	-	24	25.5	20.7	78.4	85.9	45.5	70.3
High HDI	0.289	-	38	26.6	22.3	69.5	75.7	55.0	75.5

7. The main income resources conducted in Gediz Basin are agriculture and livestock activities. According to the World Bank data, the rate of female employment in the agriculture sector is 27,9 while this rate for the male is 15,2%. The unemployment rate is considerably high among females which is 13,6 %. This rate is 9,6 for males.

8. Women play an essential role in agricultural production, and make up a substantial part of the agricultural labour force. However, a large number of rural women typically work as unpaid family workers, performing tasks both within their households and household plots. According to ILO estimates (the World Bank), the rate of female family workers is 25,1 and this rate is 4,3 for males. Their contribution is invisible in official statistics and is often undervalued by women themselves as perceived as a continuation of their natural role.

9. Men who work in agriculture have better access than women to business support services, training and education, which contribute to better work opportunities and higher pay. Women in rural areas have less access than men to productive resources and opportunities and thus income. The gender gap is found for many assets, inputs and services ? land, livestock, labor, education, extension and financial services, and technology ? and it imposes costs on the agriculture sector, the broader economy and society as well as on women themselves.

10. The main challenges to close gender GAPs in the project areas are the following:

- ? Higher unemployment rates among women
- ? Women face the problem of time scarcity as they have to take care of the production in the field on the one hand, and the housework, child and elderly care on the other.

? The intensive participation of women in agricultural production is an obstacle to enrolling in education services

11. The project represents an opportunity to contribute to closing these gender gaps. For this, a Gender Action Plan (GAP) has been prepared. A Gender Specialist will be hired by the project to ensure the completion and monitoring of these activities and gender considerations will be included in the ToRs for all project personnel. In particular, the project will implement the following actions to approach the above-mentioned challenges:

? Increasing gender awareness of government officials at the institutional level and mukhtars at the community level: this will be done by mainstreaming gender considerations into the governance mechanism and capacity building for the implementation of the GRBMP under component 1.
? Develop skills and practices to improve women's qualifications and increase their employability, and release women form intensive burden from agricultural activities: the implementation of Sustainable Land Management and Restoration practices will be decided among local communities considering the participation of women and will be complemented with capacity building activities.
? Supporting women with income-generating activities. Green-Belt and reforestation work will be done considering income-generating species to support the livelihoods of local communities.

12. Women?s participation in the decision-making process and their full engagement in project activities will be ensured through specific arrangements. The project will ensure that half of the beneficiaries are women (51%) and their conditions will be considered to organize activities such as specifically designed training in line with their needs, flexible training hours, appropriate timing (considering agricultural seasons) of project activities, their close interaction with women project staff and childcare services (if and when possible). In addition, at least 30% of beneficiary women participate in decision processes during the BPAP and RBMP.

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;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

1. Representatives of the private sector, mainly land users and women and men farmers including, families involved in rangeland management will be the main partners of this project. They will be the direct beneficiaries in the implementation of environmentally friendly agricultural activities, alternative income generation activities. Equal participation of women farmers will be ensured.

2. There are a remarkable number of individuals industries (agricultural and others), organized industry district ones and other small enterprises in several sectors as representatives of the private sector. It is inevitable to keep in touch with them or their representatives, especially for wastewater related issues. Moreover, landowners and farmers are our key partners for agricultural practices and dissemination of innovative approaches especially firstly in the Basin.

3. Engagement with the private sector under this project will be completed at the following levels:

? Local Communities: They will be the main beneficiaries from the project benefiting from the demonstrations of sustainable land management, restoration and reforestation practices to support income-generation and improved livelihoods. This will be guaranteed by involving local community members and local mukhtars on the demonstrations and capacity building activities.

? Academic and research institutes: will play a key role in capacity building and information management activities and will provide inputs to develop project activities.

? CSOs and local cooperatives. Will play a vital role in organizing local level consultations and providing feedback and inputs to the project activities.

? Izmir and Manisa Chambers of Commerce and Industries were also consulted during project preparation to raise awareness of the project among local stakeholders.

? As part of the revision of the existing river basin management plan and governance model proposed under Output 1.1.1 the project will also assess the participation of the private sector on the implementation of the GRBMP.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

1. The following potential risks and mitigation measures have been identified.

Risk	*Rating*	*Mitigation Measure*	*Responsible Party*
Decrease in project support from the government	Low	The government authorities have fully backed the development of this concept and all concerned government stakeholders were involved in project preparation. Moreover, the project fits into national development and environmental priorities and the project will continue to consider all the relevant stakeholders during project implementation.	General Directorate of Water Management (GDWM) and Ministry of Agriculture and Forestry (MoAF)
Climate Change	Medium	During the lifetime of the project, it is probable to come across with effects of climate change on water resources and agricultural resources. As one of the results, a decrease in agricultural productivity is mostly possible in the next decades. The project considers monitoring and stocktaking on water quantity and quality and agricultural resources for climate change resiliency.	PMU
Low institutional capacity at national and local level hampering project progress	Medium	To mitigate this risk, the project design incorporates institutional capacity building measures taking into account the specific needs of stakeholders.	General Directorate of Water Management (GDWM) and Ministry of Agriculture and Forestry (MoAF)
Project activities are implemented in a compartmentalized fashion with little integration and coordination with all relevant government departments (for example: unsustainable tourism development activities implemented in project areas affecting the sustainable resource management impacts generated by the project)	Low to Medium	Under component 1, a governance model will be established, within and beyond the project context, the model will ensure coordination between all relevant government actors. Consultations have been held with all relevant government departments and this process will continue throughout the project implementation to ensure that the project progress and impacts generated do not happen in isolation.	PMU

Reluctance of local population to involve and participate effectively in the project activities	Low to Medium	Local communities (through community and civil society representatives) were involved during the project preparation processes. The project activities, especially livelihood improvement activities under Component 2 and the sustainable impacts generated, will ensure continued interest and participation of local communities	PMU, General Directorate of Water Management (GDWM) and Ministry of Agriculture
Women?s restricted participation in project activities due to agricultural season, patriarchal structure and/or caring responsibilities.	Medium	Project activities and timing for community members were designed considering women?s eligible time and agricultural/grazing season. On the other hand, project experts will closely be working with men community members to increase their awareness of gender equality.	PMU, General Directorate of Water Management (GDWM) and Ministry of Agriculture
Women?s hesitation to participate in project activities due to cultural attitudes.	Medium	Women staff members of the project team will communicate with local women when needed.	PMU, General Directorate of Water Management (GDWM) and Ministry of Agriculture
COVID-19 Pandemic	Medium	The project will consider the evolution of the pandemic in the implementation of all its activities and were necessary, a COVID-19 mitigation plan will be developed. In addition, the project will build on the efforts of the Turkish goverments for Green recovery as described on the project description above.	PMU, General Directorate of Water Management (GDWM) and Ministry of Agriculture

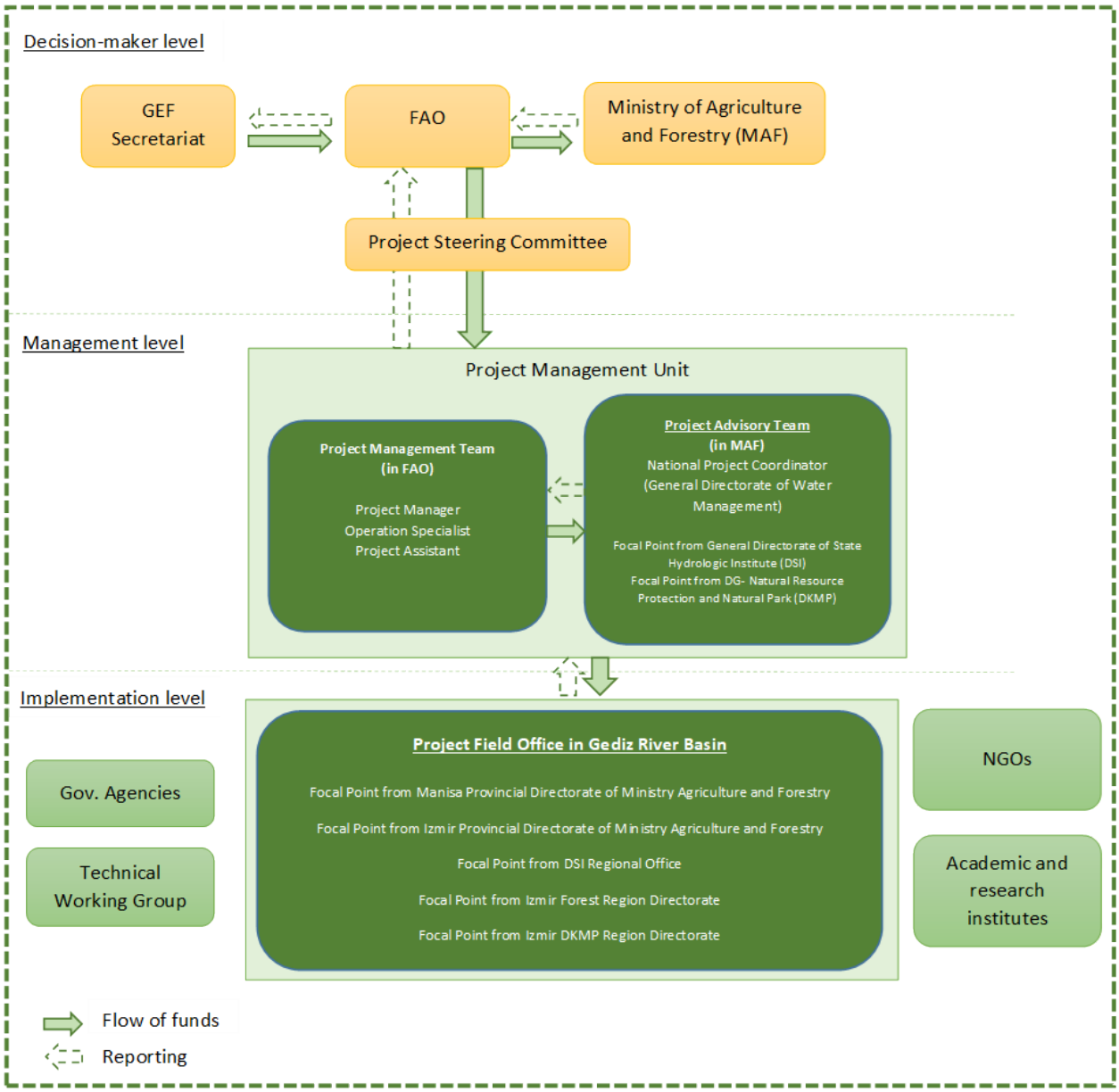
6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

6.a Institutional arrangements for project implementation.

1. The General Directorate of Water Management (GDWM) under the Ministry of Agriculture and Forestry (MoAF) will be the main project partner, with FAO providing oversight as GEF Agency as described below.

2. The project organization structure is as follows:



3. The government will designate a National Project Coordinator (NPC). Located in the Ministry of Agriculture and Forestry the NPC will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners.

4. The NPC (or designated person from the lead national institution) will chair the Project Steering Committee (PSC) which will be the main governing body of the project. The PSC will approve Annual Work Plans and Budgets on a yearly basis and will provide strategic guidance to the Project Management Unit and to all executing partners.

5. The PSC will be composed of representatives from the General Directorate of Water Management of the Ministry of Agriculture and Forestry and FAO T?rkiye, and Focal Point for the project from respective agencies. Hence, the project will have a Focal Point in each concerned institution. As

Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

6. The Project Manager (PM) (see below) will be the Secretary to the PSC and be responsible for coordination and implementation of all project activities. The PSC will meet at least twice per year to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of governmental partners work under this project; vi) Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the National Project Coordinator of the PMU.

7. A Project Management Unit (PMU) will be co-funded by the GEF grant and established within the General Directorate of Water Management. The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation, and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of a Project Manager (PM) who will work full-time for the project lifetime. In addition, the PMU will include a GEF Portfolio Coordinator (in-kind) or Assistant FAO rep (Programme), operations assistant and communication specialist as well as a monitoring and evaluation officer.

8. The Project Manager will be in charge of the technical implementation, management, and oversight of the project, in close coordination with the General Directorate of Water Management and within the framework outlined in the Project Results Framework (Annex 1), and approved Project Budget (Annex 2). He/she will work under the technical supervision of the FAO Project Task Force, particularly the FAO Lead Technical Officer (LTO). The PM will be responsible, among others, for:

i.Lead the operational planning, coordinate and monitor the technical delivery of project outcomes, outputs and activities;

i.Provide operational guidance to the executing partner(s) and experts to ensure that the activities are implemented using relevant approaches, tools and methodologies and best practices.

i.Provide technical guidance, assess, review and approve the deliverables together with the GEF-financed national technical specialists (TS), and the technical outputs of the executing partner(s), short-time consultants, and other technical teams financed by projects funds, in close consultation with FAO and the Operational Partner.

i.Ensure technical alignment of this GEF project?s objectives and the programs implemented by partner institutions and organizations at national and local levels.

i.Ensure a high level of collaboration between participating institutions and organizations at the national and local levels;

i.Supervise the project?s M&E and communications plans.

9. During the implementation of the project, a field office will be established considering the Ministry of Agriculture and Forestry, the focal points from Izmir and Manisa Provincial Directorates, one focal point from Regional Directorate of Stathe Hydraulic Works, Izmir Regional Directorate Natural Resource Protection and National Parks (responsible for Gediz National Park), Izmir Forestry Region Directorate will assigned by MAF. The focal points will be responsible for developing project activities in GRB and selected pilot areas.

10. The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency (IA) for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for the delivery of the results.

In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project (see Annex J for details):

? The Budget Holder, which is usually the most decentralized FAO office, will provide oversight of day-to-day project execution;

? The Lead Technical Officer(s), drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Project Steering Committee;

? The Funding Liaison Officer(s) within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements.

11. In addition to the PMU the project will consider a **Project Technical Unit** (within Manisa/Izmir Provincial Directorate of MAF) with the following personnel and associated tasks and responsibilities:

Water management Expert:

? Lead the hydrological monitoring of surface and subsurface waters at project sites during the project time period
? Lead the capacitiy building activities on sustainable water resorce management and effective use of irrigation water
? Lead the demonstrations of sustainable water irrigation.
? Lead the capacity building activities for with reference to sustainable water resource management, water conservation and erosion prevention
? Lead the feasibility studies of wastewater treatment for irrigation.
? Technical support for Gediz Delta Managers on effective water use.

Land Management and SLM Expert:

? Develop landscape restoration plans and activities at project sites and provide rechnical assistance for their implementation.
? Liaise with local stakeholders to identify restoration and sustainable land management activities.
? Lead the work of delimitation of rehabilitated rangelands.
? Lead capacity building activities on rangeland protection and suitable animal grazing.
? Support research activities of local forestry personnel for testing the suitability of alternative tree species to be used in reforestation activities.
? Ensure the integration of the increased hydrological functions of forests dimension into project activities.
? Provide Technical assistance and lead the activities related to forestation and greenbelt formation.
? Providing support to delimit reforested area and limiting unauthorized access on restored sites.

The **M&E Specialist** will design and develop the Monitoring and Evaluation Strategy with relevant stakeholders, clearly defining the expected results, expected timelines for achievement and confirmation through objectively verifiable indicators and means of verification including the following specific tasks:

? Design the Project?s monitoring and evaluation platform.

? Implement and manage the project's M&E Plan;

? Follow-up the execution of the work plan and budget to ensure an adequate level of investment in accordance with the program.

? Participate in planning, information collection, data processing, analysis and elaboration of compliance reports withing the framework of the project.

? Guide staff and implementing partners in preparing their progress reports. Together, analyze these reports in terms of problems and actions needed.

? Collaborate with staff and implementing partners on qualitative monitoring to provide relevant information for ongoing evaluation of project activities, effects and impacts.

? Foster participatory planning and monitoring by training and involving primary stakeholder groups in the M&E of activities.

? Plan for regular opportunities to identify lessons learned and implications for the project?s next steps. Participate in these events when possible.

? Keep the higher levels informed on the project?s progress and provide feedback to the execution of activities.

? Undertake periodic field visits to each of the intervention areas in coordination with the technical personnel in order to verify in situ the progress achieved.

? Coordinate periodic monitoring meetings ensuring an active support.

? Provide information for Mid-term Review (MTR) Report.

? Provide information Final Evalution (FE) Report.

The Gender Specialist will **provide assistance in advancing gender equality and female empowerment by ensuring full integration of gender issues in supporting the implementation of the projects**

? Coordinate with experts to review curricula and ensure that technical information is in line with quality standards and is presented in simple and understandable language and illustrations.? Implementing the projects' gender strategy to prioritize women's roles in training, food security, nutrition, income generation, and value-added activities in their communities and families.

? Conduct gender-sensitive analyses to ensure that the different needs, constraints, capacities, and priorities of the project target women and men are understood and addressed.

? Improved gender mainstreaming in project activities and project management tools, including gender results tracking and gender-sensitive analysis of the data collected.

The Knowledge Management Specialist will support the design and implementation project knowledge management plan including the following specific responsibilities:

? Design and implement mechanisms for dissemination and exchange of best practices and lessons for replication and upscaling of the project results.

The Communication Specialist will support the design and implementation project communication plan including the following specific responsibilities:

? Sharing of lessons learned through production of project knowledge material on best practices, policy briefs, etc. for dissemination through digital platforms, public campaigns, etc.

12. During the first year of project implementation, the PSC will select National Technical Partners (e.g., Local Research institutes, local governments, NGOs) for the Execution of the following main project activities.

? Assessment of existing Gediz River Basin Management Plan and Governance Model and design of new governance model

? Participatory Preparation of Species Management Action Plan

? Assesment of Gedir River Basin Natural Capital, Capacity Diagnostic and Forest Management Plan

? Development Calibration and Monitoring of Hydro Economic Model

? Desing of a Capacity Building Program for the implementation of the Gediz River Basin Management Plan

? Implementation of landscape restoration activities to improve the provision of ecosystem services and biodiversity integration (Rangeland rehabilitation)

? Implementation of SLM practices to avoid and reduce land degradation and restore ecosystem services and biodiversity in the river basin. Including Groundwater recharge planning, and reforestation

13. The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency (IA) for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project:

? The Budget Holder (FAO T?rkiye Office) will provide oversight of day to day project execution;

? The Lead Technical Officer(s), drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Project Steering Committee;

? The Funding Liasion Officer(s) within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements.

? FAO responsibilities, as GEF agency, will include:

? Administrate funds from GEF in accordance with the rules and procedures of FAO;

? Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;

? Conduct at least one supervision mission per year; and

? Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress;

? Financial reporting to the GEF Trustee.

6.b Coordination with other relevant GEF-financed projects and other initiatives.

Coordination with other GEF projects:

10. The project will be tightly aligned with the decision support system for LDN being developed under the ***?Contributing to Land Degradation Neutrality (LDN) Target Setting by Demonstrating the LDN Approach in the Upper Sakarya Basin for Scaling up at National Level?*** project (GEFID 9586). The project will take advantage of the methodologies and approaches to carry out a decision support system as well as with the monitoring systems being developed to report on LDN achievement.

11. The project will also take advantage of the improved integration and sustainable landscape-scale management of forest, agricultural and other productive systems to enhance ecosystem services and goods, while also contributing to the buffering of protected areas and maintaining their inter-connectivity, being developed under the ?**Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in T?rkiye?s Kazda?lari Region** project (GEFID?..)

12. The project ?Integrated approach to the management of forests in T?rkiye, with a demonstration in high conservation value forests in the Mediterranean region? (UNDP) will allow getting benefit with showing the demonstration of innovative mitigation and sequestration approaches implemented at forest habitat in T?rkiye.

13. The project will also be directly linked with the World Bank-funded ?**T?rkiye Irrigation Modernization Project? (TIRP)** which has activities taking place in the eastern part of the Basin. The TIRP supports incremental institutional advancements, which can improve the quality of irrigation service design and delivery, increase social and economic welfare, and enhance resource sustainability and climate resilience of investments. This project proposal will contribute to the implementation of bringing process and capacity improvements such as integrating consultations and community feedback in the irrigation system design, enhanced social and environmental management, piloting the use of renewable energy, developing a systematic program

Cordination with other projects:

14. The project funded by FAO-TCP (TCP/TUR/38) on the **Enhancement of soil and fertilizer management in T?rkiye** aims to promote sustainable management of soil resources for sustainable productivity and decrease of environmental pollution including GHG emissions. This project will contribute to integrated water management by enhancing fertilizer monitoring systems and related soil mapping that will help to improve the watershed management in Gediz River Basin. Moreover, the relevant capacity development program will support the increased awareness of the importance of sustainable soil amendment and its link with the management of water resources.

15. The FAO- TCP project (TCP/TUR/3701)?**Integrated Land Use Planning for Food Security with enhancing climate change resilience and ecosystem management**?? funded under the FAO-Technical Cooperation Program aims to develop an integrated land-use planning approach and implement it in a pilot area. This project will contribute to raising awareness of relevant stakeholders about the role of land use and management in addressing the problems of land abandonment and efficient land use together with initial steps towards the development of rural community

? FAO T?rkiye Partnership Programme (FTPP II) on ?**?Leaving no one behind: empowerment of rural women**??, GCP /SEC/018/TUR includes (1) the efforts to increase productivity and food security through the provision of effective rural advisory services allowing women farmers to have equal access to trainings and knowledge-sharing; and (2) an initiative assisting the Syrian refugees, in particular women, to integrate with the host communities by providing trainings to improve agricultural skills to engage in productive activities. This project will contribute to capacity building with a focus on women and youth, to ensure their participation in decision-making processes.

? FAO T?rkiye Forestry Partnership Programme (FTFP) **Boosting Restoration, Income, Development, Generating Ecosystem Services** (GCP /INT/340/TUR) aims to catalyze action, support sustainable management and restoration of dryland forests and agrosilvopastoral systems. This project will contribute compiling, managing, sharing knowledge and promoting good practices, promoting communications and visibility of project activities to the across Africa?s Great Green Wall and throughout the global drylands.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

1. The project will contribute T?rkiye to fulfill its international and national commitments stated in the below strategies, action plans and conventions.

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD
- Biennial Update Report (BUR) under UNFCCC
- 11th Development Plan of T?RKIYE 2019-2023
- Ministry of Forestry and Water Affairs? Strategical Plan 2017-2021

- Decisions of Forestry and Water Council 2017

- National River Basin Management Strategy

2. The project is aligned with the following national priorities;

? 11th Development Plan: Relevant objectives of the Development Plan are ?Protection and development of the water and soil resources? amount and quality, development of a management system that provide sustainable use of the water and soil resources.? ``Integrated basin management strategies, plans and action plans will be realized in an integrated approach in the scope of the conservation, development and sustainable use of the water resources of the basins.? ``Protection measures will be increased to reduce water pollution originated from agricultural activities.``

? Ministry of Agriculture and Forestry Strategical Plan: The Main objectives of Strategical Plan are ?To ensure the conservation, improvement and sustainable management of water resources?, ?To ensure effective conservation and sustainable management of biological diversity.? This Strategic Plan shapes a common goal for 25 basins of T?rkiye and decreases the planning hierarchy from up to bottom. But, still, it is needed to downscale the practices especially with projects including demonstrative activities. As this Strategic Plan includes sub-objectives such as sustainable management of water and land resources preparation of sectoral water allocation plans, it is considered to constitute an effective protection-usage balance in Gediz River Basin and disseminate the result in T?rkiye.

? National Water Strategy (2019-2023) aims to ; (i) updated and accurate water monitoring system in line with international and international standards (ii) sustainable water management by holistic approach with ensure the balance between the conservation and use of water resources considering quantity, quality and ecosystems management (iii) ensure Sustainable supply-demand balance of water resources considering water quantity, quality, climate change and ecosystem needs for 25 river basins. In this regards, this project will fully contribute to implement this strategy and ensure sustainable management of water resource considering ecosystem needs in the Gediz River Basin which is one of the 25 basin in T?rkiye

? National Strategy to achieve LDN: Primary reasons for land degradation in the Gediz basin include inappropriate land use, urbanization, industrialization, tourism and particularly intensive agricultural activity. Erosion has been causing significant problems, particularly in agricultural lands in the basin. Given all these facts, the basin is selected among the hot spots of T?rkiye in terms of land degradation. The proposed project will support the implementation of the LDN strategies by working with local stakeholders to demonstrate SLM practices that can be upscaled by using co-financing to support the following targets:

LDN Targets in agriculture (Pg 16 of LDN report):

- Promotion and supporting soil conservation farming (including building farmer capacity)
- Enforcing all relevant articles of Soil Law No. 5403, which sets the rules and principles for determining land and soil resources and their classification, preparing land utilization plans, preventing non-purpose utilization, and defining the tasks and obligations to ensure land and soil preservation.
- Expand irrigated area from 6.3m ha to 8.5m ha. Mainstream pressurised irrigation systems
- Support and upscale soil and fertilizer analysis, and ensure controlled applications

LDN Targets in Forestry
- Reduce the decline in forest areas, in particular support national targets of afforestation and rehabilitation of mine sites
- Reduce the declining productivity in forest lands by rehabilitating forest lands, decreasing the number of Forest Crimes, and reducing the area affected by fires.

? **The 5th National Communication to the UNFCCC:** The communication lists under Forestry measures ??Maximizing sink capacity in the forestry sector?? with objectives of a) increasing carbon sequestered in forested areas by 15% until 2020 b) decreasing deforestation and forest degradation by 20% by 2020. The project?s activities, specifically under Component 2, directly contribute to these objectives.

? **The National Biodiversity Action Plan (NBSAP 2018-2028).** This updated document establishes 7 National Objectives. The selection of the project implementation area will be aligned to these five objectives and their corresponding activities as follows:

National Objective 1: Pressures and threats on biodiversity and ecosystems will be determined, reduced to the possible lowest level or removed totally.

Action 1.1*: Struggle strategies will be continued to be improved against direct or indirect pressures on biological diversity such as habitat loss and degradation, global warming, increase of population, overconsumption of natural resources, genetic erosion and pollution.*

This proposal aims at improving the management of the river basin in Gediz preventing the pressures to a biological diversity that will be tackled through the implementation Gediz River Basin Management Plan, a strategy to implement a green belt approach, training of Government staff in best practices concerning landscape restoration and management.

National Objective 2: Biological diversity components (ecosystem, species and genetic variability) will be determined, monitored, and species-specific and ecosystem-based conservation approaches (traditional and modern) will be developed by determining current condition of biodiversity.

Action 2.3: *Studies to determine and monitor endemic and endangered species; develop and implement species-specific conservation methods will increasingly be continued.*

This proposal will establish and pilot a monitoring system for the river basin. Moreover, it will establish and pilot a monitoring system for rehabilitated forests. As a part of the RBMP to be implemented, the proposal will establish biodiversity protection measures.

National Objective 3: Conservation and sustainable management of biodiversity of areas exposed to agriculture, forestry and fishing activities in the country will be ensured.

Action 3.1. *Conservation and sustainable management of biodiversity creating sources for industries of agriculture, forest, food and medicine will be ensured.*

This proposal will implement measures to improve sustainable financing of degraded forests such as investing in the sustainable management of restored forests. Furthermore, income-generating activities, such as ecotourism, will be implemented.

National Objective 4: Awareness of the public and administrators on ecosystem services will be raised, benefits from ecosystem services will be increased and sustainable biodiversity management will be ensured.

Objective 4.1. *Awareness of ecosystem services wilt be raised among public and private sectors, and training of specialists will be ensured.*

This proposal will include training Government staff (at least 50 govt. staff and 200 local stakeholders) at the General Directorate Water Management Division level, and other local stakeholders in best practices in biodiversity conservation and management. These practices include biodiversity monitoring, carbon measuring and monitoring as well as improved harvesting and processing techniques.

National Objective 5. Rehabilitation and restoration of ecosystems damaged due to different reasons will be ensured, measures to prevent damage to healthy ecosystems will be developed and legislative gaps thereon will be fulfilled.

Action 5.1. *Through improving ecosystem-based models, rehabilitation and restoration of degraded ecosystems (marine, forest, wetland etc.) will be provided, monitoring and inspection thereof will be performed.*

? This proposal will implement sustainable measures that aim to restore 5 km of degraded waterfront and riparian zone-habitats restored along the river basin

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

1. A comprehensive communication strategy is essential for raising awareness and increasing knowledge across all key stakeholders (government, civil society, rural communities, CBOs and local businesses) about the outputs of the project, and about the importance of Sustainable Land Management and integration of biodiversity into land-use plans . Proper dissemination and communication of the project?s outcomes and outputs is also essential in order to ensure the maximum impact of the proposed project and to ensure social and economic sustainability. The communication strategy will be a key component for mainstreaming the project approach and enhance to secure the support of the local communities in and around the project sites(villages, cooperatives and small scale business), key public institutions in the region, local governments and other relevant stakeholders that will ensure sustainability of the project related outcomes.

2. The knowledge management approach also builds on recommendations from the 2010 Country Portfolio Evaluation (2010 CPE) which requested agencies to ?systematically involve focal points in M&E activities by sharing M&E information with them in a timely manner?. FAO accepted this recommendation and routinely informs and involves the GEF OFP about project activities in its portfolio of 3 projects. The proposed project will continue to involve the GEF OFP by involving staff from his/her office in the design of the communication and knowledge management strategy under Component 3.

3. In particular, the Output 3.1.4 of the project refers to: Knowledge tools and information materials for SLM and integration of biodiversity into land-use plans developed and disseminated based on best practices. This will consider the following two specific activities:

? Development and implementation of project communication strategy

? Sharing of lessons learned through production of project knowledge material on best practices, policy briefs, etc. for dissemination through digital platforms, public campaigns, etc.

4. The designed communications Strategy will be reviewed annually and at mid-term in line with adaptive management approach, to ensure objectives are being achieved and updated to reflect changing needs and priorities.

5. In addition to the communication strategy, lessons learned and knowledge material sharing, the project also considers the development of a capacity building program to support the implementation of the Gediz basin river management plan (Output 1.1.4). The improved capacities under this output could be extended to management plans of other water basins throughout T?rkiye.

6. Finally, the activities under Output 2.1.2 aimed to the promotion of SLM practices consider capacity building activities and worksops to ensure the knowledge associated to the project interventions remains at the community level.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. The project results, as outlined in the project results framework (Annex A1), will be monitored regularly, reported annually and assessed during project implementation to ensure the project effectively achieves these results. Monitoring and evaluation activities will follow FAO?s and GEF?s policies and guidelines for monitoring and evaluation. The M&E system will also facilitate learning, replication of the project?s results and lessons which will feed the project?s knowledge management strategy.

Monitoring Arrangements

2. Project oversight and supervision will be carried out by the Budget Holder with the support of the PTF, LTO and FLO and relevant technical units in FAO headquarters. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits)are being delivered.

3. The FAO-GEF Coordination Unit and HQ Technical units will provide oversight of GEF financed activities, outputs and outcomes largely through the annual Project Implementation Reports (PIRs), periodic backstopping and supervision missions.

4. Day-to-day project monitoring will be carried out by the Project Management Unit. Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At inception phase, the results matrix will be reviewed to finalize the identification of i) outputs ii) indicators iii) targets and iv) any missing baseline information

5. A detailed M&E System, which builds on the results matrix and defines specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc) will also be developed during project inception by the PMU M&E Specialist.

M&E Activity	**Responsible Parties**	**Timeframe**	**GEF Budget (USD)**
Inception Workshop	Project Management Unit (PMU)	Within two months of project document signature	10,500
Mid Term Workshop	PMU	In the 3rd quarter of the 2nd year of the project	10,500
Final Workshop	PMU	At the end of project implementation	10,500
Project Inception Report	PMU	Within two weeks of inception workshop	No extra costs
Annual PSC meetings and bi-annual TF meetings	PMU	Annually	Covered by co-financing
Project Progress Reports (PPRs)	PMU	Annually	M&E Specialist (36,000)
Project Implementation Review report (PIR)	PMU	Annually in July	Covered by above
Co-financing Reports	PMU	Annually	No extra costs

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Mid-term review (MTR) (Decentralized evaluation under BH responsibility)	BH, External Consultant, in consultation with the PMU, including the GEF Coordination Unit and other stakeholders, and with possible support from FAO Independent Evaluation Unit OED	In the 3rd quarter of the 2nd year of the project	30,000
Terminal Evaluation (Decentralized evaluation, under Regional Office responsibility)	The BH will be responsible to contact the Regional Evaluation Specialist (RES) within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED.	To be launched 6 months prior to terminal review meeting	40,000
Terminal Report	BH	At the end of project implementation	10,000
Total Budget			**USD 147,550**

Monitoring and Reporting

6. In compliance with FAO and GEF M&E policies and requirements, the PMU, in consultation with the PSC and PTF will prepare the following i) Project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing reports; and (vii) Terminal Report. In addition, the Core Indicators will be used to monitor Global Environmental benefits / adaptation benefits (specify as appropriate) and updated regularly by the PMU.

7. Project Inception Report. A project inception workshop will be held within two months of project start date and signature of relevant agreements with partners. During this workshop the following will be reviewed and agreed:

- the proposed implementation arrangement, the roles and responsibilities of each stakeholder and project partners;

- an update of any changed external conditions that may affect project implementation;

- the results framework, the SMART indicators and targets, the means of verification, and monitoring plan;

- the responsibilities for monitoring the various project plans and strategies, including the risk matrix, the Environmental and Social Risk Management Plan, the gender strategy, the knowledge management strategy, and other relevant strategies;

- finalize the preparation of the first year AWP/B, the financial reporting and audit procedures;

- schedule the PSC meetings;

- prepare a detailed first year AWP/B,

8. The PMU will draft the inception report based on the agreement reached during the workshop and circulate among PSC members, BH, LTO and FLO for review within one month. The final report will be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit and uploaded in FAO?s Field Program Management Information System (FPMIS) by the BH.

9. Results-based Annual Work Plan and Budget (AWP/B). The draft of the first AWP/B will be prepared by the PMU in consultation with the FAO Project Task Force and reviewed at the project Inception Workshop. The Inception Workshop inputs will be incorporated and subsequently, the PMU will submit a final draft AWP/B to the BH within two weeks after the workshop. For subsequent AWP/B, the PMU will organize a project progress review and planning meeting for its progress review and adaptive management. Once PSC comments have been incorporated, the PMU will submit the AWP/B to the BH for non-objection, LTO and the FAO GEF Coordination Unit for comments and for clearance by BH and LTO prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project?s Results Framework indicators to ensure that the project?s work and activities are contributing to the achievement of the indicators. The AWP/B should include detailed activities to be implemented to achieve the project outputs and output targets and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The AWP/B should be approved by the Project Steering Committee, LTO, BH and the FAO GEF Coordination Unit, and uploaded on the FPMIS by the BH.

10. Project Progress Reports (PPR): The PPRs are used to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action. PPRs will be prepared based

on the systematic monitoring of output and outcome indicators identified in the Project Results Framework indicate annex number, AWP/B and M&E Plan. Each semester the indicate as appropriate Project Coordinator (PC) or Project Manager will prepare a draft PPR, will collect and consolidate any comments from the FAO PTF. The PC / PM will submit the final PPRs to the FAO Representation in indicate country every six months, prior to 31 July (covering the period between January and June) and before 31 December (covering the period between July and December). The July-December report should be accompanied by the updated AWP/B for the following Project Year (PY) for review and no-objection by the FAO PTF. The Budget Holder has the responsibility to coordinate the preparation and finalization of the PPR, in consultation with the PMU, LTO and the FLO. After LTO, BH and FLO clearance, the FLO will ensure that project progress reports are uploaded in FPMIS in a timely manner.

11. Annual Project Implementation Report (PIR): The PIR is a key self-assessment tool used by GEF Agencies for reporting every year on project implementation status. It helps to assess progress toward achieving the project objective and implementation progress and challenges, risks and actions that need to be taken. Under the lead of the BH, the Project Coordinator / Project Manager will prepare a consolidated annual PIR report covering the period July (the previous year) through June (current year) for each year of implementation, in collaboration with national project partners (including the GEF OFP), the Lead Technical Officer, and the FLO. The PC/PM will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission and report these results in the draft PIR.

12. BH will be responsible for consolidating and submitting the PIR report to the FAO-GEF Coordination Unit for review by the date specified each year after each co-implementing agency?s review for each respective output under their responsibilities (to be included for joint implementation only). FAO - GEF Funding Liaison Officer review PIRs and discuss the progress reported with BHs and LTOs as required. The BH will submit the final version of the PIR to the FAO-GEF Coordination Unit for final approval. The FAO-GEF Coordination Unit will then submit the PIR(s) to the GEF Secretariat as part of the Annual Monitoring Review of the FAO-GEF portfolio

13. Technical Reports: Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The LTO will be responsible for ensuring appropriate technical review and quality assurance of technical reports. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.

14. Co-financing Reports: The PMU will be responsible for tracking co-financing materialized against the confirmed amounts at project approval and reporting. The co-financing report, which covers the GEF fiscal year 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The co-financing report needs to include the activities that were financed by the contribution of the partners.

15. Tracking and reporting on results across the GEF 7 core indicators and sub-indicators: As of July 1, 2018, the GEF Secretariat requires FAO as a GEF Agency, in collaboration with recipient country governments, executing partners and other stakeholders to provide indicative, expected results across applicable core indicators and sub-indicators for all new GEF projects submitted for Approval. During the approval process of the (insert short project title) expected results against the relevant indicators and sub-indicators have been provided to the GEF Secretariat. Throughout the implementation period of the project, the PMU, is required to track the project?s progress in achieving these results across applicable core indicators and sub-indicators. At project mid-term and project completion stage, the project team in consultation with the PTF and the FAO-GEF CU are required to report achieved results against the core indicators and sub-indicators used at CEO Endorsement/ Approval. Methodologies, responsabilities and timelines for measuring core-indicators will be outlined in the M&E Plan prepared at inception.

16. Terminal Report: Within two months before the end date of the project, and one month before the Final Evaluation, the PMU will submit to FAO (to specify the unit in charge in HQ) a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

MTR and Evaluation provisions

Mid-Term Review

17. As outlined in the GEF Evaluation Policy, Mid-Term Reviews (MTRs) or mid-term evaluations (MTEs) are mandatory for all GEF-financed full-sized projects (FSPs), including Enabling Activities processed as full-sized projects. It is also strongly encouraged for medium-sized projects (MSPs). The Mid-Term review will (i) assess the progress made towards achievement of planned results (ii) identify problems and make recommendations to redress the project (iii) highlight good practices, lessons learned and areas with the potential for upscaling.

18. The Budget Holder is responsible for the conduct of the Mid-Term Review (MTR) of the project in consultation with the FAO-GEF Coordination Unit halfway through implementation. He/she will contact the FAO-GEF Coordination Unit about 3 months before the project half-point (within 3 years of project CEO Endorsement) to initiate the MTR exercise.

19. To support the planning and conduct of the MTR, the FAO GEF CU has developed a guidance document ?The Guide for planning and conducting Mid-Term Reviews of FAO-GEF projects and programmes?. The FAO-GEF CU will appoint a MTR focal point who will provide guidance on GEF specific requirements, quality assurance on the review process and overall backstopping support for the

effective management of the exercise and for timely the submission of the MTR report to the GEF Secretariat.

20. After the completion of the Mid-Term Review, the BH will be responsible for the distribution of the MTR report at country level (including to the GEF OFP) and for the preparation of the Management Response within 4 weeks and share it with national partners, GEF OFP and the FAO-GEF CU. The BH will also send the updated core indicators used during the MTR to the FAO-GEF CU for their submission to the GEF Secretariat.

Terminal Evaluation

21. The GEF evaluation policy foresees that all Medium and Full sized projects require a separate terminal evaluation. Such evaluation provides: i) accountability on results, processes, and performance ii) recommendations to improve the sustainability of the results achieved and iii) lessons learned as an evidence-base for decision-making to be shared with all stakeholders (government, execution agency, other national partners, the GEF and FAO) to improve the performance of future projects.

22. The Budget Holder will be responsible to contact the Regional Evaluation Specialist (RES) within six months prior to the actual completion date (NTE date). The RES will manage the decentralized independent terminal evaluation of this project under the guidance and support of OED and will be responsible for quality assurance. Independent external evaluators will conduct the terminal evaluation of the project taking into account the ?GEF Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full-sized Projects?. FAO Office of Evaluation (OED) will provide technical assistance throughout the evaluation process, via the OED Decentralized Evaluation Support team ? in particular, it will also give quality assurance feedback on: selection of the external evaluators, Terms of Reference of the evaluation, draft and final report. OED will be responsible for the quality assessment of the terminal evaluation report, including the GEF ratings.

23. After the completion of the terminal evaluation, the BH will be responsible to prepare the management response to the evaluation within 4 weeks and share it with national partners, GEF OFP, OED and the FAO-GEF CU. The BH will also send the updated core indicators used during the TE to the FAO-GEF CU for their submission to the GEF Secretariat.

Disclosure

24. The project will ensure transparency in the preparation, conduct, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information, and consultation with major groups and representatives of local communities. The disclosure of information shall be ensured through posting on websites and dissemination of findings through knowledge products and events. Project reports will be broadly and freely shared, and findings and lessons learned made available.

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

1. The project activities will create local and national socioeconomic benefits as follows:

? The improved enabling environment proposed under component 1 will promote capacity building activities and improved capacities for the implementation of the Gediz River Basin Management Plan. Further to project completion, these capacities could be further applied to the development of other water basin management plans. The support tools for evidence-based decision-making proposed under the project will guarantee that management decisions are taken to deliver socio-economic and global environmental benefits. For example, the assessment of natural capital (output 1.1.2) will help to provide information so that policies and decisions are taken considering both the socio-economic and environmental costs and benefits. Similarly, the nature of the Hydro Economic Model (Output 1.1.3) for decision making considers both biophysical and socio-economic data to identify trade-offs and synergies between socio-economic and environmental benefits. Finally, Capacity building on key components of the Gediz River Basin Management Plan (e.g., application of green belt and groundwater recharge activities) considers direct training to local stakeholderds.

? Project Component 2 considers landscape restoration activities (Output 2.1.1) and demonstrations of SLM practices (output 2.1.2). All the project activities will be planned and implemented together with local stakeholders to ensure they derive socio-economic benefits for themselves and the surrounding communities besides the environmental benefits of restoration and improved agricultural practices. Additionally, the activities of the project are designed to generate socio-economic co-benefits. For example, groundwater recharge activities are aimed to improve irrigation for agricultural practices, the green belt application to restore forests will consider income-generating species, and rangeland rehabilitation will improve grazing and dairy production.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

1. In line with FAO's Environmental and Social Safeguards, the project has been screened against Environmental and Social risks and rated as low risk (see certification in annex) . No FAO safeguards were triggered.

2. The project?s environmental and social risks are classified as Low. The intervention will take place in and around a large protected area, the Gediz Delta Ramsar Site The project will work with local communities located in and around these areas and whose livelihoods are derived from the PA and the buffer zones. The project?s positive impacts will surpass its negative impacts, as the project will put considerable emphasis on improving biodiversity conservation while implementing sustainable forest management principles. The project will biodiversity loss, while strengthening ecosystemic services in order to promote access to more resilient livelihood options.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
CC screening_Turkey_Gediz_19_02	Project PIF ESS	
Risk Certification	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: To promote Integrated Natural Resource Management (INRM) and mainstream Biodiversity Conservation in the Gediz River Basin with a focus on the sustainable management of land and water resources.							
Component 1: Enhancing collaborative management of the Gediz River Basin (GRB).							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
<u>Outcome 1.1:</u> Enabling environment to support the implementation of best practices in river basin management and biodiversity conservation aligned with the existent Gediz River Basin Management Plan (RBMP).	Governance mechanism for the GRB and its Ramsar site Enhanced capacity in implementing the Gediz RBMP. (Contributes to GEF Core Indicator 11). including percentage of women participation. Number of decisions taken for groundwater artificial recharge and water harvesting based on documentation of feasibility assessment the eco-hydrological modelling	The Gediz RBMP is in place, but does not integrate community-participation and biodiversity conservation. Capacity to implement the RBMP is weak.	Enhanced capacity in implementing the Gediz RBMP	GRB governance mechanism in place that integrates local participation and biodiversity conservation and supports decision making 50 government staff and 200 local stakeholders trained in Gediz RBMP. (50% women)	Reports from meetings of GRB governance mechanisms, with lists of stakeholder participation from basin districts; reports of decisions taken based on feasibility assessments and eco-hydrological modelling	Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	GEF Core Indicator 1.2: Terrestrial protected areas under improved management effectiveness (14,900 ha of the Gediz Ramsar site under improved management for conservation and sustainable use of biodiversity)	METT Score for the Gediz Delta RAMSAR site: 72	METT Score for the Gediz Delta RAMSAR site: 72	METT Score for the Gediz Delta RAMSAR site: 78	GEF Protected Area Management Effectiveness Tracking Tool (METT)		
Output.1.1.1: Governance mechanisms (including incentives) developed, and a road map provided to support community-based management and decision making at the basin and sub-basin level.	Road map for community-based management Species Management Action Plan developed for the Ramsar site GRB governance mechanism	The Gediz RBMP is in place, but does not integrate community-participation and biodiversity conservation	1 road map for community-based engagement 1 Species Management Action Plan	GRB governance mechanism in place that integrates local participation and biodiversity conservation 14,900 ha of the Gediz Ramsar site under improved management for conservation and sustainable use of biodiversity	TORs for the GRB governance mechanism Reports with road map and Management Action Plan	Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.2: Gediz River Natural Capital Assessed, and scenarios for the incorporation of national capital into policy planning developed.	Assessment of GRB natural capital Forest Management plan with hydrological functions	There is no assessment of the natural capital in the GRB that focuses on ecosystem functions	1 Assessment of GRB natural capital	1 Forest Management plan with hydrological functions	Assessment report on GRB natural capital Forest management plan	Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities	
Output 1.1.3: Hydro Economic Model developed for the GRB to strengthen the National Water Information System to support decision-making.	Hydro-economic model for the GRB Use of model in decision making	There have been progress in assessment of impacts of water-policy instruments, but no hydro-economic model has yet been developed for the GRB	Hydro-Economic Model developed Indicators defined	Application of the model to assess economic impacts of nutrient pollution, soil erosion by water and sedimentation	Model software and portal with specification of indicators Reports of model results for different scenarios in the GRB	Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.4: Stakeholder capacity building program to support the implementation of key components of the Gediz RBMP: (i) rainwater harvesting, (ii) green belt application, (iii) artificial groundwater recharge (iv) biodiversity mainstreaming in the agriculture sector.	Capacity needs assessment Capacity building plan Number of staff trained in river basin management and biodiversity conservation	There is no capacity building programme in place to support stakeholders in in the implementaiton of the Gediz RBMP	1 Capacity needs assessment for the RBMP Capacity building plan for the GRB	50 government staff and 200 local stakeholders trained	Report with capacity needs assessment for the Gediz RBMP Report with capacity building plant for the Gediz RBMP Training reports and participants lists	Strengthening of governance mechanisms and capacity for INRM have support from GRB authorities Local communities see benefits of INRM and are willing to participate	
Component 2: Enhanced sustainable land-use practices and integrated natural resource management.							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 2.1: SLM practices upscaled and promoted to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.	Ha of land restored under different types of land cover that integrates biodiversity (Targeting GEF Core Indicator 3. Area of Land Restored) Ha of land under SLM to restore ecosystem services and biodiversity (Targeting GEF Core Indicator 4.1. Area of landscapes under improved management to benefit biodiversity) GEF Core Indicator 6.1 Carbon sequestered or emissions avoided in the AFOLU sector GEF Core Indicator 11. Number of direct beneficiaries disaggregated by gender	Unsustainable land use and continuous land degradation in the GRB is causing loss of natural capital, including soils, biodiversity, carbon stocks and water	764 ha of land restored in the GRB 413 ha with improved connectivity benefitting biodiversity	764 ha of land restored in the GRB 413 ha of landscape under improved INRM and SLM practices 334,848 tons of carbon sequestered in the GRB 400 people benefit from INRM and SLM in the GRB (205 Female and 195 Male).	Remote sensing Field surveys FAO?s Ex-Act Tool.	Capacity to implement INRM at basin and sub-basin level available Local communities see benefits of INRM and scale up best practices to achieve improved livelihoods Monitoring and lessons learned lead to iterative learning, improved implementation and scaling up of INRM in the GRB	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output. 2.1.1: Demonstrate landscape restoration activities in supporting key ecosystems across different land covers to improve the provision of ecosystem services and biodiversity integration.	Number of landscape restoration plans Ha of land with improved landscape connectivity along riparian zones benefitting biodiversity Ha of agricultural land restored Ha of grasslands and pastures restored	Unsustainable land use and continuous land degradation in the GRB is causing loss of natural capital, including soils, biodiversity, carbon stocks and water	4 landscape restoration plans	764 ha of land restores for improved landscape connectivity along riparian zones (Contributes to GEF Core Indicator 3)	Reports with landscape restoration plans Remote sensing Field surveys	Capacity to implement INRM at basin and sub-basin level available Local communities see benefits of INRM and scale up best practices to achieve improved livelihoods	
Output 2.1.2: SLM practices upscaled and promoted in 413 ha to avoid and reduce land degradation and to restore ecosystem services and biodiversity in the river basin.	Ha of land with implementation of SLM practices	Land management practices in the GRB are unsustainable and local communities do not have access to the latest SLM knowledge	4 communities with 400 people adopt SLM practices for rangeland rehabilitation, terracing and reforestation and rehabilitation of abandoned agricultural land	SLM implemented on a total of 413 ha (Contributes to GEF Core Indicator 4) 400 local beneficiaries of INRM and SLM in the GRB	Remote sensing Field surveys	Local communities see benefits of INRM and scale up best practices to achieve improved livelihoods Monitoring and lessons learned lead to iterative learning, improved implementation and scaling up of INRM in the GRB	
Component 3: Monitoring, evaluation and dissemination of best practices.							

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 3.1: Project implementation based on RBMP and lessons learned/good practices documented and disseminated	Results Based Monitoring (RBM) system Number of people with enhanced knowledge and awareness and percentage of women participation	None	RBM system in place that monitors area restored, SLM, LDN and biodiversity mainstreaming	Final evaluation 400 people in the GRB with enhanced awareness of INRM, SLM and biodiversity mainstreaming (50% Women)	Final evaluation report Articles in national and local media, appearance in TV, website and social media statistics	Adequate funding and capacity allocated to RBM National and GRB lead agencies committed to reaching out to project beneficiaries and the general public	
Output.3.1.1: A Monitoring system developed for the restored lands within the framework of national LDN and CBD commitments.	LDN and biodiversity monitoring and indicator system for the GRB	None	Timely monitoring of area restored, SLM, LDN and biodiversity mainstreaming	Assessment of area restored, SLM, LDN and biodiversity mainstreaming for reporting to the national LDN mechanism	LDN report Final evaluation	Adequate funding allocated to M&E	
Output 3.1.2: Integrated monitoring and evaluation system for the project applied.	Project M&E system that ensures timely delivery of project benefits in terms of GEBs and gender dis-aggregated co-benefits	None	Timely monitoring of project outcomes, outputs and activities	Timely monitoring of project outcomes, outputs and activities and fed into final evaluation	PIRs, PPRs	Adequate funding allocated to M&E	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 3.1.3: Final evaluation conducted and informing replication strategies.	Final evaluation	None	None	Final evaluation	Final Evaluation report Final project report	Adequate funding allocated to evaluation	
Output 3.1.4: Knowledge tools and information materials for SLM and integration of biodiversity into land-use plans developed and disseminated based on best practices.	Communication strategy; number of knowledge products, number of people reached by public awareness raising campaigns; number of appearances in national and local media and partner websites	None	Communication strategy Project knowledge products	400 land users in the GRB with enhanced knowledge and awareness about INRM, SLM and best practices for achieving LDN and biodiversity mainstreaming	Project knowledge products and material Articles in national and local media, appearance in TV, website, and social media statistics	National and GRB lead agencies and stakeholders are committed to reaching out to project beneficiaries as well as the public to create awareness about INRM and LDN	

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

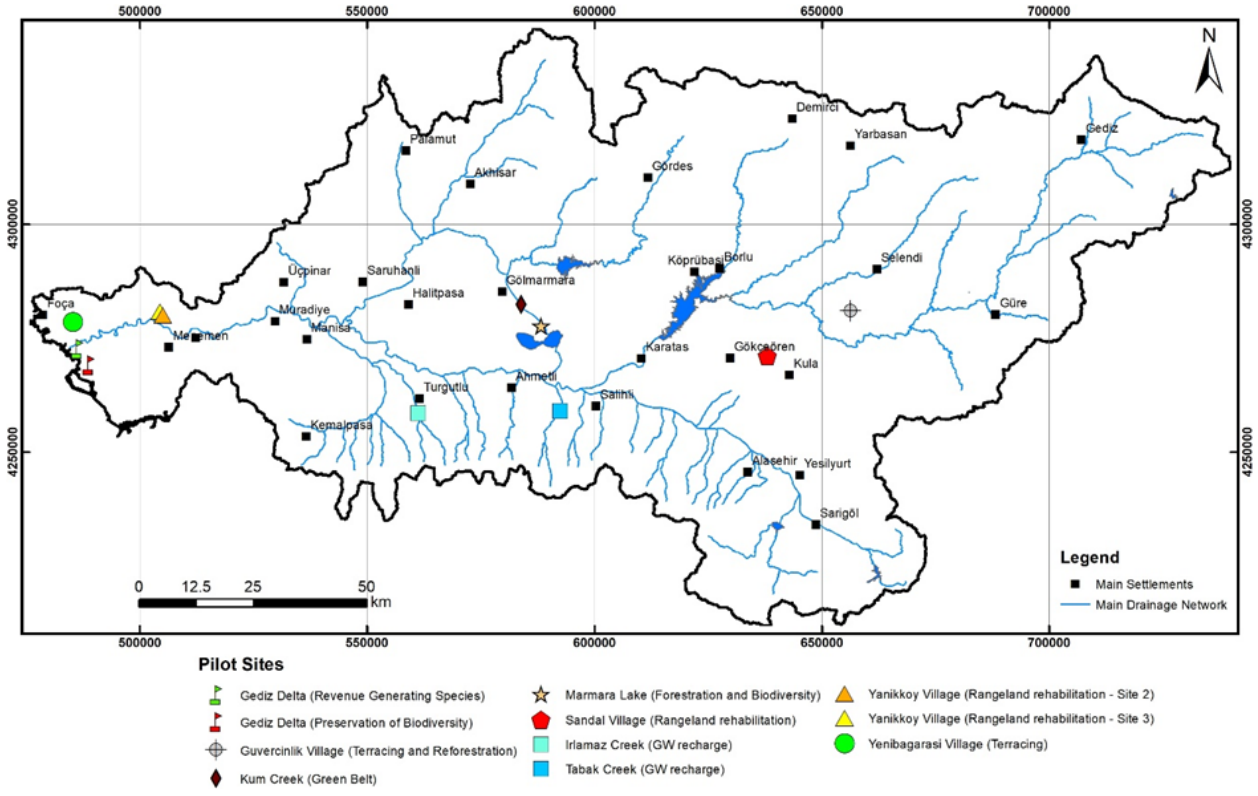
ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **43,162**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Salaries Professional	2,055	0	2,055
Consultants	26,900	12,571	12,030
Travel	6,207	8,506	0

Training	8,000	2,919	5,081
Total	**43,162**	**23,996**	**19,166**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



#	Site Name	Projected Coordinates (UTM Zone 35 ED1950)
1	Irlamaz Creek	561264E 4258629N
2	Tabak Creek	592533E 4259117N
3	Kula-G?vercinlik Village	656353E 4281097N
4	Kula-Sandal Village	638047E 4271136N

5	Menemen-Yan?kk?y Site:2	505186E 4280028N
6	Menemen-Yan?kk?y Site:3	504484E 4280854N
7	Fo?a-Yeniba?aras? Village	485404E 4278646N
8	Kum Creek (Channel from ??mlek?i Diversion Weir to Marmara Lake)	583924E 4282470N
9	G?lmarmara Lake Northern Shoreline Forestration	588302E 4277762N
10	Gediz Delta - RAMSAR Site	488834E 4269174N
11	Gediz Delta - RAMSAR Site	486411E 4272674N

ANNEX E: Project Budget Table

Please attach a project budget table.

												Responsible Entity		
FAO Cost Categories	Unit	No. Units	Unit Cost	Component 1	Component 2	Component 3			Subtotal	PMC	Total	MoAF	National Technical Partner	FAO
						M&E	Outp 3.1.4	Total Comp. 3						
5013 Consultants														
National Project Manager	Months	36	1,885	0	0	0	0	0	0	67,860	67,860	67,860	0	0
Operations Specialist - Cost Shared	Months	36	600	0	0	0	0	0	0	21,600	21,600	21,600	0	0
Finance Assistant - Cost Shared	Months	36	400	0	0	0	0	0	0	14,400	14,400	14,400	0	0
M&E Specialist - Cost Shared	Months	36	1,000	0	0	36,000	0	36,000	36,000	0	36,000	36,000	0	0
Knowledge Management - Cost Shared	Months	20	1,000	0	0	0	20,000	20,000	20,000	0	20,000	20,000	0	0
Communication Specialist - Cost Shared	Months	20	1,000	0	0	0	20,000	20,000	20,000	0	20,000	20,000	0	0
Gender Expert - Cost Shared	Days	25	300	3,750	3,750	0	0	0	7,500		7,500	7,500	0	0
Water Management Expert (short term)	Days	45	450	10,125	10,125	0	0	0	20,250	0	20,250	20,250	0	0
Land Management and SLM Expert (short term)	Days	45	450	10,125	10,125	0	0	0	20,250	0	20,250	20,250	0	0
5013 Sub-total consultants				24,000	24,000	36,000	40,000	76,000	124,000	103,860	227,860			
5650 Contracts														
Output 1.1.1 - Assessment of existing Gediz River Basin Management Plan and Governance Model and design of new governance model	Lumpsum	1	40,000	40,000	0	0	0	0	40,000	0	40,000	0	40,000	0
Output 1.1.1 - Participatory Preparation of Species Management Action Plan	Lumpsum	1	60,000	60,000	0	0	0	0	60,000	0	60,000	0	60,000	0
Output 1.1.2 - Assesment of Gedir River Basin Natural Capital, Capacity Diagnostic and Forest Management Plan	Lumpsum	1	40,000	40,000	0	0	0	0	40,000	0	40,000	0	40,000	0
Output 1.1.3 - Development Calibration and Monitoring of Hydro Economic Model	Lumpsum	1	40,000	40,000	0	0	0	0	40,000	0	40,000	0	40,000	0
Output 1.1.4 - Desing of a Capacity Building Program for the implementation of the Gediz River Basin Management Plan	Lumpsum	1	20,000	20,000	0	0	0	0	20,000	0	20,000	0	20,000	0
Output 2.1.1 - Implementation of landscape restoration activities to improve the provision of ecosystem services and biodiversity integration (Rangeland rehabilitation)	Lumpsum	1	180,000	0	180,000	0	0	0	180,000	0	180,000	0	180,000	0
Output 2.1.2 - Implementation of SLM practices to avoid and reduce land degradation and restore ecosystem services and biodiversity in the river basin. Including Groundwater recharge planning, and reforestation	Lumpsum	1	180,000	0	180,000	0	0	0	180,000	0	180,000	0	180,000	0
Mid-Term Review	Lumpsum	1	30,000	0	0	30,000	0	30,000	30,000	0	30,000	0	0	30,000
Terminal Evaluation	Lumpsum	1	40,000	0	0	40,000	0	40,000	40,000	0	40,000	0	0	40,000
Terminal Report	Lumpsum	1	10,000	0	0	10,000	0	10,000	10,000	0	10,000	0	0	10,000
5650 Sub-total Contracts				200,000	360,000	80,000	0	80,000	640,000	0	640,000			
5021 Travel														
Travel for Component 1 - PMU and National Consultants	Travel	24	750	18,000	0	0	0	0	18,000	0	18,000	18,000	0	0
Travel for Component 2 - PMU and National Consultants	Travel	45	750	0	33,750	0	0	0	33,750	0	33,750	33,750	0	0
5021 Sub-total travel				18,000	33,750	0	0	0	51,750	0	51,750			
5023 Training														
Inception Workshop	Workshop	1	10,500	0	0	10,500	0	10,500	10,500	0	10,500	10,500	0	0
Mid Term Workshop	Workshop	1	10,500	0	0	10,500	0	10,500	10,500	0	10,500	10,500	0	0
Final Workshop	Workshop	1	10,550	0	0	10,550	0	10,550	10,550	0	10,550	10,550	0	0
Workshops for component 1 - 3 Workshops x 4 Outputs	Workshop	12	1,000	12,000	0	0	0	0	12,000	0	12,000	12,000	0	0
Training for Component 2 - Capacity Building Workshops - 6 Workshops * 11 Sites	Workshop	70	1,000	0	70,000	0	0	0	70,000	0	70,000	70,000	0	0
5023 Sub-total training				12,000	70,000	31,550	0	31,550	113,550	0	113,550			
5024 Expendable procurement														
Technical Equipment for Component 2 - Restoration and demonstrations of SLM Practices	Lumpsum	1	39,979	0	39,979	0	0	0	39,979	0	39,979	39,979	0	0
5024 Sub-total expendable procurement				0	39,979	0	0	0	39,979	0	39,979			
6100 Non-expendable procurement														
Technical Equipment for Component 2 - Restoration and demonstrations of SLM Practices	Lumpsum	1	70,000	0	70,000	0	0	0	70,000	0	70,000	70,000	0	0
6100 Sub-total non-expendable procurement				0	70,000	0	0	0	70,000	0	70,000			
TOTAL				254,000	597,729	147,550	40,000	187,550	1,039,279	103,860	1,143,139	503,139	560,000	80,000

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used

by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).