



**Food and Agriculture Organization
of the United Nations**

Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in Turkey's Kazdağlari Region





**Food and Agriculture Organization
of the United Nations**

Signature Page

Upon request from the Government of Turkey, represented by the Ministry of Agriculture and Forestry.

the Food and Agriculture Organization of the United Nations (FAO) will provide technical assistance for the project entitled: “Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in Turkey’s Kazdağlari Region”

Upon signature of this project document by the duly authorized representatives of both parties, the project will be implemented in accordance with the background, rationale and management arrangements described herein.

On behalf of the Government:	On behalf of: The Food and Agriculture Organization of the United Nations
Name:	Name:
Title:	Title:
Date:	Date:



FAO-GEF PROJECT DOCUMENT

Project Title:	Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in Turkey's Kazdağlari Region
GEF ID:	10369
FAO Entity Number:	640648
FAO Project Symbol:	GCP /TUR/904/GFF
Countries:	Turkey
EOD (Implementations start):	March 2022
NTE (Implementation end):	February 2027
Environmental and Social Risk Classification:	Low risk <input type="checkbox"/> Moderate risk <input checked="" type="checkbox"/> High risk <input type="checkbox"/>
Gender Marker ¹ :	G0 <input type="checkbox"/> G1 <input type="checkbox"/> G2a <input checked="" type="checkbox"/> G2b <input type="checkbox"/>
Contribution to FAO's Strategic Framework: (Indicate as appropriate)	<ul style="list-style-type: none">▪ Strategic Objective/Organizational Outcome: BP1: Innovation for sustainable Agriculture Production BE1: Climate change mitigating and adapted Agri-food systems BE3: Biodiversity and Ecosystem Services for Food and Agriculture▪ Country Outcome(s): Outcome 3 (UNSDCF Outcome 3.1): By 2025, all relevant actors take measures to accelerate climate action, to promote responsible production and consumption, to improve the management of risks and threats to people, to ensure sustainable management of the environment and natural resources in urban and ecosystem hinterlands.▪ Country Programming Framework(s) Output(s): Output 7 Productivity, sustainability and resilience in land based ecosystems maintained and improved through integrated participatory management of resources, including sustainable land and forestry management, conserving biodiversity and genetic resources enhanced <p>Regional Initiative/Priority Area: Managing natural resources sustainably and preserving biodiversity in a changing climate (Nature-based solutions)</p>
	Project Budget (GEF/SCCF/LDCF): \$ 4,657,534 Co-financing: <u>\$25,000,000</u> Total Project Budget: \$29,657,534

¹ See [Guidance Note on Gender Mainstreaming](#) in project identification and formulation.

Executive Summary

The project is designed to enhance the conservation of biodiversity across Turkey's Kazdağları Region through an integrated (multi-sectoral) landscape management approach that strengthens protected areas at system and individual site levels, while also safeguarding peripheral forest and agricultural lands under production through sustainable management practices, and enhancing biodiversity conservation

This integrated landscape approach will be demonstrated in the project area of 184,297 ha, comprising 25 forest sub-districts in Balıkesir and Çanakkale Regional Forest Directorates and including Kazdağı National Park, with the intention of being mainstreamed post-project in accordance with a Regional Vision developed by this project to conserve Kazdağları's biodiversity. Interventions will focus on: (i) improving the effectiveness of managing PAs through an inclusive planning and implementation process that engages with local stakeholder needs, such as livelihoods, and other interests; and (ii) accommodating biodiversity priorities and opportunities for its enhancement within forests and agricultural lands managed for production purposes.

The project will enable the national network of PAs to be strengthened and expanded by: assessing its comprehensiveness in conserving Turkey's biodiversity; establishing a publicly accessible PAs information system; creating a PAs monitoring system; and, most importantly, supporting the incorporation of the landscape approach into national policy, along with addressing gaps in PAs policy and legislation

Contents

PART I: PROJECT INFORMATION	8
A. Focal/Non-Focal Area Elements	8
B. Project description summary	8
C. Confirmed sources of Co-financing for the project by name and by type	12
D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds	12
E. Does the project include a “non-grant” instrument?	12
F. Project’s Target Contributions to GEF 7 Core Indicators	13
PART II: PROJECT JUSTIFICATION	14
1.a Project Description	14
1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	14
2) Baseline scenario and any associated baseline projects	18
3) Proposed alternative scenario with a brief description of expected outcomes and components of the project and the project’s Theory of Change	23
4) Alignment with GEF focal area and/or Impact Program strategies	56
5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing	57
6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)	59
7) Innovativeness, sustainability, potential for scaling up and capacity development	59
8) Summary of changes in alignment with the project design with the original PIF	60
1.b Project Map and Geo-Coordinates	61
1.c Child Project	63
2. Stakeholders.	63
3. Gender Equality and Women’s Empowerment.	69
4. Private Sector Engagement.	76
5. Risks.	77
Section A: Risks to the project	78
Section B: Environmental and Social risks from the project	80
6. Institutional Arrangements and Coordination	81
6.a Institutional arrangements for project implementation	81
6.b Coordination with other relevant GEF-financed projects and other initiatives	84
7. Consistency with National Priorities.	85
8. Knowledge Management	87
9. Monitoring and Evaluation	88
10. Benefits	91
PART III: ANNEXES.....	92
Annex A1: Project Results Framework	92
Annex A2: Project Budget	104
Annex B: Response to Project Reviews	105
Annex C: Status of Utilization of Project Preparation Grant (PPG)	105
Annex D: Calendar of Expected Reflows (if non-grant instrument is used)	105
Annex E: Project Map(s) and Coordinates	105
Annex F: GEF TF / LDCF/ SCCF Core Indicator Worksheet	106
Annex H: Work Plan (indicative)	106
Annex I1: Environmental and Social Risk Annexes	106
Annex I2: Stakeholder Engagement Matrix, Grievance Redress Mechanism and Disclosure	106
Grievance Redress Mechanism	107
Annex J: Indigenous Peoples	109
Annex K: FAO’S Roles in Internal Organization	109
Annex L: FAO and Government Obligations	112
Annex M: Detailed	115

Acronyms

A complete list of all acronyms used within the text can be provided.

Note: the first time a term is introduced in the text it must be spelled out in full followed by the bracketed acronym (example: FAO (Food and Agriculture Organization of the United Nations)).

Acronym	Description
AWP/B	Annual work-plan and/or budget
BH	Budget Holder
CA(s)	Conserved Area(s)
CBD	Convention on Biological Diversity
CBT	Community-Based Tourism
CSO	Civil Society Organization
DNWFPS	Department of Non-Wood Forest Products and Services
EHI	Ecosystem Health Index
ESM	Environmental and Social Risk Management
FAO	Food and Agriculture Organization of the United Nations
FDSF(s)	Forest District Stakeholder Forum(s)
FLO	Funding Liaison Officer
FLR	Forest Landscape Restoration
FMD	Forest Management Directorate
FMP	Forest Management Plan
FMU	Forest Management Unit
FPMIS	Field Program Management Information System
GDF	General Directorate of Forestry
GDNCNP	General Directorate of Nature Conservation and National Parks
GEF	Global Environment Facility
GEN	Global Ecovillage Network
GHG	Greenhouse gas
GMKA	South Marmora Development Agency
ha	Hectare (10,000 square metres; 0.01 square kilometre)
IFFMP(s)	Integrated Functional Forest Management Plan(s)
ILM	Integrated Landscape Management
IPARD	Instrument for Pre-accession Assistance for Rural Development (EU)
IUCN	International Union for Conservation of Nature
KRSF	Kazdağlari Regional Stakeholder Forum
KWG	Kazdağlari Working Group
LTO	Lead Technical Officer
M&E	Monitoring and Evaluation
MAF	Ministry of Agriculture and Forestry
MAP(s)	Medicinal and Aromatic Plant(s)
MCT	Ministry of Culture and Tourism
METT	Management Effectiveness Tracking Tool
MEU	Ministry of Environment and Urbanisation
MPG	Management Planning Group
MRT	Multi-tasked Restoration Team
MTR	Mid-Term Review
NDC	Nationally Determined Contribution (under UNFCCC)

NGO	Non-governmental Organization
NPD	National Project Director
NWFP(s)	Non-Wood Forest Product(s)
OECM	Other effective area-based conservation measures
OP	Operational Partner
OPA	Operational Partnership Agreement
OPIM	Operational Partnership Implementation Modality
ORKOY	Forest and Villagers Relations Department
PA	Protected Area
PMU	Project Management Unit
PIR(s)	Project Implementation Review(s)
PPG	Project Preparation Grant
PPR	Project Progress Report
PSC	Project Steering Committee
PTF	Project Task Force
RIL	Reduced Impact Logging
SEPA	Special Environmental Protection Agency
SFMC(s)	Sustainable Forest Management Committee(s)
SMART	Specific, Measurable, Achievable, Relevant and Time- Bound (indicators)
SSC	Species Survival Commission (IUCN)
tCO ₂ eq	Metric tons of carbon dioxide equivalent
TKDK	Agriculture and Rural Development Support Institution
TE	Terminal Evaluation
TIES	The International Ecotourism Society
TOGEG	Foresters' Association of Turkey Ecotourism Group
TOR	Terms of reference
TTTC	Tender Technical Terms and Conditions
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UTM	Universal Transverse Mercator
VRHS	Variable Retention Harvest System
WCPA	World Commission on Protected Areas (IUCN)

PART I: PROJECT INFORMATION

Project Title: Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in Turkey's Kazdağlari Region			
Country(ies):	Turkey	GEF Project ID:	10396
GEF Agency(ies):	FAO	GEF Agency Project ID (FAO entity number):	640648
Project Executing Entity(s):	Ministry of Agriculture and Forestry (MAF)	Submission Date	31 January 2022
GEF Focal Area (s):	Biodiversity, Land Degradation	Expected Implementation Start	March 2022
		Expected Completion Date	February 2027
Name of Parent Program	N/A	Parent Program ID:	N/A

A. FOCAL/NON-FOCAL AREA ELEMENTS

Programming Directions	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
BD-1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GEFTF	1,387,557	6,000,000
BD-2-7	Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	GEFTF	1,135,274	5,500,000
LD-1-2	Maintain or improve flow of ecosystem services, including sustaining livelihoods of forest-dependent people through Sustainable Forest Management (SFM)	GEFTF	1,034,703	6,000,000
LD-1-3	Maintain or improve flows of ecosystem services, including sustaining livelihoods of forest-dependent people through Forest Landscape Restoration (FLR)	GEFTF	1,100,000	7,500,000
Total project costs			4,657,534	25,000,000

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To improve biodiversity conservation and sustainable forest management in the Kazdağlari Region for environmental and socio-economic benefits						
Project Components/ Programs	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Strengthening protected areas management within a sustainable landscape management context.	TA	1.1 Protected areas system underpinned by strengthened policies and monitoring systems	1.1.1 Policies aligned with IUCN's Protected Areas Categories system, developed to underpin subsequent legislation on the governance and financing of different protected area types	GEFTF	487,932	2,622,400

		1.2 Improved coverage ² , governance and effective management of protected areas	<p>1.1.2 Systematic Monitoring Framework developed for protected areas system,</p> <p>1.2.1 Identification of potential Natura 2000 sites in Marmara Region³ and listed new protected areas</p> <p>1.2.2 Protected area planning and effective management strengthened for Kazdağı National Park, Darıdere and Ayazma Pinari Nature Parks⁴, Kazdağı Göknarı Nature Reserve⁵, and at least one example of other conservation categories (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest).</p>	GEFTF	887,149	4,768,000
2. Integrating biodiversity conservation and sustainable management of forests and agricultural areas across Kazdağları's landscapes.	TA	2.1 Kazdağları Region managed in an integrated, holistic manner to safeguard its unique biodiversity, enhance functioning of its ecosystems and ensure provisioning of goods and services for its social and economic prosperity.	2.1.1 Regional Vision and 5-year Action Plan to conserve Kazdağları's biodiversity, sustainably manage its ecosystem goods and services and restore its degraded lands, generated by a Regional Forum and operational.	GEFTF	310,502	1,668,800

²The term 'coverage' is used in the sense of representativeness of Kazdağları Region's genetic, species and ecosystem diversity.

• ³ The Marmara Region (Turkish: Marmara Bölgesi) is a geographical region of Turkey. Located in northwestern Turkey, it is bordered by Greece and the Aegean Sea to the west, Bulgaria and the Black Sea to the north, the Black Sea Region to the east, and the Aegean Region to the south. At the center of the region is the Sea of Marmara, which gives the region its name. Among the seven geographical regions, the Marmara Region has the second-smallest area, yet the largest population; it is the most densely populated region in the country. There is 11 provinces; Balıkesir, Bilecik, Bursa, Canakkale, Edirne, İstanbul, Kırklareli, Kocaeli, Sakarya, Tekirdag, Yalova . Project area is in the same region.

³ The term 'coverage' is used in the sense of representativeness of Kazdağları Region's genetic, species and ecosystem diversity.

⁴Designated mainly for recreational activities and protection of landscape diversity.

⁵Designated strictly for conservation and scientific research: public access is prohibited.

			2.1.2. All or some of Project Area, including its protected areas, assessed and nominated for designation as an international certification programs, as part of the vision for Kazdağlari Region			
		2.2 Improved integration and sustainable landscape-scale management of forest, agricultural and other production systems	2.2.1 National LDN targets supported through delivery of a Restoration Strategy for degraded forests and unsustainably managed agricultural landscapes in Kazdağlari Project Area.	GEFTF	266,146	1,430,400
			2.2.2 Improved livelihood opportunities piloted	GEFTF	1,552,511	8,344,000
3. Enhancing awareness, understanding and capacities to integrate management for conservation and production purposes across landscapes	TA	3.1 Improved awareness, understanding and capacity to effectively manage protected areas and production systems at landscape scales	3.1.1 Communications Strategy and Action Plan prepared and implemented, including events, outreach materials and knowledge products, to promote gender equity and integrated management at landscape scales. 3.1.2 Modular capacity development training programme for protected areas and landscape management designed and delivered across relevant sectors within national and local governments, communities, NGOs and private enterprises	GEFTF	931,507	5,006,400
		3.2 Project effectively and efficiently implemented, including dissemination of knowledge gained and	3.2.1 Transparent, gender-sensitive M&E Plan in place to inform project implementation, decision-			

		lessons learned, and fully accountable to its stakeholders	making and adaptive management. 3.2.2 Project results and lessons learned collated, shared with project stakeholders and disseminated nationally and more widely across Caucasus and Middle East			
Subtotal					4,435,747	23,840,000
Project Management Cost (PMC)				GEFTF	221,787	1,160,000
Total project costs					4,657,534	25,000,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: (n/a)

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

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 expenditure	6,200,000
Recipient Country Government	Ministry of Agriculture and Forestry	Public investments	Investment mobilized	17,300,000
GEF Agency	FAO	Grant	Investment mobilized	1,500,000
Total Co-financing				25,000,000

Describe how any “Investment Mobilized” was identified.

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
FAO	GEFTF	Turkey	Biodiversity	BD STAR allocation	2,522,831	239,669	2,762,500
FAO	GEFTF	Turkey	Land Degradation	LD STAR allocation	2,134,703	202,797	2,337,500
Total GEF Resources					4,657,534	442,466	5,100,000

E. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT?

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund).

Not applicable

F. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Update the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet provided in Annex F and aggregating them in the table below. Progress in programming against these targets is updated at mid-term evaluation and at terminal evaluation. Achieved targets will be aggregated and reported any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCCf.

Project Core Indicators		Expected at CEO Endorsement
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	21,733
2	Marine protected areas created or under improved management for conservation and sustainable use (Hectares)	
3	Area of land restored (Hectares)	5,955
4	Area of landscapes under improved practices (excluding protected areas)(Hectares)	131,167
5	Area of marine habitat under improved practices (excluding protected areas) (Hectares)	
	Total area under improved management (Hectares)	158,854
6	Greenhouse Gas Emissions Mitigated (metric tons of CO2e)	2,318,452
7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited marine fisheries moved to more sustainable levels (metric tons)	
9	Reduction , disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	

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

1.a Project Description

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

1. In global terms, Turkey is rich in biodiversity. It is almost contained within three of the world's 36 biodiversity hotspots, namely the Caucasus, Irano-Anatolian and Mediterranean hotspots⁶ that correlate with three of the 238 globally important ecoregions prioritised by WWF and others to conserve the most outstanding and representative habitats on planet Earth. Respectively, these are the Caucasus-Anatolian-Hyrcanian Temperate Forests (78), Anatolian Freshwater (195) and Mediterranean Forests, Woodlands, and Scrub (123); and their conservation status is assessed as being critical or endangered.⁷ The *Greater Black Sea Basin*, which includes the Caucasus, Black Sea and most of Turkey, has also been prioritised by WWF as one of the world's 35 'priority places' for conserving species and reducing humanity's ecological footprint.⁸

2. Significant proportions of Turkey's species diversity, summarized in **Table 1** for vascular plants and vertebrates, are threatened with extinction and those that are endemic are irreplaceable. Species endemism is particularly high among vascular plants (31%) and amphibians (57%); and significant numbers of species (over 5% for all taxonomic groups) are threatened, to the extent of 57% in the case of amphibians. Note that IUCN threat status has been assessed for all vertebrate groups but total species' numbers assessed do not necessarily tally with official government species' totals reported to the Convention on Biological Diversity (CBD) Secretariat; and fewer than 10% of vascular plants have been assessed. Turkey also features important migratory routes for birds, including the largest migration for birds of prey in the West Palaearctic.

3. With over 10,000 species of vascular plants, nearly 200 mammal species and over 500 bird species, Turkey's species diversity exceeds that of any individual European country, as well as the entire Caucasus Ecoregion that overlaps with N.W. Turkey (**Table 1**)⁹. Turkey has 10,097 species according to the World Checklist of Vascular Plants¹⁰, which is almost double that of any other country in Western/Central Europe (e.g. Italy: 5,600 spp., Spain: 5,050 spp., Portugal: 5,050 spp. Greece 4,990 spp.) and on a par with the Russian Federation (11,400 spp.)¹¹. Its vascular plant species diversity is 42% that of Continental Europe¹² (24,224 spp.) or 33% that of Continental Europe and the Asian part of Turkey (30,187 spp.)¹⁰. [Note: Turkey's flora, in terms of its 9,996 species of flowering plants (comprising 11,707 infrageneric taxa), is the richest of any country in Europe, North Africa and Middle East.¹³]

⁶ Mittermeier, R. A., Robles Gil, P., Hoffmann, M., et al., 2004. *Hotspots: Revisited*. Cemex, Mexico. **Note** that biodiversity hotspots are considered to be the Earth's biologically richest places, with high numbers of endemic species (including at least 1,500 endemic vascular plant species). Such hotspots face extreme threats and have already lost 70% of their original vegetation.

⁷ Olson, D and E. Dinerstein, 2002. *The Global 200: Priority Ecoregions for Global Conservation*. Annals of the Missouri Botanical Garden 89: 199-224. **Note** that Caucasus-Anatolian-Hyrcanian Temperate Forests is one of 238 ecoregions included within the Global 200 list of priority ecoregions.

⁸ WWF 2008, *A Road Map for a Living Planet*.

⁹ Note that MAF Noah's Ark National Biodiversity Database currently holds records of 13,404 species across 853,000 observation spots, comprising 12,141 plant and 1,263 animal species of which over 3,700 species are endemic to Turkey. <https://www.dailysabah.com/turkey/turkey-boosts-biodiversity-prepares-protective-law/news>, 25 May 2021.

¹⁰ WCVP (2021). World Checklist of Vascular Plants, version 2.0. Facilitated by Royal Botanic Gardens, Kew. <http://wcvp.science.kew.org/> retrieved courtesy of Bob Allkin, 6 May 2021.

¹¹ https://rainforests.mongabay.com/03highest_biodiversity.htm

¹² Continental Europe includes the European part of Turkey and to the north includes the Russian Federation, which extends as far east as the Ural Mountains.

¹³ Kuşaksız, Gül (2019). Rare and endemic taxa of Lamiaceae in Turkey and their threat categories. *Journal of Scientific Perspectives* 3 (1): 69-84.

Table 1 Comparison of species diversity, endemism and threatened status among vascular plants and vertebrate groups highlights the importance of Turkey with respect to neighbouring countries in the Caucasus.

Region	Area (km ²)	Vascular Plant Species			Mammal Species			Bird Species			Reptile Species			Amphibian Species			Fish Species		
		Total	Endemic	CR EN VU	Total	Endemic	CR EN VU	Total	Endemic	CR EN VU	Total	Endemic	CR EN VU	Total	Endemic	CR EN VU	Total	Endemic	CR EN VU
¹ Caucasus Ecoregion	580,000	>7,000	>25%	700	153	>5		400	4		87	28		14	4		200	33%	
² Turkey	783,562	^a 9,500	31%		^b 161	3%		^c 460	1%		^d 120	13%		30	57%		^f 694	^g 16%	
³ Mongabay		10,001			149		19	392		20	150			37		^e 10	832		131
⁴ IBAT-Alliance		933		138 14%	168		28 17%	453		25 6%	112		23 21%	29		11 38%	675		117 17%

^a A total of 10,235 vascular plant species (10,150 seed plant, 85 fern species) is cited in Dönmez & Verli, 2018 (referenced below²). 16 genera, mostly monotypic, are endemic.

^b A total of 197 mammal species is recorded by Dönmez & Verli (2018), referenced below².

^c A total of 517 bird species are recorded for Turkey by BirdLife International (<https://avibase.bsc-eoc.org/checklist.jsp?region=TR>); 420 spp. is cited in Dönmez & Verli, 2018.

^d A total of 145 reptile species are recorded for Turkey (www.reptile-database.org); 130 spp. is cited in Dönmez & Verli, 2018.

^e A total of 37 amphibian species are recorded for Turkey, 10 of which are globally threatened (<https://amphibiaweb.org>); 28 spp. is cited in Dönmez & Verli, 2018.

^f A total of 825 fish species have been recorded, of which 479 species are marine and 367 species are freshwater (www.fishbase.se).

^g Endemism (16%) relates to freshwater fish, which total 371 species according to Dönmez and Verli (2018).

¹ Source: Ecoregion Conservation Plan for the Caucasus. 2012 revised and updated edition. Note: (i) Caucasus defined as Armenia, Azerbaijan, Georgia, North Caucasian part of Russian Federation, N.E. Turkey, and part of N.W. Iran; and (ii) National Red Books list 700 threatened vascular plant species, only a proportion of which are globally threatened species.

² Turkey's land area is 780,043 km². Sources for total numbers of species: Turkey's Fifth (2014) and Sixth (2019) National Report to the CBD. Some of this information is inconsistent with the earlier National Biodiversity Strategy and Action Plan 2007-2017 (e.g. 11,001 vascular plant species of which 3,928, 36%, are endemic) and other records held in reputable global databases as noted above^(a-d). Percentage endemism sourced from: Dönmez, Ali and Verli, Sedat V., 2018, Chapter 11 Biodiversity in Turkey. In Pullaiah, T. (Ed.), Global Biodiversity: Selected Countries in Europe, pp.397-442, Taylor & Francis group, Boca Raton. <https://www.researchgate.net/publication/329614456>

³ Total number of species of vascular plants and vertebrate groups in Turkey sourced (04-2021) from https://rainforests.mongabay.com/03highest_biodiversity.htm.

⁴ Globally threatened species data for Turkey sourced from: https://www.ibat-alliance.org/country_profiles/TUR (accessed 27 April 2021) for globally threatened IUCN Red List species (CRitically endangered, ENdangered and VUlnerable). Note: total number of species for each taxonomic group refers to numbers of species assessed by IUCN. In the case of vascular plants, assessments are currently limited to the Gnetopsida, Liliopsida, Magnoliopsida, Pinopsida and Polypodiopsida.

* Total number of globally threatened species has risen in Turkey from 150 in 2010 to 435 in 2020. Forest cover has increased marginally from 14.5% to 15.2% over the same period. (<https://data.un.org/en/iso/tr.html>)

4. Turkey is also a centre of genetic diversity, reflecting its 10,000-year history of natural resource use that has generated a rich heritage of traditional knowledge about biocultural diversity. Located at the conjunction of the Near-East and Mediterranean Vavilovian gene centres in Turkey are 5 micro-gene centres where over 100 species display broad variation that accounts for the origin or diversity of important cultivated and other plant species, namely:¹⁴

- **Thracian-Aegean Region:** bread, durum, Poulard, stick and small red wheat; lentil, chickpea, melon, vetch, lupin and clover.
- **Southern-South-Eastern Anatolia:** double-grain wheat (*Triticum dicoccum*), small red wheat, *Aegilops speltoides*, squash, watermelon, cucumber, bean, lentil, broad bean, vine and fodder plants.
- **Samsun, Tokat, Amasya:** Large number of fruit species and varieties, broad bean, bean, lentil and various leguminous crops used for animal feed.
- **Kayseri and vicinity:** almond, apple, pea, fruit species, vine, lentil, chickpea, lucerne (alfalfa) and sainfoin.
- **Ağrı and its vicinity:** apple, apricot, cherry, sour cherry, leguminous fodder crops and watermelon.

5. While such biodiversity manifest in Turkey underpins national food security, it is also regionally important because Turkey's diverse soil and agro-climatic conditions are similar to those of some other countries, making it possible to adopt Turkish agricultural techniques elsewhere in the region.¹⁵

6. Nature conservation in Turkey began with the Forestry Regulations of 1870 but it was only in 1956 that the *national park* concept was introduced in Forest Law 6831, followed by the declaration of Belgrad Forest as the first Recreational Area in 1956 and the designation of Yozgat Çamlığı as a National Park in 1958. Considerable investments have since been made to establish a network of 4,287 protected areas (PAs). Most PAs, including national parks and nature reserves, are under the Ministry of Agriculture & Forestry, MAF and they cover 3.2% of Turkey; the rest, notably special environment protection areas, are under the Ministry of Environment & Urbanization, MEU (and cover 5.8%). Internationally designated natural (and cultural) sites are under the Ministry of Culture & Tourism, MCT (see **Table 4** for details).

Threats to Turkey's Biodiversity

7. In terms of conservation assessment, strategic planning and intervention, Turkey's main ecosystems are considered to be agricultural and steppe, forest and mountain, inland waters, and coastal and marine. Their terrestrial extent is summarised in **Table 2**, while noting that available information is dated (2007 and earlier) and limited in its consistency. A consolidated analysis of threats to these ecosystems is provided in **Table 3**, using data from the 2001 and 2007 NBSAPs but with emphasis on the latter Strategy because it is more recent and involved extensive consultation with stakeholders. Ecosystems most relevant to the project are forest and inland water.

8. Turkey's forest ecosystems cover some 211,887 km² or 27.2% of Turkey, of which 154,960 km² is degraded or destroyed (**Table 2**). Turkey's *forest area*¹⁶ has increased from 197,830 km² in 1990 to 222,200 km² according to FAO's most recent *Forest Resources Assessment* in 2020. Likewise, its

¹⁴ General Directorate of Nature Conservation & National Parks (2007). *The National Biological Diversity Strategy and Action Plan*, 2008-2017.

¹⁵ FAO (2019). *Biodiversity of Turkey. Contribution of Genetic Resources to Sustainable Agriculture and Food Systems*. <http://www.fao.org/3/ca1517en/ca1517en.pdf>

¹⁶ *Forest area* is defined by FAO as "Land with tree crown cover (or equivalent stocking level) of more than 10 percent and area of more than 0.5 hectares (ha). The trees should be able to reach a minimum height of 5 meters (m) at maturity in situ." The term does not include tree cover in urban, rural or agricultural settings, such as tree orchards, agroforestry or palms.

naturally regenerating forest increased from 192,380 km² to 215,030 km² over the same 30-year period. Natural forest, defined as >30% tree canopy, amounted to 86,700 km² in 2010 and covered 11% of the country's land area, since when 3,042 km² (3.5%) have been lost. Key drivers of permanent deforestation are identified as urbanization and commodity-driven deforestation. Antalya, Balikesir and Çannakale are among the top 9 provinces that account for over 52% of all tree cover loss between 2000 and 2020.¹⁷

Table 2 Extent of Turkey's main terrestrial ecosystems, based on land use, according to its 2001 and 2007 NBSAP.

National Biodiversity Strategy & Action Plan 2001*			National Biodiversity Strategy & Action Plan 2007*		
Land use class	Surface Area		Land use class	Surface area	
	km ²	%		km ²	%
Arable (cultivated areas)	271,180	35.0	Agricultural land	412,144	52.8
			- cultivated	266,176	34.1
			- grassland, meadows	145,968	18.7
Grassland (herbaceous plants) ⁺	217,450	28.1	Steppe and grassland	210,000	26.9
Forest	154,960	20.0	Forest land	211,887	27.2
Lakes and water surface (wetlands)	12,860	1.7	Inland waters	10,000	1.3
Others	119,320	15.4			
Over accounted	950	0.1	Over accounted [#]	63,275	8.1
Total	774,820	100.1		780,756	100.1

* Clearly, this information needs updating. It is repeated verbatim in Turkey's 5th National Report to the Convention on Biological Diversity (2014); and neither Turkey's 2019 National Biodiversity Action Plan (2018-2028)¹⁸ nor 6th National Report to CBD (2019) provide more recent summary data.

[#] This over-accounting is likely attributable to some duplication between the 'grassland, meadows' element of 'agricultural land' and 'steppe and grassland' land class. According to the ongoing GEF 5657steppe project, 12 of 32 million hectares of Turkey's natural steppe have been lost over the last 80 years.

⁺ Steppe, defined as the total of grassland and marginal areas, amounts to 280,000 km² – reduced from 443,000 km² in 1935 and from 378,000 km² in 1950.

9. Inland waters, rivers and lakes, cover some 10,000 km² or 1.3% of Turkey (NBSAP¹⁹, 2007). Wetland biodiversity is threatened by pollution, illegal and over-fishing, habitat destruction (e.g. dam construction), tourism and changes in water regime, such as excessive use of water for irrigation. Turkey's wetlands are more crucial for bird migration than any other country in the region (NBSAP, 2001), the Black Sea – Mediterranean being one of eight major migratory bird flyways in the world.²⁰

10. Steppes (grasslands) cover about 21 million ha or 26.7% of Turkey (NBSAP, 2007). Steppe biodiversity has been degraded over the last 2,000-3,000 years by some 1,500 small-scale and 70 large-scale migrations of people through Anatolia, resulting in the gradual depletion of much of the forest cover. Increasing human and livestock populations, conversion of grasslands to arable and unsustainable agricultural practices resulting in soil erosion and chemical pollution of the environment,

¹⁷ Global Forest Watch Country Profile: Turkey. Accessed 27 May 2021. [<https://www.globalforestwatch.org/dashboards/country/TUR/>]

¹⁸ General Directorate of Nature Conservation & National Parks (2019). NBSAP Addendum: *National Biodiversity Action Plan, 2018-2028*.

¹⁹ Note that Turkey has produced three National Biodiversity Strategies and Action Plans to date, all of which are relevant to this Project Document. The first, prepared in 2001, assesses the status of Turkey's major ecosystems (steppes, wetlands and marine waters, forests), threats to them and causes of their loss/degradation, all of which informs a strategy and priority action plan. The second NBSAP (2008-2017), produced in 2007, updates the 2001 NBSAP in response to changing national and international conditions and trends, including the adoption of a more participatory approach. The Strategy is similarly structured (i.e. agricultural and steppe biodiversity, forest and mountain biodiversity, inland waters biodiversity, coastal and marine biodiversity) and more comprehensive with respect to identifying gaps/needs in policy, institutional and individual capacity development. Cross-cutting issues, such as invasive alien species and access to/benefit sharing of genetic resources, are also included. Most recent is the 2019 NBSAP Addendum Action Plan (2018-2028), which provides a 10-year National Biodiversity Action Plan (NBAP) that builds on Turkey's 2008-2017 National Biodiversity Strategy and is aligned with the CBD Biodiversity Strategic Plan 2011-2020, including the Aichi Biodiversity Targets.

²⁰ <https://www.birdlife.org/worldwide/programmes/migratory-birds> (accessed 19 May 2021)

post-harvest burning, excessive hunting and collection of economically important plants are common threats to steppe ecosystems (NBSAP, 2001).

11. Threats to Turkey’s biodiversity vary by ecosystem and have been analyzed in detail²¹. These can be summarized as: (i) habitat change/loss stemming from expansion of the agricultural frontier, infrastructural development (including transport and residential expansion), mining and forest fires; (ii) overexploitation of resources, including excessive pressure on water resources (water supply), agricultural intensification (including intensive irrigation schemes and use of pesticides) and abandonment of lands once they are no longer productive, overgrazing, and overexploitation of wood and non-wood forest products (including illegal wood cuttings); (iii) climate change; (iv) invasive species; and (v) pollution, including wastewater and discharges from urban areas and pesticides and nutrients from agriculture. Drivers of land degradation are shown in Figure 1.

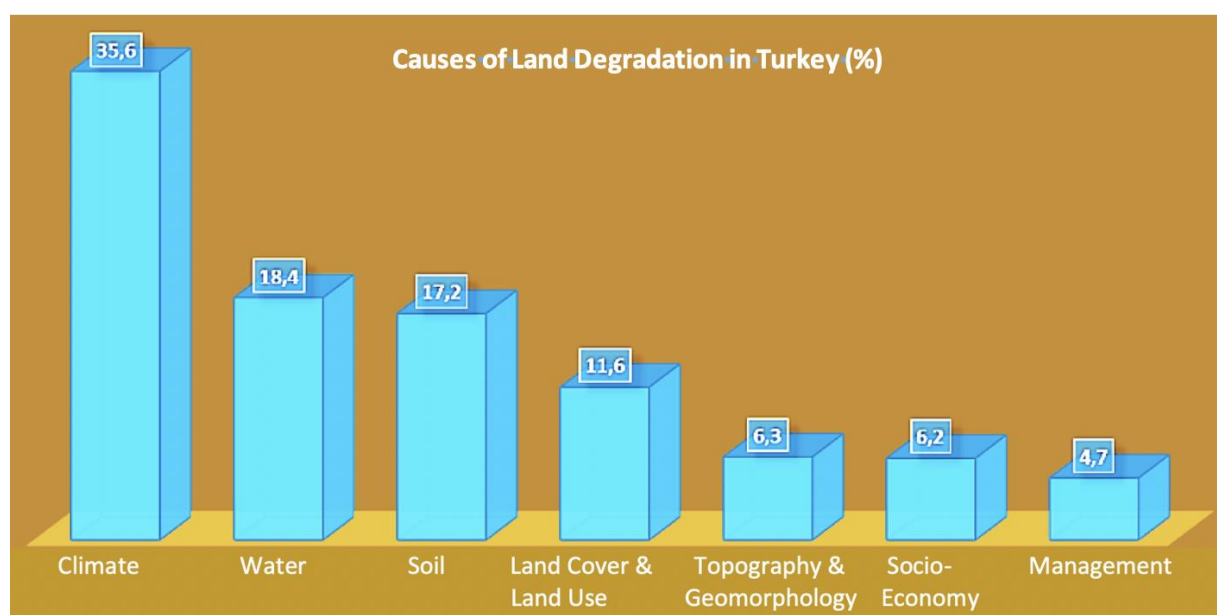


Figure 1 Drivers of land degradation in Turkey (Source: Turkey LDN National Report to UNCCD, 2016-2023)

2) Baseline scenario and any associated baseline projects

12. Turkey’s 4,287 PAs²² cover 71,102 km², which equates to 9.1% of the country’s total area (783,562 km²). Summary details in **Table 4** show the 17 different types of PA distributed across three ministries, some of which clearly do not meet the globally accepted definition of a ‘protected area’, for example *ex situ* Seed Orchard and individual trees protected as a Natural Asset. PAs under the management of MAF cover 3.2% of the country and those under MEU’s mandate 5.8%. Internationally designated PAs, under MCT, comprise some 2,226 km² but their total extent is largely taken into account as most are also designated under national conservation legislation.

13. The existing PAs system requires regular, routine monitoring of both the effectiveness and the health of the ecosystems and their associated species managed to conserve them in perpetuity. Securing ecosystem goods and services on which local communities and society at large are increasingly dependent (e.g. carbon sequestration, public enjoyment and mental health, agricultural and public water

²¹ National reports to the conventions (5th National Report to CBD, 2018-2028 NBSAP, LDN report to UNCCD), and CEPF (<https://www.cepf.net/our-work/biodiversity-hotspots/caucasus/threats>).

²² This total excludes 8,724 natural assets (i.e. monuments), which are individually protected trees and not protected ‘areas’.

supplies, clean air, safe food, forest products) is also an essential role of PAs that needs strengthening and enhancing across peripheral forest and other landscapes in partnership with other sectors.

Table 4 Summary of Turkey’s designated PAs (Source: NBSAP Addendum Action Plan 2018-2028, corrected/updated).

#	Protected Area Designation	Number	Area (ha)	Legislation	Responsible Authority
Nationally designated protected areas					
1	National Park	44	846,288.40	2873 National Parks Law and Bylaw on National Parks	Ministry of Agriculture and Forestry
2	Nature Park	243	106,452.70		
3	Nature Reserve	30	46,797.18		
4	Natural Monument	112	7,487.82		
	Subtotal	429	1,007,026.10		
5	Wildlife Development Area	81	1,172,133.00	4915 Hunting Wildlife Law and Bylaw on Wildlife	
6	Wildlife Protection Site	1	8,000.00		
	Subtotal	82	1,180,133.00		
7	Wetland of National Importance	48	714.13	Bylaw on Protection of Wetlands	
8	Wetland of Local Importance	9	10.29		
	Subtotal	57	724.42		
9	Forest Reserve	55	251,519.00	6831 Forest Law	
10	Gene Conservation Forest (in-situ)	312	42,329.00		
11	Seed Stand (in-situ)	317	41,992.00		
12	Seed Orchard (ex-situ)	197	1,457.00		
13	Urban Forest	137	10,363.00		
	Subtotal	1,018	347,660.00		
	MAF Total	1,586	2,535,543.52		
14	Special Environment Protection Area	18	2,582,968.00	383 Decree	Ministry of Environment and Urbanization
15	Natural Site (1 st , 2 nd and 3 rd Degree)	2,434	1,991,700.00	2863 Protection of Cultural and Natural Assets Law	
16	Natural Asset (monument - tree)	8,724	-		
17	Natural Asset (cave)	249	-		
	Subtotal	11,407	1,991,700.00		
	MEU Total	11,425	4,574,668.00		
	NATIONAL TOTAL	13,011	7,110,211.52		
Internationally designated protected areas					
	Biosphere Reserve	1	*27,152	UNESCO Man and Biosphere (MAB) Program	Ministry of Agriculture and Forestry
	Ramsar Site	14	184,487	Convention on Wetlands of International Importance especially as Waterfowl Habitat, Ramsar 1971	
	Specially Protected Area of Mediterranean Importance (SPAMI)	0	0	Convention for the Protection	Ministry of

				of the Mediterranean Sea against Pollution (Barcelona Convention, 1976) ratified 1981	Environment and Urbanization
	World Heritage Site - natural	0	0	World Heritage Convention 1972	Ministry of Culture and Tourism
	World Heritage Site - mixed natural/cultural	2	10,961		

14. An important consideration for Turkey to address is the present absence of other *conserved areas* (CAs) that do not meet the internationally accepted PA definition²³ but may qualify as “*other effective area-based conservation measures*” (OECM), as defined^{Error! Bookmark not defined.} and adopted at the CBD 14th Conference of the Parties in 2018.

Biodiversity legislation and governance

15. The legal status of biodiversity in Turkey is covered under Turkey’s Constitution and various legislation (laws and related byelaws), as well as international conventions and protocols to which the nation has signed up. Thus, the conservation and sustainable utilization of biodiversity in Turkey is under the authority and management responsibility of various institutions, as indicated in **Table 3**.

16. According to Article 410, paragraph (d) of the revised Presidential Decree No. 1 published in the Official Gazette No. 30474 on July 10, 2018, it is MAF’s responsibility to “Develop policies for the conservation of nature, detection of protected areas, national parks, nature parks, natural monuments, nature preservation areas, wetlands and conservation, management, development, operation and authorizing biodiversity operations and hunting wildlife.” Moreover, according to Article 420, the tasks of “taking measures and cooperating with relevant institutions with regards to the flora and fauna that are protected under international conventions and to protection of areas” in paragraph (e) and, “performing the tasks and operations related to the conservation and improvement of flora and fauna genetic resources within its field of authority” in paragraph (g) are under GDNCNP’s authority.

17. The forest estate, in general, is protected and managed by MAF’s General Directorate of Forestry (GDF). GDNCNP is the main unit responsible for conserving natural resources and biodiversity, including forest, wetland, mountain, marine and other ecosystems. The General Directorate of Combating Desertification and Erosion works mainly on the development of strategies and policies to conserve natural values and prevent desertification and erosion. Some forest areas declared as natural sites or special environmental protection areas are managed by the Ministry of Environment and Urbanization, MEU (**Table 3**).

18. Of Turkey’s 22.3 million ha of forests, 99.9% belongs to the State and only 0.1% is in private ownership. In terms of management regimes, forests can be classified into two main types: ‘coppices’ and the ‘high’ forests, with the latter comprising 82.5% of the total national forests in 2014. As a result of mismanagement of forest resources over decades, productive forests cover only about 54.8% (11.99 million ha) of the total forest estate, the remaining 45.2% (9.90 million ha) being degraded or severely degraded unproductive forest.

²³ A protected area is: “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”. Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN. x + 86pp.

19. Substantial amounts of this degraded forest can potentially be returned to productive forest through reforestation, rehabilitation and erosion control activities. Turkey has shown strong commitment to sustainable forest management, as evident from the 50-60 thousand ha/year of forest rehabilitation and reforestation that has taken place over the past 30 years, with the increase in growing stock maintained by keeping the annual allowable cut to 19 million cubic meters, which is significantly lower than the annual increment of 42 million cubic meters. Apart from the biodiversity and economic benefits generated from timber production, more than 500 NWFPs are extracted from forests. Most importantly, Turkey's forests annually sequester more than 20 million tonnes of carbon in living biomass and store more than 2.7 million tonnes of carbon in dead organic matter. Annual carbon losses due to commercial cutting, fuelwood collection and forest fires are around 6.4 million tonnes of carbon.

20. About 10% of Turkey's population live in forest villages or forest-neighbouring settlements, where forest resources make a vital contribution to livelihood. In recent years, GDF has attached substantial importance to the enhanced income generated from forest ecosystems by way of NWFPs. Urban dwellers also increasingly value forests, particularly with respect to their biodiversity, environmental and social functions.

Land degradation in Turkey

21. Turkey is highly vulnerable to desertification and drought due to its climate and soil characteristics. Water erosion is a primary concern as almost half of Turkey's topography inclined at 40% or more. Despite significant efforts by government, erosion and flooding remain a significant risk due to inadequate cultivation practices on sloping agricultural terrain. Degradation of agricultural lands and pastures and the destruction of forests and natural ecosystems are also key components of land degradation. Land degradation results in lower productivity levels and revenue losses, pushing farmers in the short term towards unsustainable practices, including the need for additional fertilizer and other inputs to compensate for losses in efficiency.

22. Agriculture in the buffer areas around Kazdağı National Park is dominated by fruit production, namely olives and nuts as well as vegetables (e.g. tomatoes, peppers, eggplants), collection of medicinal plants and animal husbandry (some 500,000 and 1,000,000 heads of cattle and small ruminants in Çanakkale Province, respectively). Beekeeping is also an important source of income in the region. The main drivers of land degradation in the region include (i) inappropriate production practices on steep slopes and marginal land, (ii) drought risk and irregular rainfall patterns, (iii) inappropriate irrigation systems and (iv) inadequate use of fertilizers and pesticides.

23. Turkey submitted its LDN Report to UNCCD in 2016 for the period 2016-2023.²⁴ Specific commitments include: (i) stop the decline in forest areas by applying corrective measures such as soil conservation, afforestation and rehabilitation of mine sites; (ii) stop declining productivity in forest lands by decreasing forest crimes, rehabilitating forest lands and reducing the number of anthropogenic fires; (iii) halt declining productivity of pastures through rehabilitation measures, and (iv) stop declining productivity in agricultural lands by consolidating lands, registering areas of great agricultural potential as agricultural lands, increasing the irrigated area, and rehabilitating agricultural lands. This project will support Turkey's efforts to achieve Land Degradation Neutrality and meets the criteria established by the UNCCD in the "Checklist for Land Degradation Neutrality Transformative Projects and Programmes".

Kazdağlari Region

²⁴ <https://knowledge.unccd.int/sites/default/files/inline-files/turkey-ldn-country-report.pdf.pdf>

24. The project will target the Kazdağları Region, globally significant for its biodiversity and providing an opportunity to strengthen the PAs system both nationally at policy and institutional level and regionally by demonstrating at site level how PAs and their surrounding production lands can be managed more effectively in an integrated manner using the landscape approach. Details of project's target areas are provided in **Section 1.b** and **Annex E**.

25. Currently ongoing in the Kazdağları Region is the nomination of Ida Madra as a UNESCO Global Geopark, submitted in 2021. The Geopark stretches from the Marmara Sea and islands south-west across parts of Balıkesir and Çanakkale provinces to the Aegean Sea, rising from sea level to 1,774 m at the summit of the Mt. Ida. It embraces all of Kazdağı National Park and the four forest subdistricts in Balıkesir Province in the Project Area.

Baseline programmes and projects

26. Programmes implemented by GDF and GDNCNP, with its focus on planning and managing Turkey's PAs system, provide a substantive baseline for this project. The regular program of GDF and its baseline activities in relation to the project region amount to USD 6 million per year. Baseline activities include: i) conducting forest inventories; ii) preparing forest management plans (FMPs); iii) forest extension activities at local level; iv) implementation management plans, including silvicultural management, timber harvesting and processing, afforestation, forest rehabilitation and restoration; v) NWFP inventories and utilization plans; f) forest control and monitoring, including NWFP extraction. GDF baseline activities also include building capacity to increase awareness about biodiversity conservation among foresters and develop systematic planning and management capacities at regional levels to improve forest ecosystems.

27. GDNCNP has managed Kazdağı National Park since 1993 under the umbrella of its national budgeted programme that has focussed on: (i) preparation of a national strategy and action plan for PAs, including strategies, policies and management objectives for both existing and new protected areas; (ii) raising awareness on PAs and biodiversity conservation; and (iii) increasing the effectiveness of the current protected areas management system by developing and implementing effective plans and programmes. A number of projects have also contributed significantly to biodiversity conservation baseline activities as follows:

- *Strengthening the National Nature Protection System for Implementation of Natura 2000 Requirements* (USD 9,300,000, 2015-2018), undertaken in Central Anatolia, is completed. The EU Birds and Habitats Directive Annexes are now replete with respect to listing species and habitats present in Turkey. A new *Methodology for Selection of Natura 2000 Sites* has been applied in Turkey; and potential Natura 2000 sites in the pilot areas of the Central Anatolia Region and its surroundings are listed in a new database that complies with EU Natura 2000 requirements.
- *National Biodiversity Inventory and Monitoring Project* (USD 10 million), begun in 2013 and completed three years behind schedule in 2021, inventoried biodiversity and established monitoring baselines across all 81 provinces in Turkey. The inventory data is held in the *Noah's Ark National Biodiversity Database*, created in 2007 by the Biological Diversity Monitoring Unit of the former Ministry of Forestry & Water Affairs and now managed by MAF's Directorate of Information Technology. Noah's Ark is publicly accessible,²⁵ providing its members with limited access to interrogate data and permits based on 'areas, species and habitats' for monitoring Turkey's biodiversity. Users are able to:
 - enter their biodiversity data directly into the system using geographic coordinates;

²⁵<http://www.nuhungemisi.gov.tr/Giris/index.aspx>

- filter species information by family, taxon and time interval, likewise for information on protected area, habitat and geography, - by indicating the area of interest on the map;
- access distribution maps of species;
- monitor changes in species' red list status;
- monitor changes in protected areas over time; and
- use the database to inform Environmental Impact Assessment (EIA) reports and decision-making.

28. While the national biodiversity inventories undertaken at provincial levels are limited to sampled sites, access to Noah's Ark will be invaluable for the Kazdağları regional vision, and planning inventories and monitoring of the Project Area. Conversely, the project will be able to contribute new records to this database.

3) Proposed alternative scenario with a brief description of expected outcomes and components of the project and the project's Theory of Change

Alternative scenario using an integrated landscape approach

29. PAs have proliferated since the late-1950s to counter ever increasing degradation and fragmentation of forest and other ecosystems. However, their 9.1% coverage of Turkey is inadequate in terms of protecting biodiversity and natural values. Thus, the current challenge is to strengthen the PAs system systematically, in terms of its representativeness of biodiversity, and institutionally with respect to its effective planning, management and monitoring. . Hence, an integrated landscape approach will be applied to the Project Area to demonstrate how: individual PAs can be managed more effectively on the ground, with their integrity enhanced to absorb threat and corridors to increase connectivity; degraded forests under production can be restored; and agricultural lands (pastures and cultivations) can be managed sustainably.

30. The landscape approach also provides an opportunity to address more complex scenarios where, for example, communities physically reside inside PAs or even natural forests reserved for production, within bounded enclaves comprising settlements, cultivations and pastures. Such an approach is referred to as integrated landscape management (ILM), whereby production systems and natural resources are sustained at scales large enough to provide vital ecosystem services and small enough to be managed by the people using the land. Further details and guidance on the ILM approach are provided in **Additional Annex 1** to guide the execution of this project.

31. More ambitious will be the development of a common Regional Vision and Action Plan to conserve Kazdağları's biodiversity (and geodiversity), thereby providing a framework for out-scaling best practices demonstrated and lessons learned by the project. This will require much enhanced multi-sector coordination and cooperation at community and regional government levels, particularly in agricultural and forest production areas, to safeguard ecosystem services, maintain and enhance biodiversity, and improve ecological connectivity. It will also need to be championed by MAF and its key partners (General Directorates of Nature Conservation & National Parks, Forestry and Agriculture), as well as other key sectors such as mining, tourism and wind energy; and widely embraced by stakeholders within government, communities, private enterprises and NGOs.

Project aims and objective

32. The project **aims** to strengthen Turkey's PAs system by: improving its representativeness, effectively managing key biodiversity and reducing external threats from peripheral production systems through the adoption of an integrated approach that transcends sectoral interests in favour of

sustainability (economic, social and environmental) at holistic levels (e.g. landscapes and watersheds). The project's **objective**, *to improve biodiversity conservation and sustainable forest management in the Kazdağlari Region for environmental and socio-economic benefits*, is designed to strengthen the PAs system in terms of its representativeness of biodiversity, governance and monitoring of its biodiversity and management status, while focussing on demonstrating a landscape approach that embraces PAs and production systems in a key biodiversity, geodiversity and cultural hotspot within the Kazdağlari Region, referred to as the Project Area.

33. **Component 1** focuses on comprehensive baseline studies and strengthening management effectiveness of PAs in the project area through integrated landscape approaches. . Demonstrating the effective and sustainable forest biodiversity conservation in forest production landscapes where local people are at least partly dependent on NWFPs, tourism, land cultivation and livestock grazing of pastures is the focus of **Component 2**. Raising awareness, promoting understanding and developing capacity across relevant sectors at national, regional, local and community levels is the focus of **Component 3**, as well as monitoring the project's implementation.

Theory of Change

34. Intervention pathways for the three strategies (Project Components) that will realize the Project's Objective are illustrated below in the Theory of Change model (**Figure 2**); and the accompanying legend for the assumptions indicated alongside the pathways in the diagram is provided in **Table 5**. Key elements of the model are as follows:

- While Turkey's existing PAs system provides legal protection for the country's important biodiversity, policies regarding the definition, roles and governance of different categories of PA are need to be strengthened . Moreover, the distribution of financial and technical resources is inadequate to effectively manage and monitor the system. This problem is exacerbated by mounting pressures from infrastructural development and extractive industries, and surrounding settlements and production systems that are managed unsustainably in ways that erode the integrity of PAs. Weak or non-existent multi-sectoral coordination contributes to such pressures.
- Significant investment is required to strengthen, maintain and effectively manage the existing PAs and this will be supported by integrated sustainable landscape management, participatory planning and systematic monitoring of the PAs (**Output 1.1.2**).
- Concomitant with the above measures, the governance, planning, management and monitoring of PAs will be improved across a total area of 21,733 ha, as demonstrated in the Project Area for Kazdağı National Park, Darıdere and Ayazma Pınarı Nature Parks, Kazdağı Göknarı Natural Reserve, and at least one example of other PA categories (e.g. seed stand, gene conservation forest, forest reserve) in a participatory manner with representatives from relevant stakeholder groups and delivered by mid-term (**Output 1.2.1**). These sites present a range of settings, requiring different landscape approaches as appropriate.
- Promotion of greater awareness among the public and especially decision-makers across government about the values of the biodiversity conserved in PAs and their ecosystem goods and services that support human life and livelihoods. This is particularly pertinent for Kazdağlari Region, with its vested interests in mining, energy and tourism, and which will be subject to a Regional Vision to conserve biodiversity hotspots and reconnect forest fragments, informed by a socio-economic valuation of goods and services (**Output 2.1.1**).
- Forest management planning will be improved to accommodate biodiversity interests across a total forest area of 131,167 ha, within which 5,455 ha of degraded forest will be restored, (**Output 2.2.1**). Integrated Functional Forest Management Plans (IFFMPs) will initially be piloted at forest sub-district level in Bayramic and Kalkim forest districts (one each), following which 19 FMPs will be revised across four of the five target districts (Edremit being the exception) and upscaled to IFFMPs. A further 500 ha will be restored for NWFPs. Implementation of the 21 IFFMPs will contribute to Turkey's LDN target.

- Strengthening livelihoods, supporting alternative opportunities and markets through the implementation of PA management plans and IFFMPs, and initiatives will be realised during the second half of the project (**Output 2.2.2**).
- A wide range of activities in Components 1 and 2 will be underpinned by a modular Training Programme (**Output 3.1.2**), institutionalised by project closure to ensure that it can continue to support and mainstream integrated management of PAs and surrounding production systems across the Kazdağlari Region.
- These interventions will result in: a consolidated policy enabling environment for the PAs system, supported by adequate information, monitoring and financing (**Outcome 1.1**); improved representation and conservation of biodiversity in PAs, with ecosystem goods and services restored and enhanced in surrounding forest and non-forest landscapes within the 184,297 ha Project Area (**Outcomes 1.2 and 2.2**); and a vision to conserve biodiversity across the Kazdağlari Region and post-project actions planned to up-scale what has been the demonstrated in the Project Area (**Outcome 2.1**), underpinned by raised awareness, understanding, capacity (**Outcome 3.1**) and lessons learned (**Outcome 3.2**).
- Refer to the project's App (<https://projectgeffao.users.earthengine.app/view/kazdaglari-app>) to appreciate the geographical scope, administrative boundaries and some interventions in the Project Area, which comprises: five Forest Management Districts (Bayramiç, Çan, Edremit, Kalkım and Yenice) in two Forest Regional Directorates of Balıkesir and Çanakkale; and Kazdağı National Park Directorate.

35. Thus, the proposed project targets the support and maintenance of biodiversity and ecosystem goods and services associated with Turkey's PAs system through interventions both inside and outside this network. Its focus on production practices becoming less degrading and more biodiversity friendly, particularly in the forestry, agriculture and tourism sectors, is underpinned by an integrated landscape approach to governance, management and monitoring. Project Components (i.e. GEF alternative strategies), designed to remove barriers to achieving the long-term solution, are described below, together with details of their respective Outputs and indicative Activities.

Table 5. Legend of assumptions underpinning the Theory of Change conceptualised in **Figure 2**.

Component	Outcome. Output.	Key Assumptions
C1		Political support forthcoming from the highest levels of government within key sectors, including MAF and its Nature Conservation & National Park, Forestry and Agriculture directorates, MCT and MEU, and commitment to cooperate across all relevant sectors in order to deliver the landscape approach.
C2	O2.1	Benefits of the landscape approach appreciated by Provincial, District and Municipality authorities to the extent that during the life of the project they will commit to developing a Regional Vision to conserve Kazdağlari's biodiversity and, post project, resources to catalyse delivery of the Action Plan.
C2	O2.2	Effective monitoring, using the METT and Ecosystem Health Index, informs PA planning and management cycle.
C2	O2.2.1	Participatory management plans will have been delivered by mid-term for at least one of each category of PA within Project Area to provide adequate time and resources to support their implementation during second half of project, thereby ensuring they are 'fit for purpose' and providing adequate opportunity for adaptive measures to be taken as necessary.
C2	O2.3	Government stakeholders from different sectors willing to cooperate and, where necessary, compromise in order to resolve conflicts of interest and enable the landscape approach to be flexibly and effectively applied to a range of scenarios. Synergies and conflicts of interest will be addressed through management agreements between relevant parties (partners including local communities) and based on principles of sustainable, integrated land management.
C2	O2.3	Development and adoption of best practices, combined with lessons learned from experience, delivers project objective.

C3	O3.1	Necessary organizational structures, policies and regulations in place by project closure to enable mainstreaming of landscape approach to be realized across the Kazdağlari Region and elsewhere across the PAs system post project.
C3	O3.1	Communications Strategy is effective in delivering key messages to multiple sectors about benefits of the landscape approach and importance of sustainable public and other financing to secure and enhance the integrity of the PAs system, and adjoining production systems.
C3	O3.1	Modular capacity development training programme on Landscapes and PAs Management institutionalised for post-project capacity development in support of upscaling the ILM approach across the Kazdağlari Region, based on a collaborative agreement between MAF and an educational or other appropriate institution.
C3	O3.1.2	Sufficient publicity and incentives (ease of access, quality and relevance of training, adequacy of facilities, tangible benefits) in place for stakeholders to commit to training and capacity development opportunities.
C3	O3.1	Capacity development and the various coordination, integration and decision-making platforms created by the project will be equally accessible to men and women, as well as minority groups, as a result of effective communications and, as necessary, incentivisation.

Strengthening the Conservation of Biodiversity and Sustainable Management of Forest Landscapes in Turkey's Kazdağlari Region
Theory of Change

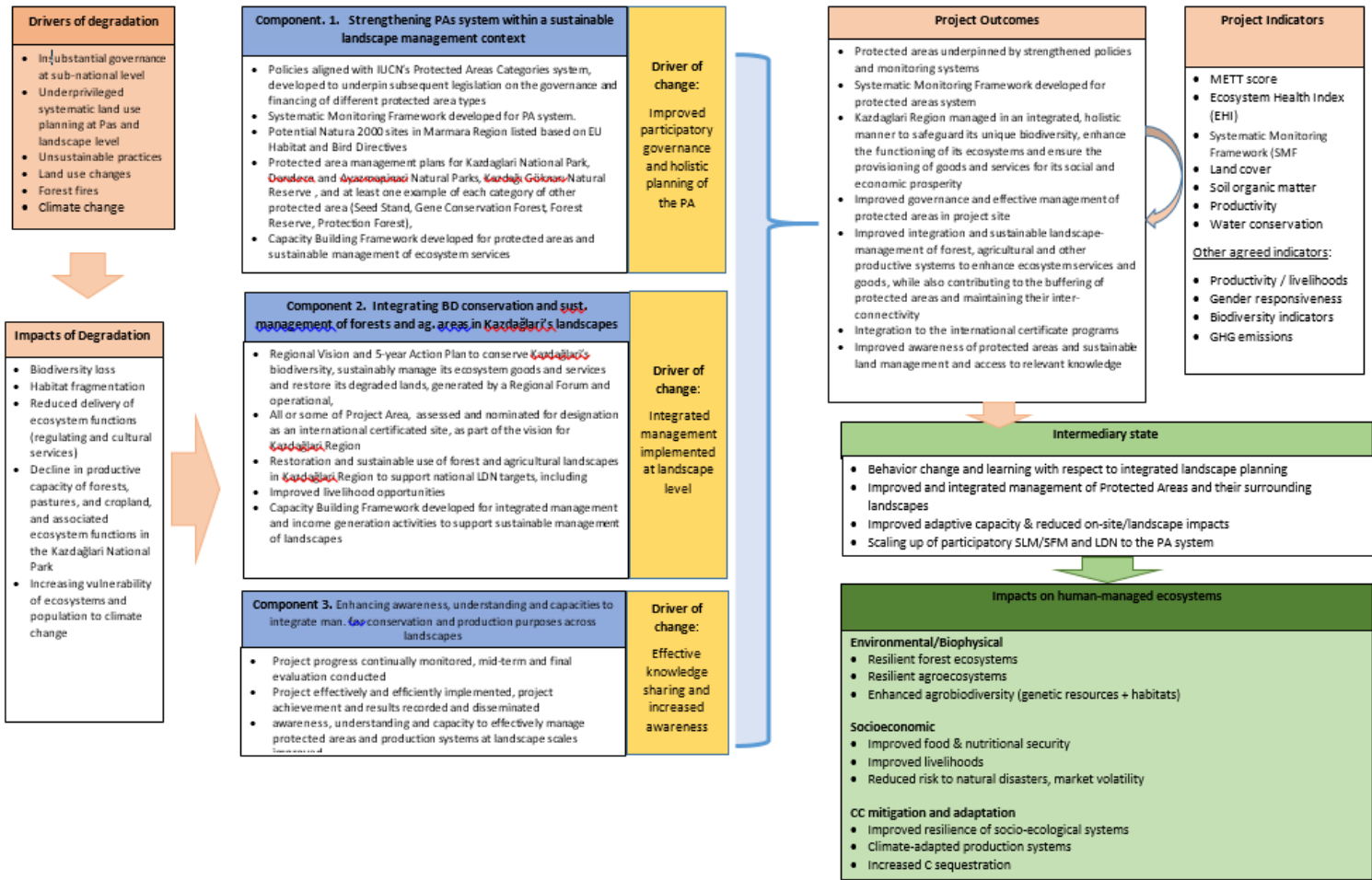


Figure 2 Theory of Change, showing barriers, components (i.e. GEF alternative strategies) with respective outputs to address them, and outcomes resulting in achievement of project objective, subject to a set of assumptions that logically connect the different levels of intervention. Longer term, post-project impacts are also shown.

Component 1: Strengthening protected areas management within a sustainable landscape management context.

36. Component 1 is designed to promote holistic and sustainable management of PAs through integrated landscape approaches. It will strengthen PAs system by focusing on the policy enabling environment and supporting tools, specifically: consolidating the policy enabling environment with respect to more effective and integrated governance, planning and management of land and water to conserve biodiversity in PAs and sustainably use natural resources in and their surrounding production systems. It will also promote biodiversity and land/forest ecosystems conservation with a comprehensive investigations;; and developing participatory management plans for the protected areas in the project site. Additionally, it will also set up an information systems and monitoring frameworks to support effective PAs management. Policies will be informed by lessons learned from other ongoing PAs work, such as the GEF-5 5657 Project: *Conservation and Sustainable Management of Turkey's Steppe Ecosystems*, and the pilot interventions envisaged under Component 2.

37. Consideration will also be given to OECM, which provide an important opportunity to better recognise and record *de facto* nature conservation that is being implemented outside currently designated PAs by a diverse set of stakeholders, including local communities, private sector and government agencies. Refer to **Output 2.2.1** details.

Outcome 1.1: Protected areas system underpinned by strengthened policies and monitoring systems.

38. This outcome of requires aa comprehensive review, update and expansion of PA policies ; and adequate tools to inform and monitor its effective management. It is supported by an integrated landscape²⁶ management (ILM) approach to address the mosaic of production systems within which PAs are invariably located, with a view to introducing policy guidance on ILM within the nature conservation, forestry and agricultural production, and fisheries sectors, all of which operate under the same ministry (MAF).

Output 1.1.1 *Policies, aligned with IUCN's Protected Areas Categories system, developed to underpin subsequent legislation on the governance and financing of different protected area types.*

39. This output will comprise a comprehensive review of existing policies on PAs both national and in the scope of the project area, with key gaps identified and scope expanded to address at least the following aspects: definition and categorisation of the full spectrum of PA designations, including a review of which designations meet the internationally accepted definition of 'protected area';²³ governance types and levels (models) for the different categories of PAs, with principles clearly articulated and best practices exemplified; and financing mechanisms reviewed and explored with respect to innovative strategies and initiatives to underpin effective governance and management. Policies on the ILM approach will also be developed, informed by experience from across Turkey's PAs system, including pilots implemented in the project and international experience elsewhere.²⁷

40. An all-embracing policy document is anticipated from this output, accompanied by a series of policy guidance and best practices covering at least the following topics: classification of Turkey's PAs with respect to both governance and management; planning, managing and resourcing (including

²⁶ Note that for purposes of this project the term landscape includes both terrestrial and freshwater but not marine ecosystems.

²⁷ Some of these initiatives may require changes to the existing legislation.

financing) PAs; monitoring the status of the PA system with respect to the representativeness and condition of its biodiversity and, based on the Management Effectiveness Tracking Tool (METT) effective management of its individual PAs; and the ILM approach, including best practices in the sustainable management of forest and agricultural production systems and fisheries in juxtaposition with PAs.

Indicative activities under Output 1.1.1

- a) **Review existing policies and identify and develop new policies to strengthen the PAs system:**
 - Adopt the global standard with respect to the definition of a PA and apply the IUCN management categories classification system²³ to the entire range of Turkey's PA designations.²⁸ For each of these designations articulate the responsible management authority, governance type(s), financing regimes and options, management structure, and management planning process and its monitoring. Where gaps exist, propose policy measures. Apply IUCN guidance on management categories and governance types.²⁹
 - Define stepping stones and any other planning concepts designed to re-connect fragmented biodiversity; and, extend policy measures to adopt these concepts.
 - Include policy guidance on the ILM approach (refer to **Additional Annex 1** for background information) and provisions for sustainable production systems in agriculture, forestry and fisheries.
 - Ensure that global standards and best practices relating to the certification programs and CBD provisions for OECM³⁷ are incorporated within the policy guidance.
- b) **Work closely in partnership with relevant sectors to draft policies and subsequently consult widely with stakeholders** at national, provincial and local levels.
 - This policy document will be prepared by an expert team with the participation of all relevant stakeholders.
- c) **The proposed policies may include:** demonstrating best practices and examples besides the current situation and, at least the following:
 - Planning, managing and resourcing (including financing) PAs, including monitoring the status of the PA system with respect to the representativeness and condition of its biodiversity and effective management of its individual PAs, using the METT, and/or EOD of IUCN.
 - Principles and criteria to designating and managing stepping stones and other measures to PAs and enhance their inter-connectivity, using IUCN guidance on ecological corridors and networks.³⁰
 - Identification the ILM approach³¹, with best practices demonstrated in the sustainable management of forest and agricultural production systems and fisheries in juxtaposition with PAs.
- d) **Finalise policy document and guidance on strengthening PAs and submit to MAF** ³², having incorporated feedback from stakeholders, as appropriate, and lessons learnt from the project

²⁸ Refer to: <https://r2r.environment.gov.ck/wp-content/uploads/sites/2/2021/05/38.-Cook-Islands-PACS-policy-paper-2021.pdf> for a good, recent example of applying IUCN's PAs management categories system. [Twyford, K. (2021) *Towards a Protected Areas Classification System for the Cook Islands: Policy Paper*. Prepared for Cook Islands National Environment Service and Ridge to Reef (R2R) Project.]

²⁹ Dudley, N. (Editor) (2008). *Guidelines for Applying Protected Area Management Categories*. Gland, Switzerland: IUCN. x + 86pp. WITH Stolton, S., P. Shadie and N. Dudley (2013). *IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types*, Best Practice Protected Area Guidelines Series No. 21, Gland, Switzerland: IUCN.

³⁰ Hilty, J.*, Worboys, G.L., Keeley, A.*, Woodley, S.*, Lausche, B., Locke, H., Carr, M., Pulsford I., Pittock, J., White, J.W., Theobald, D.M., Levine, J., Reuling, M., Watson, J.E.M., Ament, R., and Tabor, G.M.* (2020). *Guidelines for conserving connectivity through ecological networks and corridors*. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN.

³¹ Refer to **Additional Annex 1** for a résumé on FAO's Integrated Landscape Approach.

³² MAF is likely to send to the Strategy and Budget Department under the 'Presidency' for clearance.

Output 1.1.2 Systematic Monitoring Framework developed for protected areas system

41. Systemic monitoring of PAs (mainly for national parks) is currently implemented using the Management Effectiveness Tracking Tool (METT), which is a globally renowned and widely used tool to monitor the effectiveness with which PAs are managed. It has been also regularly implemented since from 2011 up to date. Additionally, GDNCNP has recently published its own guidance in Turkish (and English) under its ongoing GEF-6 Project, *Conservation and Sustainable Management of Turkey's Steppe Ecosystems*, and this will be applied to all target PAs and OECM for demonstration and subsequent replication purposes. Details of the METT, its global credentials, focus on management effectiveness and essential need to be applied in a consensual manner among PA staff and, indeed, external stakeholder to secure ownership, are provided in **Additional Annex 2**. METT alone is not sufficient to monitor management effectiveness. Additional tools and approaches may be needed for this purpose.

42. The Systematic Monitoring Framework for will also include ecosystem health, which is not routinely undertaken for Turkey's PAs. Currently, species prioritised for conservation are monitored in accordance with their respective action plans but not all such species have such a plan. For decades mid-winter waterfowl counts were undertaken by NGOs and experienced national and local bird watchers as part of the Western Palearctic MWWC. In recent years, State Water Works has undertaken such counts in wetlands due to their interest in the quality of the water for public consumption purposes; and GDNCNP now organises the MWWC using its own staff supported by individual birdwatchers.³³ Such data can also be usefully and automatically shared between interested parties, such as State Water Works and GDNCNP with their common interests in the public – be it for public health (water quality) or public enjoyment (PAs and wildlife). What is required, therefore, is an overarching set of ecological, including biodiversity, indicators for monitoring the condition of ecosystems and their associated species in PAs. This will complement the METT, so that both ecosystem health and PA management are monitored using common standards across Turkey's PAs system. This monitoring framework will be systematically applied to PAs in the Project Area, with necessary monitoring equipment provided, for subsequent post-project replication across the PA system.

43. Guidance and an example of an ecosystem health index (EHI) that was developed for a GEF PAs project in China specifically to complement the METT is provided in **Additional Annex 2a**. While this index was designed specifically for wetlands, it can be readily modified to include other types of ecosystem and contextualised for Turkey. Ecosystem health is defined as:

the suitability of a site to continue to provide secure conditions for survival of component species and delivery of key ecological services, including resilience to climate and other changes.

The Index has three components: habitat health, species health and environmental health context, each of which is scored using a set of criteria (as in the case of the METT). The scorecard should be simple and robust; and, once designed, needs only the habitats to be classified and mapped (if none is available), main threats for monitoring to be identified and suitable indicator species selected, prior to establishing the baseline. Guidance in developing the index can also be sought from the International Society for Ecosystem Health.³⁶ Note that the *IUCN Global Ecosystem Typology* **Error! Bookmark not defined.** may provide a useful high-level framework for classifying habitats.

Indicative activities under Output 1.1.2

METT

³³ While it is encouraging that such agencies invest in monitoring their biodiversity, some experts consider the quality of the data to have declined.

- a) **Present the GEF-7 METT template, completed during the PPG, to the Project Inception Workshop for affirmation and subsequent endorsement by the PSC**, having first made any changes necessary to update it and/or improve its SMARTness.³⁴ This version will be used for project implementation purposes. In the process, the past METT practices and outputs of DKMPGM will be included when updating the GEF-7 METT template for national use.
- b) **Check that the GEF-7 METT template** is aligned with that adopted by GDNCNP, for which guidelines have been produced by GEF-6 project: *Conservation and Sustainable Management of Turkey's Steppe Ecosystems*, and also with the 2016 *METT Handbook* that is the global standard.³⁵ Amend if necessary.
- c) **Disseminate the Turkish (and English) versions of the METT Guidelines across the PAs network.**
- d) **Populate the METT template, having linked it to the PAs national database, as part of the systematic monitoring of PAs.** Prioritise project target PAs, then PAs that have used and/or continue to use the METT; and then promote replication by other PAs in concert with training PA staff (**Output 3.1.2**) to apply the Systematic Monitoring Framework.

EHI

- e) **Review the EHI developed for wetlands in China (Additional Annex 2) alongside other appropriate methodologies, particularly those designed for national PA systems, and determine which elements are best suited to the Turkish context.** Other potential leads include the International Society for Ecosystem Health³⁶ and IUCN's Commission on Ecosystems Management³⁷. The latter is responsible for IUCN's Red List of Ecosystems that, together with the Species Red List, will inform selection of indicators.
- f) **Draft the EHI template** in close consultation with the KBA Expert Group and submit to the MAF and MEU for their endorsement. Note that the template should be accompanied by guidance notes as necessary.
- g) **Pilot the EHI template in the project target sites**, learn lessons and make final changes in consultation with relevant stakeholders and institutions.
- h) **Populate the finalised EHI template**, having linked it to the PAs national database, as part of the PAs Information System. Prioritise other PAs that have previously used/adopted the METT; and then promote replication by other PAs in concert with training PA staff to apply the Systematic Monitoring Framework.

Outcome 1.2: Improved coverage³⁸, governance and effective management of protected areas.

44. Outcome 1.2 is focused on improving biodiversity conservation, ecosystem functioning (health) and social well-being by strengthening the planning and management of a suite of different types of PAs within the target region, as well as listing new candidate PAs in accordance with priorities that emerge from the comprehensive baseline survey studies to increase the biodiversity representativeness of PAs within project area and listing of the Natura 2000 sites in Marmara Region.. Existing PAs to be targeted in the Project Area include Kazdağı National Park, Kazdağı Goknari Nature Reserve, Daridere and Ayazmapınarı Nature Parks, and at least one example of every other PA designation within the Project Area (i.e. Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest), for which different PA governance models will be piloted in close coordination with

³⁴ Specific, Measurable, Achievable, Relevant and Time-Bound (indicators)

³⁵ Stolton, S. and N. Dudley (2016). *METT Handbook: A guide to using the Management Effectiveness Tracking Tool (METT)*, WWF-UK, Woking. Note that this was translated into Turkish by FAO in 2020.

³⁶ Rapport, D.J., G. Bohm, D. Bgham, J. Cairns, Jr., R. Costanza, J.R. Karr, H.A.M. de Kruijf *et al.* (1999). Ecosystem health: the concept, the ISEH, and the important tasks ahead. *Ecosystem Health* 5(2): 82-90.

³⁷ <https://www.iucn.org/commissions/commission-ecosystem-management>. For example, see review on selecting indicators for ecosystem risk assessments: Rowland J.A., J. Nicholson, N.J. Murry, D.A. Keith, R.E.Lester, L.M. Bland (2018). Selecting and applying indicators of ecosystem collapse for risk assessments. *Conservation Biology* 32 (6): 1233-1245.

³⁸ The term 'coverage' is used in the sense of representativeness of Marmara Region's genetic, species and ecosystem diversity linked with Habitat and Birds Directives.

relevant government authorities responsible for their management. Emphasis will be given to promoting co-management arrangements with local stakeholders, where appropriate, to strengthen ownership. The corresponding National Park Directorate/Provincial Division Directorate will lead the process of improving governance as appropriate. There will be a specific works to list potential protected areas in line with the potential NATURA 2000 areas in Marmara Region with implementing Habitat and Birds Directives priorities.

45. Improved management planning and implementation will be demonstrated for a representative sample of PA types in the Project Area; and the representativeness and connectivity of the existing PAs network will be strengthened, using the results of the baseline survey studies (**Output 1.2.1**) to both list new PAs and enhance or restore connectivity between existing and proposed PAs by means of corridors and stepping stones.

46. Most importantly, all outputs will inform policy development under **Output 1.1.1**. This necessitates close coordination between **Outputs 1.1.1**, involving the same experts to: (i) avoid inconsistencies and conflicts between emerging policies and their application; and (ii) ensure that implementation **Output 1.1.1** can progress simultaneously in an iterative manner. Hence, the piloting of new PA policies will underpin their development and final adoption by government.

Output 1.2.1 Identification of potential Natura 2000 sites in Marmara Region³⁹ and listed new protected areas based on baseline survey assessment;

47. Baseline surveys in Marmara Region and in the Project Area will support the documentation of the status of globally significant biodiversity and listed potential Natura 2000 sites in order to list candidate PAs in the region. The survey work will focused on Birds and Habitat Directives requirements in Marmara Region and comprehensive baseline surveys on biodiversity, social and economic issues in project area. While the assessment will provide the potential Natura 2000 sites and alternate candidates for new PAs, it will also generate the baseline information and processes required to inform the protected area management plans (output 1.2.2) in the project area.

48. This Output and the Kazdağı National Park Management Plan, updated under **Output 1.2.2**, will also be informed by the Natura 2000 assessment (**Output 1.2.1**). Both initiatives, which are expected to provide recommendations on priorities for the establishment of new PAs (or even OECMs and potential Natura 2000 sites), will need to be completed by mid-term of the project in order to deliver this Output.

Indicative activities under Output 1.2.1

- a) **Undertake a rapid assessment of site designation for Natura 2000 sites in the Marmara region**, based on Habitat and Birds Directives requirements and their annexes. The assessment should be focused on to meet requirements of Annex I habitat and Annex II species sufficiently represented at national and biogeographical level. The assessment reports should include recommendations for the creation of new PAs together with potential Natura 2000 sites.

• ³⁹ The Marmara Region (Turkish: Marmara Bölgesi) is a geographical region of Turkey. Located in northwestern Turkey, it is bordered by Greece and the Aegean Sea to the west, Bulgaria and the Black Sea to the north, the Black Sea Region to the east, and the Aegean Region to the south. At the center of the region is the Sea of Marmara, which gives the region its name. Among the seven geographical regions, the Marmara Region has the second-smallest area, yet the largest population; it is the most densely populated region in the country. There is 11 provinces; Balıkesir, Bilecik, Bursa, Canakkale, Edirne, İstanbul, Kırklareli, Kocaeli, Sakarya, Tekirdağ, Yalova . Project area is in the same region.

³⁹ The term ‘coverage’ is used in the sense of representativeness of Kazdağları Region’s genetic, species and ecosystem diversity.

- b) **Undertake comprehensive baseline surveys for project area, based on biodiversity, social and economic issues** as described in **Additional Annex 2**^{Error! Reference source not found.} and refined as necessary. The assessment reports should include recommendations for the creation of new PAs in the project site and with clear, robust justifications.
- c) **Use the results from the assessments rapid biodiversity assessment to provide a vision of how best to conserve biodiversity hotspots**, to inform protected area design and the protected area management plans. It will also use to revision of the forest management plans either implemented by the project or by co-financing by ministry. Additionally, to build public awareness regarding biodiversity and ecosystem service values. Methodologies will be informed by best international and national models for biodiversity gap analysis adapted for the specific needs of forest ecosystems and forest protected area assessment
- d) **Consult stakeholders and build capacities of Ministry and related stakeholders.** The assessment effort will be used to build the capacities of project team and related stakeholders. The project will provide the technical support required to build this capacity. The assessment will be accompanied by a series of workshops designed to inform key stakeholders of assessment methodologies and results. The results of assessment will be published and disseminated.

Output 1.2.2 Protected area planning and effective management strengthened for Kazdağı National Park, Daridere and Ayazma Pinari Nature Parks⁴⁰, Kazdağı Göknarı Nature Reserve⁴¹, and at least one example of other conservation categories (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest).

49. This Output is closely interlinked with outputs 1.1.1: Review existing policies and identify and develop new policies to strengthen the PAs system; 1.2.1: Identification of potential Natura 2000 areas in Marmara Region⁴² and listed new protected areas within the Project Area; and 1.1.2: applying the EHI and METT templates to monitor, respectively, the health of a PA's ecosystem and the effectiveness with which it is managed. Other specific interventions for strengthening the planning and management of individual PAs will include the following:

- Confirming/applying the IUCN management category and clarifying (i) the purpose(s) for which the PA has been designated under national legislation and, if appropriate, international conventions (e.g. Bonn, Ramsar, UNESCO MAB Programme, World Heritage); and (ii) governance provisions in place, with a view to promoting and strengthening the participation of stakeholders in PA planning and management as appropriate. Note that IUCN (2013) defines four types of governance (listed below) and 11 sub-types.^{Error! Bookmark not defined.}
 - **Type A. Governance by government:** Federal or national ministry/agency in charge; sub-national ministry/ agency in charge (e.g. regional, provincial, municipal level); government-delegated management (e.g. NGO).
 - **Type B. Shared governance:** Trans-boundary governance (formal and informal arrangements between two or more countries); collaborative governance (through various ways in which diverse actors and institutions work together); joint governance (pluralist board or other multi-party governing body).

⁴⁰Designated mainly for recreational activities and protection of landscape diversity.

⁴¹Designated strictly for conservation and scientific research: public access is prohibited.

• ⁴² The Marmara Region (Turkish: Marmara Bölgesi) is a geographical region of Turkey. Located in northwestern Turkey, it is bordered by Greece and the Aegean Sea to the west, Bulgaria and the Black Sea to the north, the Black Sea Region to the east, and the Aegean Region to the south. At the center of the region is the Sea of Marmara, which gives the region its name. Among the seven geographical regions, the Marmara Region has the second-smallest area, yet the largest population; it is the most densely populated region in the country. There is 11 provinces; Balıkesir, Bilecik, Bursa, Canakkale, Edirne, Istanbul, Kırklareli, Kocaeli, Sakarya, Tekirdag, Yalova . Project area is in the same region.

⁴² The term 'coverage' is used in the sense of representativeness of Kazdağları Region's genetic, species and ecosystem diversity.

- **Type C. Private governance:** Conserved areas established and run by individual landowners; non-profit organisations (e.g. NGOs, universities) and for-profit organisations (e.g. corporate landowners).
 - **Type D. Governance by Local peoples and local communities:** Indigenous peoples' conserved areas and territories - established and run by Indigenous peoples;⁴³ community conserved areas – established and run by local communities.
- Management planning will involve consultative, consensus building processes that engage stakeholders in elaborating the future of a PA and an action plan of agreed objectives, inputs, and outputs to achieve the vision. Implementation of management plan actions will be monitored regularly and report annually. This is in addition to the adoption of the EHI and METT, the results of which will be held in the GIS/database system developed under **Output 1.1.4**
 - Biodiversity data will be sourced from readily accessible sources including Noah's Ark, which monitors Turkey's biodiversity; findings from the analysis in appropriate cases; and reviews of the literature and other sources, including previous management plans and historic records held by GDF, museums and research institutions in warranted cases (e.g. threatened endemic species or landscapes). Note that the project is not designed to undertake extensive/intensive biodiversity and socio-economic field surveys but rapid assessments may be prioritised for: potential new PAs lacking data on ecosystem and species diversity; corridors and stepping stones proposed to re-establish connectivity between forest complexes and fragments; and (critically) endangered biodiversity of unknown distribution and status within a PA or CA³⁷.
 - PA management plans will comprise at least: a vision accompanied by measures towards its achievement; budget for recurrent activities; budget for management interventions requiring additional investments with potential sources of funds identified, using policy guidance on resourcing PAs (Output 1.1.1c); and EHI and METT templates applied, with baselines scored and entered the National PAs Monitoring Framework.

Indicative activities under Output 1.2.2.

- a) **Confirm selection of the four target PAs in the Project Area** (listed above) **and select representative examples of other conservation categories** (e.g. Seed Stands, Gene Conservation Forests, Forest Reserves and Protection Forests) for planning and management strengthening purposes. Incorporate examples, preferably from the Kazdağlari Region but including other PA designations and conservation categories not represented in the Project Area, to ensure that the complete complement of categories is addressed⁴⁴.
- b) **Classify the designations of the selected PAs** according to the IUCN PA management categories system²³ **and assign a governance type** appropriate for each national designation using the IUCN classification of governance types and sub-types for guidance;^{Error! Bookmark not defined.} and refine the governance model according to the national and local context as appropriate. Governance models for a given PA designation type will be based on Turkish context and experience, enhanced by 'know-how' gained from other countries.
- c) Knowing the designated purpose of a PA, its IUCN management category and the type of governance envisaged will define the framework for developing the management plan (or revising an existing plan). There are two further considerations to address to the extent applicable:
 - **Consider new guidance on the cultural and spiritual significance of nature** (IUCN 2021),⁴⁵ which has yet to be considered in the planning and management of PAs in a socially just, practical and systematic manner across the global PAs network. The guidance offers six principles that can be applied to stakeholders for whom the cultural

⁴³ This sub-type is not relevant as indigenous peoples are not recognized in Turkey.

⁴⁴ Note that not all categories of conserved area meet the global definition of a PA but some may meet OECM criteria, as elaborated in paragraph **Error! Reference source not found.**

⁴⁵ Verschuuren B., Mallarach J-M., Bernbaum, E., Spoon J., Brown S., Borde R., Brown J., Calamia M., Mitchell N., Infield M and Lee E. (2021). *Cultural and spiritual significance of nature. Guidance for protected and conserved area governance and management*. Best Practice Protected Area Guidelines Series No. 32, Gland, Switzerland: IUCN. XVI + 88pp.

and spiritual significance of nature has a role to play: (i) respect diversity; (ii) build diverse networks; (iii) ensure safety and inclusivity; (iv) account for change; (v) recognise rights and responsibilities; and (vi) recognise nature-culture linkages.

- **In the case of ‘conserved areas’** that do not meet the internationally accepted IUCN definition of a protected area,²³ including those of a sacred or spiritual nature, **some may qualify as an “other effective area-based conservation measures” (OECM)**, in accordance with its definition adopted by the CBD COP14 in 2018:

*A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.*⁴⁶

The distinguishing criterion between the two types of conserved area is that a PA has a primary conservation objective, whereas an OECM delivers effective conservation of biodiversity regardless of its objectives. Three types of OECM are recognised: *primary conservation*, in the case of an area that meets the IUCN definition of a PA but which the governance authority does not want to be designated as such; *secondary conservation*, such as watershed protection policies and management for public water supplies that may also result in long-term protection of biodiversity; and *ancillary conservation* where *in situ* conservation is a by-product of management, such as historic wreck sites and war graves. Guidance on OECM provided by IUCN (2019)⁴⁷ includes a screening tool.

- d) **Establish or strengthen the governance of the PA**, putting in place structures and mechanisms appropriate to the governance type, sub-type and enhancements of the model resolved above.^{Error! Bookmark not defined.} Acquiring technical know-how and experience, as necessary, and establishing a supportive environment among the people living in and around PAs are key components of their effective management. Thus, management committees, supported by technical advisory panels and influenced by consensus-building stakeholder forums are common mechanisms incorporated within the governance of many PAs around the world to strengthen their planning and management; and these or similar mechanisms should be considered a minimum requirement for most IUCN Category 1b, II, IV, V and VI PAs.

It may be appropriate for this activity to be incorporated within the management planning process below^{Error! Bookmark not defined.} to benefit from the consultative process if new participatory structures are to be set up, especially in the case of new or recently designated PAs lacking such governance provisions.

- e) **Design and implement an 18-month participatory management planning process for each target PA**,⁴⁸ with clear deliverables and timelines, including consideration of the following:
- Respective 5-year management plans drafted within 12 months, followed by three months of final public consultation and a further three months to finalise (18 months in total).
 - Management Plan to comprise a vision, description of the site with biodiversity, cultural and socio-economic features highlighted, objectives towards realising the vision over a 5-year period, inputs, outputs, and accompanying annexes that include: 1-year Action

⁴⁶ CBD (2018). *Protected areas and other effective area-based conservation measures* (Decision 14/8). <https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf>

⁴⁷ IUCN-WCPA Task Force on OECMs, (2019). *Recognising and reporting other effective area-based conservation measures*. Gland, Switzerland: IUCN.

⁴⁸ This timeframe can probably be reduced to one year or less for certain designations (e.g. Seed Stand, Gene Conservation Forest, Forest Reserve and Protection Forest) that may already have plans and few stakeholders with whom to consult and engage in planning and management).

- Plan, Additional Financing Plan and templates (with baselines completed) for monitoring implementation progress, METT and EHI.
- Management Planning Group (MPG) established for each target PA and tasked to oversee preparation of the Management Plan. Membership limited to 12 persons (ratio of up to 4-6 women and 6-8 men where possible) representing PA, relevant provincial and/or district government agencies, municipalities, and communities.
- f) **Extend Activities (c) and (d) to a representative sample of other conserved areas in the Project Area that meet OECM criteria.** This will provide government with a case study that will inform its policies with regard to complementing its PAs network by taking into account other *conserved areas* that potentially can be registered in the World Database on OECMs;⁴⁹ and included in government's reporting to the CBD.

Component 2: Integrating biodiversity conservation and sustainable management of forests and agricultural areas across Kazdağlari's landscapes.

50. Component 2 concerns the integration of biodiversity conservation with sustainable management of production systems outside PAs. It is focused on the immediate practical demonstration of improving forest management and restoring peripheral degraded forest and agricultural production systems in an integrated manner at landscape scales, while also developing a strategic vision for Kazdağlari Region in anticipation of successful outputs being replicated and scaled up across the Region. Hence, Outcome 2.1 addresses the strategic vision at regional scale; and Outcomes 2.2 and 2.3, respectively, focus on the integration of effective forest management and sustainably managed production systems at landscape scales. Note that Component 2 is supported by a capacity development programme under **Output 3.1.2** of Component 3.

Outcome 2.1: Kazdağlari Region managed in an integrated, holistic manner to safeguard its unique biodiversity, enhance functioning of its ecosystems and ensure provisioning of goods and services for its social and economic prosperity.

51. Outcome 2.1 is the realization of a vision for Kazdağlari Region's important biodiversity to be conserved, ecosystems sustainably managed to deliver goods and services, and degraded lands restored over the long-term (20 years). It will also promote alternative income generation activities for the region with support of the project. The vision, an Action Plan for its delivery, and stakeholder coordination mechanism(s) for its implementation will need to be in place at least six months prior to the end of the project in order to incorporate it into the project's Exit Strategy and the annual work plans of the respective government implementing partners. Conserving biodiversity hotspots and ecological connectivity across Kazdağlari's landscapes will underpin the Regional Vision: based on mainstreaming the landscape approach demonstrated in the Project Area and lessons learned under **the project activities**; application of recent IUCN WCPA guidelines on ecological networks and corridors;⁵⁰ and other regional examples from around the world **Additional Annex 2**.⁵¹

52. Notably, the Regional Vision will be informed by Natura 2000 sites identified in the Kazdağlari Region (**Output 2.1.1**), for which appropriate conservation measures will be proposed. The Vision will also include the nomination of an international certification programs for the Kazdağlari Region. Critical for the development and implementation of the Vision will be the establishment of a Regional Stakeholder Working Group that represents the full range of key stakeholders, with full support from

⁴⁹ <https://www.protectedplanet.net/en/thematic-areas/oecms?tab=OECMs>. [This database complements the World Database on Protected Areas.]

⁵⁰ Hilty, J., Worboys, G.L., Keeley, A., Woodley, S. *et al.* (2020). *Guidelines for conserving connectivity through ecological networks and corridors*. Best Practice Protected Area Guidelines Series No. 30. Gland, Switzerland: IUCN.

⁵¹ MEI (2009). *Central Forest Spine I: Master Plan for ecological linkages*. Regional Planning Division, Department of Town and Country Planning, Peninsular Malaysia. [Accessible from: https://conservationcorridor.org/cpb/Peninsular_Malaysia_Regional_Planning_Division_2009.pdf]

the governorships of the respective provinces.), facilitated by the project, to drive forward the elaboration of the Vision and identification of priority actions.

Output 2.1.1 Regional Vision and 5-year Action Plan to conserve Kazdağlari's biodiversity, sustainably manage its ecosystem goods and services and restore its degraded lands, generated by a Regional Forum and operational.

53. Output 2.1.1 will be a high-level biodiversity policy framework for the Kazdağlari Region, supported by the Kazdaglari Working Group (KWG), for embedding into provincial planning processes. The Kazdaglari Working Group will comprise provincial, district, municipality and sector agency representatives from government, communities, NGOs and private enterprises. The Output will comprise a Regional Vision, with proposed policy measures and Action Plan.

54. The design of the Regional Vision for planning and managing landscapes across forest districts will be holistic, integrated and participatory, based on the following principles demonstrated in the Project Area:

55. For landscape management to be sustainable, ecosystem conservation ('wise use') and restoration, enforcement of forestry and wildlife laws, and enhancement of local livelihoods must all be addressed because they are interdependent.

- Multi-sector working towards a consensual vision for the region is fundamental.
- While most of the region's forest resources fall under MAF's mandate, robust collaboration and partner-ships with other sectors, notably mining, energy and tourism, are crucial for applying an ILM approach.

Indicative activities under Output 2.1.1

- a) **Provide technical expertise to design and facilitate a participatory process to deliver a consensual Regional Vision for safeguarding Kazdağlari's biodiversity**, having scoped its jurisdiction, diversity and extent of natural ecosystems and production systems, biodiversity hot spots, potential Natura 2000 sites (identified in **Output 2.1.1**), stakeholders and coordinating mechanisms.
- b) **Design and implement a clearly defined participatory process and appropriate consultative coordinating and decision-making mechanisms** to engage multiple stakeholders in the development of the Regional Vision. This participatory process, through consensus building, will deliver:
 - A common Vision for the Kazdağlari Region, based on a 20-year projection, that has majority support.⁵²
 - An Action Plan to deliver the vision.
- c) **Strengthen and where necessary establish collaborating mechanisms**, including cooperatives and partnerships, between government agencies, private enterprises, non-government organisations and communities at Forest District levels within Çanakkale and Balikesir Regional Forest Directorates.
- d) **Establish a Kazdaglari Working Group of up to 12 members**, including officers seconded part-time from key relevant sectors (nature conservation, forestry, agriculture, inland waters and fisheries, tourism, energy, mining), to oversee drafting of the Regional Vision, based on collating, integrating and refining inputs from Forest Sub-Districts^(Error! Reference source not found.). The respective offices of the Provincial Governors will also be represented.
- e) **Consult with Kazdaglari Working Group on the Regional Vision**, amend as appropriate (several iterations of consultation with the KWG and refinement of the draft Vision are anticipated) and, if appropriate, follow-up with a formal public consultation across the Region.

⁵² In the interests of transparency, which is paramount, any significant dissenting views on the vision will be acknowledged and documented.

- f) **Finalise the Kazdağlari Regional Vision by the onset of the project's final year**, having accommodated findings from the baseline survey results (**Output 2.1.1**) scheduled for completion by project mid-term.
- g) **Prepare an Action Plan for post-project implementation of the Vision**, including identification of lead partners and resources. This will constitute a significant part of the project's Exit Strategy.

Output 2.1.2 *All or some of Project Area, including its protected areas, assessed and nominated for designation as an international certification programs, as part of the vision for Kazdağlari Region.*

In the case of Kazdağlari, part of the Regional Vision will focus on defining the certificate program, its management approach and boundriess , in alignment with criteria set out in relevant guidelines

Indicative activities under Output 2.1.2

56. Partners and other stakeholders working on the Kazdağlari Regional Vision will also be involved in the planning and nomination of the Kazdağlari certification program, using the same structures and stakeholder engagement mechanisms, notably: Kazdağlari Working Group (KWG). Key activities include the following, all of which will be subject to consultation with stakeholders, using the processes and mechanisms established under the previous **Output 2.1.1c**:

- a) **Work for decision of any international certificate program (s)** in accordance with *related guidelines*. This will also include corridors, stepping stones and potentially any other means of enhancing connectivity between forest complexes and between forest fragments.
- b) **Determine an appropriate governance structure for the decided certificate program** comprising at least an executive body (Management Committee), which is responsible for managing the site with respect to its conservation, sustainable development and logistical support in accordance the *Statutory Framework*, and an advisory body. Membership of the executive body should be gender sensitive, limited to 15 persons and comprise senior representatives from the key government partner agencies, a representative of the municipality mayors, two independent representatives (female and male) and the chairperson of the advisory body. The governor structure will be drafted during the implementation process of the project.
- c) **Complete and submit the drafted Nomination Form for certification program to MAF**, with the Management Policy.

Outcome 2.2: **Improved integration and sustainable landscape-scale management of forest, agricultural and other production systems.**

57. The focus of Outcome 2.2 is sustainable integrated landscape-scale management (ILM) of production systems within the Project Area to buffer, maintain and restore the ecological inter-connectivity between PAs; and to restore and enhance the productivity of landscapes with respect to their delivery of ecosystem goods and services. Thus, the ILM approach will contribute directly to enhancing the conservation of biodiversity, especially hotspots, and reversing land degradation processes in alignment with Turkey's commitments to UNCCD, while also benefiting local communities through improvements in the security (sustainability) and flow of ecosystem goods and services.

58. It is anticipated that a system for measurement, reporting and verification (MRV) of forest-based mitigation and sequestration will be developed in Turkey under a UNDP/GEF project, *Integrated approach to management of forests in Turkey, with demonstration in high conservation value forests in*

the Mediterranean region. This system will be adopted and applied by this project to collect relevant information for integrating carbon sequestration into forest management planning. Assessment and valuation of forest ecosystem services in forests outside PAs will help to ensure that ecosystem services become integral to sustainable management of the forests.

Output 2.2.1 ***National LDN targets supported through delivery of a Restoration Strategy for degraded forests and unsustainably managed agricultural landscapes in Kazdağlari Project Area.***

59. A draft *Strategy for the Restoration and Sustainable Use of Forest Landscapes* is provided in Section 4 of **Additional Annex 3**, summary details of which are presented here and in the indicative activities below. This Strategy may be further refined during project inception for subsequent adoption by the Project Steering Committee.

- Policy guidance will be provided by Forest Management Unit (FMU)-level Sustainable Forest Management Committees (SFMCs) set up in accordance with GDF's *Criteria and Indicators of Sustainable Forest Management Implementation Guide* (2019). Project activities related to the restoration and sustainable use of forest/agricultural landscapes will be coordinated, monitored and assessed by a Multi-tasked Restoration Team (MRT) that will report to these committees in a transparent and participatory way.
- Existing, Forest Management Plans (FMPs) will be superseded by Integrated Functional Forest Management Plans (IFFMPs) that incorporate an ILM approach and align with the SFM Criteria & Indicators (C&I) guidelines, including monitoring and reporting on indicators. Thus, IFFMPs will be piloted in 2 FMUs (ie forest sub-districts) using GEF funds, one in Bayramiç and one in Kalkım Forest District (directorates). The results of comprehensive baseline surveys will support to draft these two plans. The pilots will focus on landscapes immediately peripheral to PAs (notably Kazdağı National Park, 21,463 ha, and Kazdağı Goknari Nature Reserve, 254 ha) for subsequent planning of buffer zones, ecological corridors and stepping stones. Thereafter, the remaining 19 FMPs within the Project Area, excluding those for Edremit Forest District, will be upgraded to IFFMPs using government co-financing. The total forest area of these planned 21 IFFMPs is 137,122 ha, within which 5,455 ha of degraded forest (i.e. comprising 11-40%, 1-10% and 0% canopy cover categories) have been identified for forest restoration and 500 ha has yet to be identified for restoration of NWFPs. Interventions will include:
 - Incorporation of biodiversity monitoring and protection measures into all forest management and operations.
 - Improvement in silvicultural techniques, such as extending rotation periods and maintenance intervals to increase carbon stocks (sequestration) in production forests; and restoration to increase forest cover by at least 5%.
- Forests totalling 500 ha across all five districts in the Project Area will also be restored for improving NWFPs production, including mushrooms, medicinal and aromatic plants, and plantations for beekeeping. Precise locations will be identified with the support of local communities during project inception.
- Challenges to be addressed include: developing multi-purpose survey methods that go beyond forest inventories; incorporating biodiversity within IFFMPs; limited restoration technical capacity among foresters and their private contractors; minimising impacts of felling, skidding and removal of wood products; optimising fire-breaks and road access to fires in order to minimise forest fragmentation; and participatory processes and platforms to foster informed decisions that benefit local communities.
- ORBIS is a Forest Information System developed by GDF and managed centrally. It has 41 modules of spatial and tabular data that include layers for forest stands, pastures, reforestation,

meteorology, cadastre borders, ecological zones, forest fires, PAs and archaeological areas. However, it has no connectivity with other databases or geospatial systems, such as Noah's Ark.

60. Given the limited technical capacity of Turkey's forestry sector in designing and implementing ecological restoration projects, as opposed to rehabilitation, regeneration and afforestation with which this sector is more familiar in the context of landscape conservation,⁵³ the following guidance and opportunities merit attention with respect to supporting the capacity development planned under Component 3:

- IUCN has convened a Science Task Force to inform the UN Decade on Ecosystem Restoration on what constitutes high quality ecosystem restoration,⁵⁴ launched at its World Conservation Congress, September 2021.
- Other key guidance on restoration includes IUCN's Commission on Ecosystems, International Tropical Timber Organization⁵⁵, Society for Ecological Restoration (SER)⁵⁶ and Turkey's Nature Conservation Centre (DKM).⁵⁷
- Note that SER is currently the only provider of a certification program for restoration practitioners [<https://www.ser.org/page/CERPApplications>]. It also has a conference library of over 890 recorded presentations [<https://www.ser-rrc.org/resource-database/>]; and has recently launched: Principles for Ecosystem Restoration to Guide the United Nations Decade 2021-2030.⁵⁸

Indicative activities under Output 2.2.1

- Convene a workshop for SFMCs and all interested parties to review the national set of SFM Criteria & Indicators (C&I)** and agree to the adoption of a subset under Criterion 4 (Forest Biodiversity), enriched by including specific, measurable indicators relevant to measuring changes in biodiversity status in forest production landscapes. This may require an iterative process of gaining consensus and submitting to the relevant decision makers for approval.⁵⁹
- Establish a Multi-tasked Restoration Team (MRT)**, comprising management planning, silviculture and biodiversity experts from central and local forestry units, and two representatives (gender balanced) from the Forest District Forum^(c) to guide, coordinate, monitor and report on the implementation of this Output. Team members will be supported through a training-of-trainers program (**Output 3.1.2**). MRT will also oversee procurement and supervision of a restoration expert, whose key responsibilities will include:
 - Preparation or contribute to preparation of related Tender Technical Terms and Conditions (TTTCs).
 - Preparation of a handbook, showcasing this FLR initiative and including guidance and best practices.
 - Oversight and direction of all restoration activities in the Project Area (i.e. Activity 2.3.1j).

⁵³ Whereas *ecological restoration* is about returning an ecosystem to a former natural condition, *rehabilitation* implies putting the landscape to a new or altered use to serve a particular human purpose. *Landscape restoration* within the forestry sector is more broadly defined and may include rehabilitation, for example, and other activities to reverse forest degradation.

⁵⁴ <https://www.iucn.org/news/nature-based-solutions/202106/what-high-quality-ecosystem-restoration>

⁵⁵ ITTO (2005). Restoring forest landscapes: an introduction to the art and science of forest landscape restoration. *ITTO Technical Series No. 23*. 127 pp.

⁵⁶ Gann G.D, et al. (2019). International principles and standards for the practice of ecological restoration. Second edition. *Restoration Ecology* 27(S1): S1–S46.

⁵⁷ Zeydanlı, U. , Özütl, D. (editors) 2020. *Integrating Biodiversity into Forestry – Planner's Guide*. Nature Conservation Centre, Ankara, 173 pp.

⁵⁸ https://cdn.ymaws.com/www.ser.org/resource/resmgr/publications/principles_for_ecosystem_res.pdf

⁵⁹ A High-Level Advisory Board, representative of key ministries, was anticipated to approve of the likes of SFM reports but it was never established by the National Forest Program of Turkey, which is about to expire – hence the currently uncertainty about the approval mechanism.

- Drafting of necessary amendments to Communique to include this new restoration concept into the practice of silviculture plans and projects.
- c) **Define and apply FMU-level criteria and indicators** in accordance with the SFM C&I Implementation Guide. One or more workshops will be convened by the two target FMUs in the Project Area to enable SFMCs to determine which FMU-level C&I sub-indicators and their metrics to apply and refine for the planned inventories, all of which will be facilitated by the PMU.
 - d) **Undertake a comprehensive inventory of biodiversity throughout the forest estate** in the Project Area (Output 1.2.1b)⁶⁰ from early onset of the project. It should be designed to be completed within one year and inform restoration work and ILM in IFFMPs, as well as, ecological corridor and steppingstone planning.
 - e) **Modify FEMS software**⁶¹ and the application developed during the PPG for this GEF-7 project to support the above (d) field inventory, planning and implementation work. FEMS will be used for planning silvicultural treatments, based on the provision of growth models and volume tables of the relevant local tree species. A team under the lead of a national consultant will carry out a study to finalize the required basic data. The mapping App designed for this GEF-7 project⁶² will be used and further developed as necessary to inform and monitor the sites selected for restoration.
 - f) **Design a strategy for reduced impact logging (RIL)** based on biodiversity survey findings and available remote sensing data. Assess current status of existing transport structures, such as haul and feeder roads, skid trails and other access roads including fire strips; design a strategic plan for the entire Project Area, with tactical and operational actions to reduce RIL incorporated in pilot FMUs and associated IFFMPs; and articulate a RIL policy to underpin the strategy. Refer to **Additional Annex 3** for more details.
 - g) In cooperation with the ORKOOP, harvesting workers will be trained in harvesting (felling, bucking, winching, yarding etc) and transportation methods and in work safety.
 - h) In cooperation with Chamber of Forest Engineers (OMO), carrying out activities related to forestry and raising the awareness of practitioners
 - i) **Assess the effectiveness of current prevention structures**, such as fire strips and security roads, based on the last 10 years of data; and develop a fire prevention strategy that maximises the likelihood of fires being contained, while minimising the impact of fire prevention structures on forest biodiversity fragmentation. The spatial location, length and width of fire strips and security roads will be optimized and mapped in the forest fire management module that will be integrated with the IFFMPs.
 - j) **Prepare IFFMPs for two forest management sub-districts**, one in Bayramiç and another in Kalkim forest districts, using necessary software tools and technologies provided by GDF. Replicate this ILM approach for a further 19 FMPs: upgrading them to IFFMPs by incorporating modules on biodiversity, forest fire management, pest and diseases, carbon sequestration, ecological corridors, ecotourism and NWFPs as piloted by the UNDP GEF Mediterranean project.
 - k) **Restore at least 5,500 ha of degraded forests to their former natural** condition as far as possible, using old pictures and forest maps to confirm original forest structures. To date, restoration sites totalling 5,505 ha have been tentatively identified and classified into three types: 1,912.933 ha of broken canopy (11-40% cover), 2,934.321 ha of degraded forest (1-10% canopy cover) and 657.354 ha of unstocked forest land (zero canopy) as generated by the project's Earth Engine App. Interventions may include: restoration of forest stands with a canopy cover less than 10%; reforestation of highly degraded plots (forest land with

⁶⁰ GDF will contract Activity (d) to a competent NGO to survey biodiversity throughout the Project Area, except for PAs under the jurisdiction of GDNCNP. In practice, this Activity 2.3.1d and Activity 1.2.1b will be undertaken by the same contractor using the same methodology to ensure consistency across the entire Project Area (184,297 ha). Further details of the method are provided under Activity 1.2.1b in Additional Annex 2.

⁶¹ FEMS is an open-source Decision Support System for SFM. This software was developed by Yale University and University of Washington for the GEF-5 MEDF project: *Integrated approach to management of forests, with demonstration in high conservation value forests in the Mediterranean region*.

⁶² <https://projectgeffao.users.earthengine.app/view/kazdaglari-app>

virtually no trees); pasture improvement; erosion control along the upper borders of steep slopes with forests that diminish with elevation; and agroforestry in agricultural land to enhance biodiversity.

- 1) **Develop ORBIS as appropriate to ensure compatibility with other GIS platforms**, such as those for PAs, KBAs and Noah's Ark, providing necessary hardware and software components. The possibility of using block chain technologies⁶³ will be researched and recommendations reported.

Note: Relevant capacity development to support the above activities will be provided under **Output 3.1.2**, including: training and study tours for the MRT; training and certification in FLR for private forest officers (PFOs); training in more sustainable harvesting and transportation methods for forest wood; and training of silvicultural experts in variable retention harvesting (VRH).

Output 2.2.2 Improved livelihood opportunities piloted.

61. Support to improve local livelihoods will be integrated alongside other interventions in the Project Area, focusing on villages within forest catchments under restoration to ensure a holistic approach. Catchment and forest sub-district boundaries tend to complement each other: thus, for administrative purposes it is simplest to target villages according to their respective forest sub-district, while being mindful of the catchment context.

62. There are 83 settlements with mukhtars distributed throughout the Project Area, of which 78 are forest and 8 are non-forest villages (2 are unknown). Over 30 of these settlements are located in the two forest districts (Bayramiç and Kalkım) targeted for much of the restoration under **Output 2.2.1**. The total population in the Project Area is about 99,000 people, with 15% of settlements having less than 100 and 75% less than 500 persons.

63. There has been minimal opportunity to engage directly with any of these villages in the field due to the COVID-19 pandemic. Instead, community surveys were undertaken by interviewing mukhtars from all but one settlement by telephone; and 135 households were surveyed using the same method. Results are reported in **Additional Annex 4**, from which the key problems facing communities have been identified:

- Infrastructure problems, raised by 54 communities, include: road-related issues were most mentioned (65.33% of communities), largely due to a lack of maintenance, roads being inadequate or sometimes absent; and sewage problems (32%), as there is no sewage system in most settlements or effluents discharged from systems are polluting rivers and open areas.
- Lack of internet or internet service-related issues were mentioned by 25% of communities; and lack of or inadequate water services were emphasized by 17 mukhtars (23% of communities).
- Problems relating to: agricultural irrigation were mentioned by 17% of communities; livelihoods and unemployment - 12%; inadequate social facilities - 11%; electricity - 7%; health service - 7%; farming and husbandry - 7%; collection of rubbish 5%; lack of interest from authorities - 5%; Kazdağı National Park - 4%; severe dust levels from mining activities - 4%; and drug abuse - 1%.

64. While many of above problems are beyond the direct scope of the project, particularly those related to infrastructure and services, they provide the context within which this project can help improve livelihoods. These problems relate to social and economic conditions, and they are reflected in the quality of life and well-being: resulting in outgoing migration from the Project Area and from further

⁶³ Blockchain technology is a system of recording information in a way that makes it difficult or impossible to change, hack, or cheat the system.

afield by many young people; and in an increasingly high proportion of elderly people within communities.

65. A key finding from the community surveys is that Edremit District, which buffers the National Park boundary along its southern boundary and where no restoration is planned by the Project, has the lowest mean household income (TL72,888 /year) of the five districts in the Project Area. Yenice District, located in north-eastern tip of the Project Area, has the highest mean household income (TL95,200/year).

66. Given the minimal consultation with communities during the PPG, participatory processes will be established at the outset of project implementation to confirm which villages would benefit most from a range of livelihood alternatives, diversifications and enhancements. Criteria proposed to prioritise support to villages include:

- Village is located in one of the two forest districts targeted for most restoration interventions under Output 2.3.1; and restoration work will be undertaken in part of its catchment, ecotourism being an exception.
- Village community, led by its Mukhtar, or members express keen interest in engaging with the Project.
- Intervention meets environmental and social sustainability criteria (to be designed by PMU) and has a high probability of being sustained post-project.
- Intervention is replicable elsewhere in the Project Area (i.e. it serves as a demonstration for upscaling).
- Interventions cover a diverse array of skills and income-generating activities aligned with village interests.

67. An overarching opportunity for any of the settlements or enclaves within them, particularly among those that are already ‘eco-oriented’, is to join the Global Ecovillage Network (GEN)⁶⁴ of over 10,000 communities across all continents and become an ecovillage, which is defined as: an intentional, traditional or urban community that is consciously designed through locally owned, participatory processes in all four areas of regeneration (social, culture, ecology and economy) to regenerate their social and natural environments. While there is no one way of being an ecovillage, there are three core practices shared by all:

- being rooted in local participatory processes;
- integrating social, cultural, economic and ecological dimensions in a whole systems approach to sustainability; and
- actively restoring and regenerating their social and natural environments.

68. There are 12 ecovillages in Turkey, three of which are located in Çanakkale Province: Garp Eco-volunteer Community, Bayramiç Yeniköy (NGO-based community promotes permaculture and other sustainable practices, as well as training capabilities) and nearby the Project Area is Dedetepe Farm where volunteers produce ‘olive oil’.⁶⁵

69. Four thematic areas of opportunity to enhance the livelihoods of communities located in the Project Area were identified and assessed during the PPG, the results of which are reported in Additional Annex 5. They are Non-Wood Forest Products (NWFPs) and handicrafts, community-based ecotourism, Good Agricultural Practice (GAP) and forest biodiversity, each of which is briefly elaborated in Additional Annex 2 and should be consulted in order to appreciate the context of the indicative activities identified below.

Indicative activities under Output 2.2.2

⁶⁴ <https://ecovillage.org>

⁶⁵ Refer to this study on the *Externalities of Ecovillages as Rural Tourism Centers of the Future: Comparison of Turkey and Some of European Countries*, accessed 03-09-2021 https://jotags.org/2021/vol9_issue2_article24.pdf.

70. Prioritization and selection of villages is ongoing for the reasons previously mentioned and will be confirmed during project inception.⁷⁶ Selection should be based primarily on complementing the project's restoration efforts, much of which will be co-financed by GDF, with improvement in livelihoods of villages located within those same catchments under the administration of the relevant forest sub-district directorates. Approximately 30 villages are located in the proximity of these restoration sites. Selected villages will be supported through NWFP, organic farming and biodiversity conservation income-generating activities.

71. In the case of community-based ecotourism, it is proposed that the juxtaposition (proximity) of villages with PAs and sites of cultural interest should determine their selection, given the experience from other parts of the world. Conceptually, it is anticipated that those 14 villages in Paşadağ and two in Altinoluk forest sub-districts located between the coast and south-east boundary of Kazdağı National Park are most strategically placed for communities to provide hospitality to those visiting the Region for its natural and/or cultural values.

72. Such types of visitor are likely to appreciate local food, accommodation and related traditions. Some of these villages (5) are non-forest settlements and the PPG socio-economic survey shows that Edremit District has the lowest average annual income at 728,88TL, hence a strong justification for project support. This hospitality focus will be expanded to the one existing and two approved ecotourism routes.

73. In order to further inform prioritization and selection of villages for project support, a matrix of the 83 settlements in the Project Area (81 of which were surveyed) will be generated that: quantifies their key socio-economic statistics; summarises their key natural and cultural heritage, cooperatives, facilities and access to services; and highlights their concerns and aspirations. This matrix can then be developed by allocating relevant income-generating activities to the respective villages through further consultations during project inception.

Generic activities

- a) **Finalise the activities matrix of 83 settlements in the Project Area**, comprising relevant statistics and features of each, alongside potential income-generating activities based on the PPG socio-economic survey (Additional Annex 4) and research findings (Additional Annex 5) and consult with the respective settlement Mukhtars to validate the findings, fill any gaps and elaborate further on potential income generation and other activities to improve local livelihoods.
- b) **Finalise selection of settlements to be targeted under this Output according to criteria**, tentatively identified as those in Bayramiç (22) and Kalkım (8) forest districts where the project will be implementing most of its forest restoration; and for community-based ecotourism, focusing on hospitality in Altinoluk (2) and Paşadağ (9) forest sub-districts of Edremit Forest District and in settlements close to existing and proposed ecotourism trails. Consult with communities and local administrations; and confirm with the Project Steering Committee.
- c) **Establish stakeholder forums for each forest district (FDSFs)** in which villages will be targeted for livelihood improvements under this Output, currently likely to be Bayramiç and Kalkım forest districts, with the addition of Edremit and Yenice specifically for community-based ecotourism. These Forest District Stakeholder Forums will be set up under the aegis of the respective regional directorates for Forest-Village Relations, which are responsible for coordinating all contributions to improve the livelihoods of forest villages in the region. Membership of up to 30 persons should include representatives from each settlement within the forest district, officers representing each forest sub-district and any other key users of the forest estate, such as the private sector (e.g. mining). The main purpose of the Forum will be to share strategies and plans for forest restoration and livelihood improvements to avoid unintended impacts, generate synergies and resolve issues (e.g. perpetual dust imposed on several villages by mining activities).

- d) **Establish a network of community-run shops in the Project Area** to improve value chains and marketing of certified farmed produce, NWFPs and local handicrafts.

Non-Wood Forest Products including handicrafts

- e) **Technically support value chains, branding and marketing** in Year 1 to:
- **undertake a holistic assessment of potential opportunities to make value chains economically equitable**, according to fair trade standards, from producer to consumer across the Project Area;
 - **work with local people and their cooperatives to demonstrate equitable value chains** for locally produced NWFPs, handicrafts and products farmed organically or GAP certified.^{(p) (q)}
 - **identify a brand and strap-line⁶⁶** that is supported by local and regional consensus, label and market produce using the brand name and relevant GAP, fair trade and other certificates.
 - strategically, from a value chain and marketing perspective, **support the establishment of a network of community-run shops across the Project Area** to increase profits by selling directly to the public.
- f) **Review cooperative and other arrangements between target villages and their respective forest districts for harvesting NWFPs**; and identify and address lessons learned from the following:
- assessment of existing protocols at forest district levels to inventory and monitor NWFPs harvests to inform their management and sustain production;
 - assessment of the equitability of value chains and mechanisms for raising the value of raw products at source by, for example, restricting collection of NWFPs to residents only;
 - and, subject to training and certification, for GDF to undertake the following:
 - pilot the introduction of contractual employment for cooperatives and their members to inventory NWFPs, monitor harvests and report illegal collection by outsiders;
 - and, under the continuing direction of GDF, to
 - delegate responsibility for in situ and ex situ conservation of NWFPs to cooperatives and their members, once trained and certified, thereby providing further local employment opportunities; and
 - prepare species-specific manuals that cover biological identification, cultivation, harvesting, post-harvesting etc.
- Providing online sales strategies trainings, as well as other trainings on NWFP sales and marketing
- g) **Promote cultivation of MAPs**, the main candidates being: stone pine (*Pinus pinea*), sage (*Salvia* sp.), mountain tea (*Sideritis* sp.), oregano (*Origanum* sp.), thyme (*Thymus* sp.), lavender (*Lavandula officinalis*) and rosemary (*Rosmarinus officinalis*).
- h) **Support cooperatives to increase the capacity of their women members to process, brand and market NWFPs and handicrafts** through training opportunities under Output 3.1.2 and linking up with community-run shops.^(d)
- i) **Promote NWFPs through certification**, which may include their origins, quality, fair trading, environmental impact and other standards. Various schemes are listed and briefly described in **Additional Annex 5**, including the ISO 9000 family of standards that addresses various aspects of quality management, and the ISO 22000 family that addresses food safety management along the entire supply chain.
- j) Provide facilities and other equipment to set up Honey Production Forests in Kalkım Handere, Bayramıç Karaköy - Yeşilköy and Mekkare

⁶⁶ For example: *Kazdağları Mountains – where we care for its soil, water and air and nurture its forests.*

Ecotourism

- k) **Technically support development of an Ecotourism Strategy and Action Plan for the Project Area** in Year 1 and oversee its implementation in subsequent years, based on the following scope:
- **Review and implement planned ecotourism routes** taking advantage of existing walking and bicycle paths such as those in Kalkim Forest District (43.496 km walking path) and Bayramic Forest District (46,291 km of bicycle paths) in Çanakkale Regional Directorate of Forestry.
 - **Review ongoing and planned ecotourism initiatives within the Project Area**, key players being the nature conservation, forestry, (possibly agricultural), cultural and tourism sectors within government and businesses.
 - **Facilitate a workshop with representatives from the 32 settlements that opined the potential for ecotourism in their community** (refer to **Additional Annex 4**). Precede the workshop by a more detailed questionnaire survey and critical assessment of interests expressed. Establish 2 focal persons (gender balanced) in each participating settlement.
 - **Facilitate a workshop, preceded by a detailed questionnaire survey and critical assessment, with the 21 communities who emphasised their need and right to access to Kazdağı National Park** to celebrate 720-year-old cultural practices at certain times of the year, including how best to address ongoing access problems. (refer to **Additional Annex 4**).
 - **Consult with GMKA, TKDK and other relevant regional agencies** (e.g. Provincial Directorates of Culture and Tourism, Chambers of Commerce) in developing the Strategy, identify activities and other elements of the Strategy that they can support through grants, training, technical expertise and other means, and establish partnerships with them. Note: ecotourism is under the Division of Non-Wood Forest Products and Services in Çanakkale and Balıkesir Forest Regional Directorates, with whom partnerships will be established.
 - **Establish an Ecotourism Advisory Panel** of up to 15 members, comprising representatives from respective Regional Forest Directorates' Division of NWFPs and Services (2), each Forest District Working Group involved in ecotourism (5), an ecotourism community-run initiative from within each forest district (5), academic specialising in ecotourism (1), GMKA (1) and TKDK (1). Their role will be to advise on development and implementation of the Strategy, ensuring adoption of ecotourism principles and standards.
 - **Target a Knowledge Attitude Practice (KAP) survey** at government agencies, businesses, communities and visitors having vested tourism interests in the Project Area to assess: their knowledge of its natural and cultural heritage, local history and traditions; their attitudes and expectations with respect to the local natural and cultural environment; and their practices in terms of their demonstrated responsibility towards people, culture and nature. Survey results will inform the development of the Strategy, marketing of ecotourism and training of government, business and community members who service tourism. The baseline survey will be repeated at the end of year 4 to monitor changes and learn lessons from them. Note that this survey will be undertaken as part of wider KAP survey for the Communications Strategy in (**Output 3.1.1**).
 - **Focus the Strategy on community-based ecotourism, comprising a network of local hospitality and activity services** (simple, hygienic accommodation for independent individuals and families, cafes and restaurants with local produce) in close proximity (preferably walking or cycling distance) to PAs and other natural, cultural and scenic sites or nearby to existing/planned cycling/walking routes. Activities may include hiking, mountain biking, outdoor photography and painting, watching wildlife,

- viewing plants, climbing, visiting historic and cultural sites, experiencing local cuisine, handicrafts, music, dancing and other traditions and practices (e.g. farming). Training needs for local hospitality, guides and instructors will be identified.
- Should co-financing funds be available, it will be highly desirable for this focus to include the establishment of ecolodges in one or more target villages to demonstrate sustainable building and energy generation technologies. This will be particularly appropriate for communities concerned about some of their traditional values and hence reluctance to pursue home-stay/bed-and-breakfast arrangements. Note that ecolodges do not need to be newly built, there may be opportunities to convert existing buildings into such facilities.
 - **Assess the needs and opportunities for establishing community-based ecotourism cooperatives** at village or village cluster levels **and partnerships** with government agencies and the private sector.
 - **Ensure that the Strategy includes provisions of Environmental Impact Assessment (EIA)** of project and related interventions, **certification** of ecotourism services and **ecolabelling** of ecotourism products.
- l) **Implement the Kazdağları Ecotourism Strategy**, beginning in Year 2 and having drawn up a costed Action Plan that will be reviewed and updated annually.
- **Ensure that relevant elements of the Strategy and Action Plan are incorporated and integrated into PA management plans and IFFMPs.** This will require close coordination with Output 2.2.1.
 - **Enable communities to match project investments with additional co-financing** through government grants and other initiatives.
- m) **Prepare a pictorial pocket guide to the Project Area**, featuring its nature, historic sites, cultural traditions and walking and mountain biking routes; and profiling the villages, highlighting their historic and cultural characteristics and visitor facilities. This should also be available via MAF's website.
- n) **Establish links with one of more of the three Global Ecovillage Network initiatives in Çanakkale**,^{Error! Reference source not found.} or others further afield in Turkey; organise study tours for communities in the Project Area having common interests; and support communities wishing to join this Network.

Good Agricultural Practice and organic farming

- o) **Technically support preparation of a GAP Strategy for the Project Area** in Year 1 and oversee its implementation in subsequent years.
- p) **Show-case good agricultural practices, including organic farming**, having held initial workshops with farming representatives from cooperatives in the Project Area, including 18 organic farmers identified during the PPG (refer to GAP in **Additional Annex 2**), and from the FDSFs^(c) to understand their farming practices and livelihoods, and identify their challenges and opportunities. The GAP Strategy will include:
- agronomy (crops for food, fodder and fibre), horticulture (fruits, nuts, vegetables, mushrooms, herbs, spices, flowers), animal husbandry (breeding and raising livestock to provide food - dairy and meat, draught power and manure for crops), and beekeeping (honey, wax);
 - identifying necessary equipment and its sourcing, such as bee colonies and hives (available from ORKOY), refrigeration, drying ovens for fruit and herbs, jam-making equipment and presses for juice extraction;
 - integrated pest management (IPM);⁶⁷

⁶⁷ IPM is an **ecosystem-based strategy** that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget

- exploring partnerships with GlobalG.A.P., and its National Technical Working Group in Turkey, and opportunities for training and certification in GAP, organic farming and ‘fair trade’; [Note that training will be incorporated into **Output 3.1.2.**]
 - branding to create local, authentic brands and marketing to target niche and premium markets;
 - review existing cooperatives to identify how they can be potentially strengthened and consolidated; and
 - introduce agrotourism to the farming community as an adjunct to the above Ecotourism Strategy activity.^(k)
- q) **Improve value chains, branding and market access for organically farmed products** identified in **Additional Annex 2** (listed in GAP section), targeted at increasing the capacity of women to process and market goods through training opportunities under **Output 3.1.2:** [Note: this activity will be facilitated by the same value chain/branding/marketing expert.^(e)]
- r) **Develop a Code of Good Agricultural Practice and document good practice by the project**, including provisions for farmers to become certified in GAP and organic farming. Refer to: DEFRA (2009) for a good example of a comprehensive GAP code, providing the regulatory framework, scientific understanding and measures to be applied;⁶⁸ and to DEFRA (2018) for more specific guidance on reducing ammonia emissions from agriculture, especially from the storage and application of organic manure.⁶⁹

Forest biodiversity protection and nature training

74. The conservation of forest ecosystems and their diversity of species is supported and enhanced by several of the aforementioned activities under this Output, notably: (□ cultivation of MAPs to reduce pressures on wild plants; (k) raised awareness of Kazdağları’s globally important biodiversity through various ecotourism initiatives including (m) a pictorial guidebook; and (p) the application of *good agricultural practice* and (r) adoption of a GAP Code to compliment forest restoration efforts in two target forest districts. Other specific measures to protect/enhance forest biodiversity will include:

- s) **adaptation of Variable Harvest Retention System (VHRS)** to maintain structural diversity in harvest stands;
- t) **use of RIL systems particularly for harvesting operations in fragile forest habitats;** and
- u) **creating/maintaining corridors of ecological connectivity between agricultural land and forested areas** (e.g. hedgerows and riparian corridors).
- v) **Supporting forest information and training activities.** Equipping the existing forest building with information and training equipment and materials. The renovation of the existing building (in Bayramic, on the way of Dalaksu-Karakoy) will be completed by the ministry within the scope of co-financing. Necessary information and training materials will be prepared with the project.
- w) **Establish an outdoor training facilities in Ezine nursery.** Supporting the cultivation of species that will improving the outdoor education especially for primary and secondary school students, and informing of students on plant species

75. Many other relevant interventions will involve awareness raising, training and technical outreach that are focused on village communities, for which provisions are outlined under **Output 3.1.2.**

organisms, and the environment. Pests are organisms that damage or interfere with desirable plants in our fields, orchards, landscapes, or wildlands, or damage homes or other structures, or impact human or animal health. Pests may transmit disease or may be just a nuisance. A pest can be a plant (weed), vertebrate, invertebrate, nematode, pathogen (bacteria, virus, or fungus) that causes disease, or other unwanted organism that may harm water quality, animal life, or other parts of the ecosystem. [<https://www2.ipm.ucanr.edu/what-is-IPM/?src=redirect2refresh>]

⁶⁸ DEFRA (2009). *Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for farmers, growers and land managers*. This code has been written by technical specialists from Department for Environment, Food & Rural Affairs and Natural England, in association with the Environment Agency.

⁶⁹ DEFRA (2018). *Code of Good Agricultural Practice for Reducing Ammonia*. [<https://www.gov.uk/government/publications/code-of-good-agricultural-practice-for-reducing-ammonia-emissions/code-of-good-agricultural-practice-cogap-for-reducing-ammonia-emissions>]

Component 3: Awareness raising, Knowledge Management and Capacity building to integrate management for conservation and production purposes across landscapes.

76. Component 3 concerns awareness raising, capacity development, monitoring and evaluation, and provision of new knowledge. Improved awareness and understanding (knowledge) about protected areas and sustainable landscape management across multiple sectors, including the capacity to disseminate knowledge, is a critical Outcome (3.1) that underpins the success of the project and its long-term impact towards realizing the strategic vision for the Kazdağlari Region developed under Output 2.1.1. Thus, development of a Communications Strategy at the outset of project implementation is a high priority, particularly given the multiplicity of different sectors and other stakeholder groups involved in what is essentially a globally important project to conserve biodiversity through consolidation of the national PAs network, with a regionally significant opportunity to demonstrate the integration of ecosystems conservation alongside forest and agricultural production systems across landscapes at a regional scale. The Communication Strategy will enable key messages, events and information/knowledge to be targeted according to priority needs among stakeholders, using the most appropriate/effective media. This component will also ensure that the project's progress is tracked and periodically evaluated, enabling management to be adapted as necessary.

Outcome 3.1: Improved awareness, understanding and capacity to effectively manage protected areas and production systems at landscape scales.

77. This Outcome brings awareness raising and enhanced understanding alongside development of technical capacity and skills to inform and deliver integrated management of PAs and production systems at landscape scales. KAP (knowledge, attitude, practice) survey results will both inform the design of the Communications Strategy and provide a tool to monitor changes in awareness and understanding as project implementation proceeds, providing valuable indications of the project's success. This will be particularly valuable in the case of ecotourism, which is often undermined by inappropriate structures, facilities, activities, and attitudes generated by government agencies and the private sector alike.

Output 3.1.1 Communications Strategy and Action Plan prepared and implemented, including events, outreach materials and knowledge products, to promote gender equity and integrated management at landscape scales.

78. The Communications Strategy will be pivotal in raising awareness across all sectors of government, civil society and rural communities about the importance of an integrated approach to managing forest landscapes in which there are key biodiversity areas, including PAs, to safeguard within a mosaic of forests, pastures and croplands in varying states of degradation under production for food, energy and water to restore and manage sustainably. Increased awareness, understanding and appreciation of the project's demonstrated deliverables will help to secure wider political support and leverage further investments for mainstreaming ILM approaches across and beyond the Kazdağlari Region and enhancing key policy, institutional and finance-related reforms. The Strategy will be accompanied by an annually updated Action Plan, with events, mechanisms, and media for raising awareness about PAs, forest restoration and LDN, GAP and community-based ecotourism within the context of ILM; and a range of readily accessible knowledge products, guidelines and training modules promoted via relevant portals under the management of MAF. It will also consider gender equity and other social inclusion issues identified in the Gender Analysis and Action Plan (Additional Annex 6).

79. The Communications Strategy will be prepared during Year 1 of project implementation, informed by the results of a KAP survey undertaken at the start of the project to benchmark existing levels of knowledge, attitudes and practices in key areas of project intervention. The project's subsequent effectiveness, including its delivery of the Communications Strategy, will be monitored by repeating such surveys at mid-term and end of project. By virtue of having to engage with stakeholders, the survey itself will raise the project's profile and landscape approach, quite apart from generating baselines by which changes can be monitored.

80. The KAP survey will target six groups of stakeholders within the Kazdağlari Region: government officials from (1) nature conservation, (2) forestry, (3) agricultural and (4) private sectors at provincial and district levels; and (5) residents and (6) visitors within the Project Area. Ideally, at least 100 stakeholders in each group will be sampled for each of the three surveys. Questions will focus on the following key areas of project intervention: biodiversity and ecosystem goods and services, forest fragmentation and land degradation neutrality, biodiversity hot spots and PAs, integrated landscape management and an international certification program concept, good agricultural practice, equitable value chains, responsible tourism and (community-based) ecotourism. Up to five questions will be designed for each area of intervention (35 questions maximum plus 5 questions about stakeholder's profile); and responses will be based on scoring or multiple choice. Note that results from visitors surveyed will feed into the Ecotourism Strategy. (k)

Indicative activities under Output 3.1.1

- a) Design and oversee the implementation of the KAP surveys and develop an Integrated Landscape Management Communications Strategy & Action Plan. Thereafter, intermittently analyse and disseminate KAP survey data and update the annual Action Plan,
- b) Undertake KAP survey during project inception to benchmark levels of knowledge, attitude and practice concerning key conceptual approaches to ILM and responsible tourism to be implemented by project, as outlined above⁹⁰; and repeat surveys at mid-term and end of project. Additionally, use KAP survey questionnaires throughout project implementation, as opportunities arise (e.g. stakeholder group meetings, training modules) to collect more data to inform or further refine the ILM Communications Strategy, its annual Action Plan and capacity development programme.
- c) Draft ILM Communications Strategy & Action Plan in Year 1, informed by baseline KAP results,(b) and consult with relevant stakeholder groups (e.g. Multi-tasked Restoration Team, Ecotourism Advisory Panel) on draft material, including specific messaging and calls-to-action for target groups. Pilot draft messages and strategic approaches with target groups to confirm their effectiveness, modify as necessary based on feedback and finalize. All Project events, processes and stakeholder groups will be built into the Strategy and Action Plan.
- d) Develop outreach materials for communicating and engaging with stakeholders in Project Area, notably target forest districts, PAs, communities (including educational activities in schools) and visitors.
- e) Communicate regularly with stakeholders: using appropriate media to raise the profile of the project's objective and outcomes; and produce a quarterly Newsletter to highlight the ILM approach, recent progress, upcoming events and activities, knowledge products and, importantly, how stakeholders can engage in project activities and training opportunities, taking into account gender differences and maximising opportunities for social inclusion.

Output 3.1.2 Modular capacity development training programme for protected areas and landscape management designed and delivered across relevant sectors within national and local governments, communities, NGOs and private enterprises.

81. The training programme is intended to support all aspects of capacity development supported by the project, particularly with respect to Outcomes 1.2 and 2.2, and target some 2,800 project stakeholders of which an estimated 555 are from government and the rest are from the local

communities. It will focus on the integrated management of biodiversity and ecosystems at landscape scales to build capacity within the PAs (biodiversity conservation) and forestry (biodiversity conservation and production systems) sectors, while also including other key sectors involved in sustainable land and water management, notably agriculture (including horticulture), particularly their extension, water supply and drainage services. It will be designed and delivered with land managers very much in mind, promoting biodiversity-friendly land, water and other natural resource use practices in landscapes surrounding target PAs among the forest and farming communities whose livelihoods are significantly dependent on natural resources and their marketing.

82. Given the many training modules to be delivered to large numbers of people, it is anticipated that some modules can be delivered online several times, particularly awareness-raising courses (e.g. ecotourism, GAP) that will benefit from maximum outreach and attendance. This will reduce travel, staff, and hospitality costs. That said it equally and often more important for capacity to be developed among small groups, with plenty of opportunity for one-to-one interactions and long-term interpersonal alliances formed. Thus, it will be important to maintain a healthy balance between remote learning, coming together physically to learn and experiential learning ‘on-the-job’. Maintaining the option to train online in cases where trainees have access to IT equipment will be very reassuring during these COVID-dominated times.

83. It is also expected that genders will be balanced for most training sessions. This should apply particularly to training community members, especially given the emphasis to engage proactively with women, youth and disabled persons. It is anticipated that there will be preponderance of men from government agencies, but women should be promoted where possible to achieve a balance.

84. Given the ambitious numbers of communities and relatively small numbers of their representatives to benefit from training modules, it is proposed to adopt a ‘training-of-trainers’ approach, with community representatives becoming ‘focal points’ - trained and equipped with skills and materials to train others in their respective villages. Focal points should be overseen and coached during their initial delivery of training to others in their community.

Indicative activities under Output 3.1.2

85. Capacity development activities are shown in Table 6 and differentiated between training modules and potential partnerships, additional to government Implementing Partners (IPs), designed to develop the capacities of stakeholders on the ground. Training-of-trainers (Focal Points) is also identified. The estimated total number of trainees is 2,800, of which 1,625 will be community members and 1,172 government officials and other professionals. Modules that potentially could be delivered on-line, especially in the event of future outbreaks of COVID-19 and/or reduce logistic costs of training are highlighted. These will be reviewed during project inception.

Table 6 Capacity Development: Indicative activities under Output 3.1.2

Year(s)					Project Output or Activity	Capacity Development		On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees	
					1.1.1	Policies and guidelines, aligned with IUCN’s PAs Categories system ...		
1	2				1.1.1a	IUCN PA management category systems and governance types		150
1	2	3			1.1.1c	Planning, managing, financing and monitoring PAs		150
	2	3			1.1.1c	Integrated landscape and ridge-to-reef approaches		150
					1.1.2	Systematic Monitoring Framework developed for PAs system ...		
		3	4	5	1.1.4	How to attain IUCN Green List Standard and to apply EHI monitoring templates		200

Year(s)					Project Output or Activity	Capacity Development	On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees
					1.2.1	Identification of potential Natura 2000 sites in Marmara Region and listed new protected areas	
1	2				1.2.1a,b	<i>Technically support rapid biodiversity assessment design for Project Area, and determination of new PAs and new borders for Kazdağı NP.</i>	[1.1.1c]
					1.2.2	PA planning and effective management strengthened for ... (specific PAs)	
1	2	3				<i>Technically support respective designs of participatory processes, strengthen governance structures and management planning of PAs</i>	[1.1.1c]
					2.1.1	Regional Strategy to conserve Kazdağları's biodiversity ... operational.	
1					2.1.1	Regional strategies to conserve biodiversity: experience from around the world	250
					2.1.2	All or some of Project Area ... assessed and nominated for UNESCO designation as an international certification program.	
	2	3	4		2.1.2	<i>Technically support delineation and design of an international certificate, its governance structure and preparation of its management strategy/plan.</i>	
	2				2.1.2	Study tour to international certificated sites in Turkey	30
		3			2.1.2	Study tour to in international certificated sites in a nearby country	30
					2.2.1	National LDN targets supported through delivery of a Restoration and Best Practices Strategy for degraded forests ...	
1	2				2.2.1	Officers from principal target FMDs (Bayramiç with 6 sub-districts) and Kalkım (with 9 sub-districts) enrol in Society for Ecological Restoration e-Learning resources for restoration practitioners. Also Chamber of Forest Engineers	100
1	2	3			2.2.1	Understanding land degradation, Turkey's national commitment to UNCCD and practical steps towards demonstrating achievement of LDN in Project Area.	250
1	2	3	4		2.2.1b	Technically support preparation and implementation of FLR Action Plan. accompanied by manual. [See Additional Annex 3, Section 3.3]	
1	2	3	4		2.2.1b	FLR theory and practice, including SER's e-Learning Course: Overview of the Practice of Ecological Restoration. [Training-of-trainers approach at forest district level]	150
		3	4		2.2.1b	VRHS: training with study tour, pilot operation in high-value forest and production of guidance and best practice manual.	20
					2.2.1d	Technically support integration of biodiversity surveys and assessments into FMPs, resulting in hybrid IFFMPs. [See Additional Annex 3, Section 4.3]	
					2.2.1e	Technically support enhancement of FEMS open-source software to improve accuracy of tree volumes to be cut and, thereby, avoid over/under harvesting. [See Additional Annex 3, Section 4.3]	
	2	3	4		2.2.1f	RIL strategy: best practices learned, demonstrated and experienced.	100
	2	3	4		2.2.1h	<i>Technically support development and implementation of a strategy that is sensitive to forest fragmentation through optimization of fire breaks and security roads. [See Additional Annex 3, Section 4.3]</i>	
1	2	3	4	5	2.2.1k	<i>Technically support a restricted blockchain design of a forest/biodiversity GIS to monitor forest resources and restoration. [Additional Annex 3, 4.3]</i>	
					2.2.2	Improved livelihoods piloted.	
						<i>Generic</i>	
1	2	3			2.2.2c	Designing and facilitating stakeholder engagement processes at community levels	250
1	2	3	4	5	2.2.2d	Network of community-run shops: supported by GMKA, TKDK and ETKO (certification)	250
						<i>Non Wood Forest Products</i>	

Year(s)					Project Output or Activity	Capacity Development	On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees
1	2	3	4		2.2.2e	Technically support communities and cooperatives with value chains, branding and marketing	150
	2	3	4		2.2.2e	Value chains, branding and marketing: principles and practices - training of village trainers	150
	2	3	4		2.2.2f	Establishment and strengthening of cooperatives: partnership support from GMKA	
	2	3	4	5	2.2.2f	NWFP inventory, harvesting and monitoring - training and certification of forest staff to train village trainers	10
	2	3	4	5	2.2.2f	Harvesting and monitoring of NWFPs - training and certification of village trainers	150
	2	3	4	5	2.2.2f	online sales strategies trainings	150
1	2	3	4	5	2.2.2g	Cultivation of lavender and other MAPs: partnership support from GMKA (notably lavender); Agriculture Extension officers	150
1	2	3	4	5	2.2.2g	Cultivation of lavender and other MAPs: training and certification of village trainers	150
1	2	3	4	5	2.2.2h	Additional, specialised training in NWFPs processing, handicrafts and marketing for women, youth and disabled. [Follow-up on introductory module for value chains - 2.3.2e]	90
1	2	3	4	5	2.2.2i	Certification of NTFPs; sourcing, food safety, fair trading and other standards	120
						<i>Ecotourism</i>	
1	2	3	4	5	2.2.2j	Technically support ecotourism	
	2	3	4		2.2.2j	ecotourism: principles and best practices, incorporating an in-country study tour	100
					2.2.2j	Ecotourism: training of local guides in natural and cultural heritage, health & safety for outdoor activities	150
					2.2.2j	Etourism: training of local hosts in hospitality	150
1	2	3	4	5	2.2.2m	Ecotourism: partnership support from Global Ecovillage Network	
					2.2.2	Study tour to a nearby country to experience sharing on ecotourism	30
						<i>Good Agricultural Practice including organic farming</i>	
1	2	3	4	5	2.2.2n	Technically support Good Agricultural Practice	
1					2.2.2o	Series of training modules for farmers, including 18 organic farmers, identified in GAP Strategy:	
	2	3	4	5		- agronomy (crops for food, fodder and fibre)	60
	2	3	4	5		- horticulture (fruits, nuts, vegetables, mushrooms, herbs, spices, flowers)	60
	2	3	4	5		- animal husbandry (breeding and raising livestock to provide food - dairy and meat, draught power and manure)	60
				5		- bee-keeping (honey, wax)	60
1	2	3	4	5	2.2.2o	Sustainable agriculture: partnership with such as GlobalG.A.P. and relevant authorised certification institutions	
	2	3	4	5	2.2.2o	Agrotourism: partnership support from TKDK	
					2.2.2p	Basic training provided under Activity 2.2.2e, with more focus on processing and marketing under Activity 2.2.2h	
						<i>Forest biodiversity protection</i>	
1	2	3	4	5	2.2.2q,r,s,t	Awareness raising: Agri-environment techniques to minimise land degradation and maintain and enhance connectivity between natural forests and production systems.	150
TOTAL NUMBER OF PERSONS TRAINED							3,370

Outcome 3.2: Project effectively and efficiently implemented, including dissemination of knowledge gained and lessons learned, and fully accountable to its stakeholders.

86. This Outcome will be realised through two Outputs: (i) having an effective and efficient M&E system in place that is transparent, sensitive to social inclusion and inequality issues, and informs decision-making that may necessitate adaptive management; and (ii) ensuring that project findings and lessons learned are collated, documented, shared widely and made readily accessible via appropriate websites and portals within MAF and beyond. Particular importance is attached to ensuring that lessons learned are fed back to the GEF Secretariat for its review, reporting and, ultimately, development and refinement of its funding programme.

Output 3.2.1 Transparent, gender-sensitive M&E Plan in place to inform project implementation, decision-making and adaptive management.

87. Project implementation, monitoring and evaluation will be closely coordinated by the National Project Coordinator, based on the organizational arrangements described in Section 6. Implementation progress will be monitored routinely by means of the Project Results Framework (Annex A1) and Annual Work Plan, presented to PSC's triannual meetings for endorsement. M&E will include regular review of Annual Work Plan activities, updating progress towards indicator targets in the M&E Plan, checking and realigning budgets in accordance with progress, and generating comprehensive progress reports. Gender mainstreaming and Environmental and Social risk Management (ESM) Plan requirements will be met as an integral part of the M&E cycle.

88. Regular PSC and Project Task Force (PTF) meetings will enable key partners to participate in the M&E process. The project will also hold an annual conference in the Kazdağları Region to brief stakeholders on progress, plans for the year ahead and to receive feedback on what is working well, not so well or might be improved.

89. Information and knowledge generated by the project will be collated and documented routinely for sharing with partners and upscaling at the annual Project Implementation Reviews (PIRs), Mid-Term Review (MTR) and Terminal Evaluation (TE). Importantly, the MTR provides an opportunity to assess implementation progress, emerging constraints and, as necessary, formulate possible remedial or adaptive management measures; while the TE will focus on assessing the project's achievements, knowledge generated, and lessons learned.

Indicative activities under Output 3.2.1

- a) Review M&E provisions during project inception and update/revise as necessary, ensuring indicators, baselines and targets in the Project Results Framework are complete, SMART46 and adequately gender-sensitive; and that minimum GEF requirements are met in the Project M&E Plan.
 - b) Train project staff on gender equality during project inception; provide technical support to integrate gender into project strategies, action plans and training programme; and to advise on gender mainstreaming. Assign Gender Focal Point(s) to implement the Gender Action Plan (Additional Annex 6).
 - c) Undertake MTR and TE in line with GEF requirements: incorporate MTR recommendations into a management response and, following its approval by PSC, monitor its implementation; and complete the TE by the penultimate quarter of project closure.
 - d) Prepare an Exit Strategy by the end of Year 4 and implement it during the final year to ensure post-project sustainability and, where appropriate, institutionalization of project interventions.
- Output 3.2.2 Project results and lessons learned collated, shared with project stakeholders and disseminated nationally and more widely across Caucasus and Middle East.

90. A range of other approaches will be deployed to facilitate effective knowledge dissemination and exchange mechanisms, including presentation of project results at technical conferences, in-person and virtual knowledge exchanges, and site visits from other projects in Turkey. Readily accessible online repositories for project outputs and training materials will be adopted and adapted as necessary within the relevant departments of MAF: notably the PAs and forest information systems managed by GDNCNP (Output 1.1.3) and GDF (ORBIS), respectively. Meanwhile, the project will have its own website or webpage to communicate with its stakeholders and more widely in the Region.

Indicative activities under Output 3.2.2

- a) Create a basic project website for its stakeholders and other potentially interested parties, with project-related news, information on events including training opportunities, contact details and links to partners' websites to access technical resources and training materials generated by the project.
- b) Produce a quarterly newsletter to inform stakeholders about implementation progress and opportunities for them to participate in training or delivering activities. This will be emailed directly to stakeholders and accessible via the project website (platform).
- c) Project technical reports, such as survey results, strategies and action plans, management plans and best practice guidelines, will be documented, shared with its stakeholders and disseminated more widely via its website, those of its partners mentioned above⁹⁶ and the likes of FAO, and by being linked into the websites of practitioner groups focusing on topics such as forest restoration or GAP.
- d) Prepare, publish and disseminate the project's terminal report in both hard copy and electronic formats.

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

91. The proposed project is aligned with the Biodiversity and the Land Degradation Focal areas. It takes a landscape approach to ensure the conservation and sustainable use of natural resources. With respect to Biodiversity, the project is aligned with objective BD-1-1 (Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors) and BD-2-7 as follows:

- Under BD-1-1, the project will support spatial and land-use planning to ensure that land and resource use is appropriately situated to maximize production without undermining or degrading biodiversity (Component 1). It will also support the improvement of the regulatory framework to provide incentives for biodiversity-positive land and resource use that remains productive but that does not degrade biodiversity. Under component 2, it will work with the agriculture and forestry sectors to improve production practices to be more biodiversity-positive and explore the use of financial mechanisms to support these efforts.
- Regarding BD-2-7, the project will help consolidate the protected area system to adequately represent Turkey's biodiversity (Component 1). It will align national policies and guidelines with IUCN's Protected Areas Categories System and will develop subsequent legislation to enhance the governance and financing of different protected area types and ecological corridors. Finally, the project will apply the new approach for Turkey in the Kazdaglari area (Component 2). In particular, it will support the design and implementation of a Regional Vision and a 5-year Action Plan including (i) designation of the area as an international certificated site, (ii) new biological hot spots listed within the project area based on a comprehensive baseline assessment (output 1.1.2), and (iii) updated management plans (including sustainable financing options) for at least 5 National Parks, Nature Parks and Nature Reserves in the target area.

92. The proposed project is aligned with the LD programming directions as it seeks to avoid further degradation and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes, addressing the complex nexus of local livelihoods, land degradation, climate change, and environmental security. Specifically, the project will support objectives LD-1-2 (Maintain or improve flow of ecosystem services, including sustaining livelihoods of forest-dependent people through Sustainable Forest Management) and LD-1-3 (Maintain or improve flows of ecosystem services, including sustaining livelihoods of forest-dependent people through Forest Landscape Restoration). The project will follow a landscape approach and support the implementation of National LDN targets through the delivery of a Restoration Strategy for degraded forests and unsustainably managed agricultural landscapes in Kazdağlari Project Area (Component 2, Outcome 2.3). It will also pilot improved livelihood opportunities in the target areas. Proposed investments (approximately one-third of the project budget) will generate multiple environmental benefits and secure local livelihoods by focusing on a unique set of issues that are closely related to the vulnerability of social and environmental systems and their resilience.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

93. This GEF investment is timely with respect to Turkey's present state of development within the natural resources sector. Government has been actively investing protected areas and forestry management for decades with limited success but more recently has embarked on adopting new approaches and tools to counter the huge loss and degradation of forest ecosystems, along with their diminishing goods and services that benefit local communities and society at large. Such approaches include an increasing awareness of the need to manage natural resources at landscape and catchment scales in more sustainable ways that maintain the ecological connectivity and functioning of ecosystems and safeguard them from pollutants that contaminate water resources. Such awareness leads to a greater understanding of the need to move away from a silo mentality, characteristic of many sectors and their respective institutions, and collaborate with others. Thus, multi-sector coordination mechanisms and co-management approaches with communities are much higher on government's agenda.

94. The GEF investment will maximize this opportunity by strengthening some policies, tools and practices at national level in order to provide a more robust foundation for applying a regional approach to effectively managing and expanding the protected areas estate that can subsequently be replicated and upscaled to other regions. The key ingredients of this strategy at national level include: streamlining the governance of PAs, having first classified the different types of PA according to the globally accepted IUCN categories system; identifying gaps in the representativeness of biodiversity within the existing PAs system, as informed by the distribution of Natura 2000 within Turkey; establish policies for management of buffer zones, ecological corridors and landscape, including those under production; establish a monitoring framework for PAs; create a PAs information systemized that hosts monitoring data, while also providing a readily accessible information platform; develop a modular capacity building framework for PAs and sustainable management of landscapes; and develop a Strategic Framework for financing PAs. All of these initiatives will be applied and piloted within the target Kazdağlari Region under a common vision generated by its stakeholders. This is particularly apt and timely given the interest in nominating Kazdağlari National Park for inclusion on the World Heritage List on account of its globally significant biodiversity. The majority (80%) of the GEF funds will be invested in the target region: building capacity, improving PA and landscape management, restoring degraded lands and addressing soil erosion, and improving local livelihoods.

95. Without the GEF investment, there will be no catalyst to champion, facilitate and coordinate this paradigm shift towards a more holistic and integrate approach to conserving biodiversity alongside managing production landscapes in a more sustainable and equitable manner that takes into account the livelihoods and health of rural populations. Furthermore, opportunities for synergies will also be

constrained by the absence of coordinating mechanisms at the landscape level, which also has implications in terms of potential economic and social benefits foregone, as well as local support towards this regional vision. In the case of this particular project, the GEF is leveraging five times its investment in co-financing, which could be hugely jeopardized and even lost from the regional economy in the absence of the project.

Table 7. Summary GEF Incremental Reasoning

Baseline	Incremental reasoning
<p>Component 1</p> <p>Under the baseline scenario, protected area management will continue to be developed and managed without a vision of integration to the broader landscape and without meaningful participation of key stakeholders in the planning and monitoring process</p>	<p>The project will invest GEF resources to carry out a strategic assessment of the status of Turkey’s PA system, including the development of a national policy to take a landscape approach to managing PA.</p> <p>This will be complemented by development a Monitoring Framework aligned with existing efforts related to LDN implementation, and by developing a financial strategy for protected areas.</p> <p>In addition, project resources will be used to support the identification of potential Natura 2000 sites in the Marmara Region.</p> <p>Finally, GEF resources will be used to improve planning and management of protected areas, building on efforts carried out by the MAF</p>
<p>Component 2</p> <p>Under the baseline scenario, land use planning continues to follow business as usual approach. Each Directorate within the Ministry of Agriculture and Forestry (and between ministries) continues to implement their activities without a holistic vision that takes into consideration sustainable management and use of natural resources. For instance, the General Directorate of Forestry continues to implement their forest inventories, invest in forest extraction, and implement management plans without consideration of the needs and without involvement of the local communities. Similarly, agriculture development plans are developed without a holistic approach that would considers local stakeholders and their link to the protected areas.</p> <p>Finally, local stakeholders continue to implement their day-to-day activities, carrying out productive practices that are not fully efficient or take into account conservation principles and which continue to drive degradation in the Kazdaglari area.</p>	<p>Under component 2, GEF resources will be invested to develop and implement the stakeholder strategic vision for Kazdaglari and implement SLM/SSM strategies. This includes capacity building initiatives and investing resources to ensure meaningful stakeholder participation in the development of the vision.</p> <p>In addition, GEF resources will be used to update management plans for the protected areas in the target site, and by increasing the area protected (i.e. establishing new seed stands, gene conservation forest, etc).</p> <p>Finally, project resources will be used to develop and implement plans to sustainably manage forests at the landscape level. This includes establishing buffer zones (25,000 ha), restoring 5,000 ha of forests (including applying soil erosion prevention techniques), and developing livelihood opportunities for the people in the region.</p>
<p>Component 3</p> <p>Under Component 3, there is limited awareness raising and sharing of experiences.</p>	<p>Under this component, GEF resources will be used to develop a communication strategy, improve awareness, and disseminate knowledge products to ensure that production systems are sustainable and</p>

	take into account conservation considerations, and that livelihood-improvement opportunities are shared among participating stakeholders.
--	---

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

96. The project will contribute to safeguarding globally significant biodiversity, some of which is potentially of World Heritage value, and its ecosystem goods and services, including the productivity of timber, NWFPs and food production systems. First and foremost is the fundamental value of piloting a regional landscape-based management approach because, once mainstreamed, it could transform Turkey's PAs system and surrounding landscapes in terms of safeguarding native biodiversity and sustainably managing production systems. Specific GEBs include the following:

- 21,733 ha of terrestrial PAs (Kaz mountains, Core indicator 1.2) under improved management
- 5,955 ha of degraded forests restored (Core indicator 3.2), including 2,000 ha subjected to soil erosion prevention techniques.
- 25,000 ha of landscapes under improved management practices in land surrounding the Kazdağları National Park (Core indicator 4.1) with project funds. This corresponds to the development of 2 integrated forest management plans (IFFMP) for 2 forest subdistricts in Bayramic and Kalkim forest districts. In addition, the government will support (cofinancing) the upgrading of 19 FMP into IFFMP covering an area equal to 106,167 ha (Core indicator 4.1). The total area targeted is 131,167 ha.
- 2.3 million tCO₂eq sequestered (Core indicator 6.1). Please refer to EX-ACT calculations
- Strengthened protection measures for endemic and threatened species within target PAs (details to be confirmed during PPG).
- At least 2,800 direct beneficiaries of project activities (Core indicator 11, with a target of 50% women beneficiaries)

97. Carbon calculations: Carbon calculations have been done using EX-ACT and consider 131,167 ha of forest under improved management (3% increase in carbon stocks), 5,955 hectares of degraded forests restored (10% increase in carbon), and 25,000 ha of agroforestry systems with improved practices. It is estimated the project will reduce 2.3 million tonnes of CO₂ over a 20-year timeframe. Please see EX-ACT simulations that have been uploaded to the GEF Portal.

7) Innovativeness, sustainability, potential for scaling up and capacity development

98. Innovativeness: In the context of Turkey, the project is innovative as it is implementing approaches that are new to the country. Forest management and biodiversity conservation will become more integrated. In the future, ecosystem services (including biodiversity) would be an integral part of forest management.

99. Sustainability and potential for scaling up: The project includes components to guarantee sustainability in the institutional, environmental, economic and social dimensions. First, the capacity-building component on sustainable landscape management that considers the involvement of different stakeholders allows all the actors to work coordinated to achieve and maintain the project outcomes. Moreover, the active participation of the government, the alignment of the project with national goals and the creation of a new governance model, favors a political and institutional environment for the project implementation. In terms of environmental sustainability, the project works across different objectives for the management of protected areas, including restoration of ecosystems and improvement

of governance. In addition, the work in the buffer zones reduces the risks of negative actions occurring in protected areas by providing alternatives of activities that allow local communities to meet and improve their livelihoods. As livelihoods improve, households will experience first-hand the benefits from carrying out activities sustainably both in and outside the protected area, therefore ensuring its sustainability. The project also contemplates a platform for the monitoring and evaluation of the ecological status of the landscapes that allows to assess progress in the accomplishment of objectives. Together, all these actions constitute a set of interventions that enable the sustainable management of landscapes in the project region.

100. The new national level strategy on buffer zone management and piloting of formalized buffer zone management under this project, would together provide the policy directive and on the ground experience facilitating the scaling up of improved buffer zone management throughout the country. The activities in the context of forest carbon management and MRV would be in synergy with other similar projects (e.g. UNDP/GEF project and the adoption of the MRV system developed under that project); this would enable the easy scaling up of piloting activities undertaken. Also, at the national level, there is a clear articulation of need to conduct valuation of ecosystem services in productive forests (specifically biodiversity), and to develop integrated management systems (including improved NWF value chain development for enhanced livelihoods); piloting activities under this project would provide a blueprint for GDF to scale up the piloted activities throughout the country under their regular programmatic efforts in productive forests.

8) Summary of changes in alignment with the project design with the original PIF

101. The project design has not changed conceptually, its focus being on applying a landscape conservation approach to Turkey's Kazdağları Region by strengthening the management of PAs while also introducing buffers to absorb external threats and corridors to improve connectivity within surrounding fragmented forests, alongside sustainably managing peripheral forest and agricultural lands under production to conserve and enhance biodiversity. This integrated landscape approach will be demonstrated in the project area of 184,297 ha, now clearly defined and comprising 25 forest sub-districts in Balıkesir and Çanakkale Regional Forest Directorates and Kazdağı National Park (refer to **Part II, Section 1.b**), with the intention of being mainstreamed post-project in accordance with the Regional Vision developed by this project to conserve Kazdağları's biodiversity. The concept also supports the national context with respect to: assessing its comprehensiveness in conserving biodiversity; establishing a publicly accessible PAs information system; creating a PAs monitoring system; and, most importantly, supporting the incorporation of the landscape approach in national policy, along with addressing gaps in PAs policy and legislation.

102. Thus, Components 1 and 2 with their respective Outcomes remain the same, albeit Outcome 1.1 has been expressed more succinctly and Outcome 2.3 (and 3.1) have been shortened. Component 3, which is about awareness raising, M&E and knowledge management, has been restructured to incorporate capacity development, which aligns well with the Communication Strategy under Outcome 3.1 (*Improved awareness, understanding and capacity to effectively manage PAs and production systems at landscape scales*). This also consolidates the modular capacity development training programme under a single Outcome, which was split between Component 1 (Outcome 1) and Component 2 (both Outcomes 2.2 and 2.3) in the PIF. Further clarity has been achieved by removing the M&E and knowledge management from the awareness raising (and capacity development) in Outcome 3.1 and placing them under a new Outcome 3.2 that focuses on the effectiveness and efficient of project implementations and also incorporates lessons learned.

103. Changes to core indicators are tracked in **Table 7**, with comments to explain the rationale. Note that the 13,267 ha reduction of the target for Core Indicator 1.2 is mitigated by the 106,167 ha increase to Core Indicator 4 target. Also note the opportunity to register seed stands and other potential *conserved areas* as being under OECM.

Table 8 Changes to the core indicators

Core Indicator	Hectares at PIF	Hectares at PRODOC	Comments																				
1.2 Terrestrial PAs under improved management effectiveness	35,000	21,733	PIF target of 35,00 ha is unrealistic, hence limited to PAs within Project Area (listed below). Note: Turkey chooses to limit its data to internationally designated PAs under Ramsar, World Heritage and UNESCO MAB instruments. Hence, data on 4,169 PAs is not publicly available and cannot be viewed or downloaded from the World Database on Protected Areas (WDPA). <table border="1"> <thead> <tr> <th>(i) Name</th> <th>(ii) IUCN Category</th> <th>(iii) Area ha</th> <th>(iv) WDPA ID</th> </tr> </thead> <tbody> <tr> <td>Kazdagl National Park</td> <td>II</td> <td>21,463.00</td> <td>not listed</td> </tr> <tr> <td>Kazdagl Göknan Nature Reserve</td> <td>la</td> <td>254.00</td> <td>not listed</td> </tr> <tr> <td>Dandere Nature Park</td> <td>V</td> <td>10.00</td> <td>not listed</td> </tr> <tr> <td>Ayazmapinan Nature Park</td> <td>V</td> <td>5.85</td> <td>not listed</td> </tr> </tbody> </table>	(i) Name	(ii) IUCN Category	(iii) Area ha	(iv) WDPA ID	Kazdagl National Park	II	21,463.00	not listed	Kazdagl Göknan Nature Reserve	la	254.00	not listed	Dandere Nature Park	V	10.00	not listed	Ayazmapinan Nature Park	V	5.85	not listed
(i) Name	(ii) IUCN Category	(iii) Area ha	(iv) WDPA ID																				
Kazdagl National Park	II	21,463.00	not listed																				
Kazdagl Göknan Nature Reserve	la	254.00	not listed																				
Dandere Nature Park	V	10.00	not listed																				
Ayazmapinan Nature Park	V	5.85	not listed																				
1.1 Terrestrial PAs newly created Potential candidates for OECM	0	tbd	It may be possible to align existing protection measures for biodiversity in the case of gene conservation forests and the northern slopes of Kaz Mountains, identified as special areas and monitored for their threatened species of large mammals, with criteria for their designation as <i>conserved areas</i> under OECM. <table border="1"> <tbody> <tr> <td>Gene Conservation Forests (7)</td> <td>n/a</td> <td>1,000.00</td> <td>n/a</td> </tr> <tr> <td>North slopes of Kaz Mountains</td> <td>n/a</td> <td>15,880.00</td> <td>n/a</td> </tr> </tbody> </table>	Gene Conservation Forests (7)	n/a	1,000.00	n/a	North slopes of Kaz Mountains	n/a	15,880.00	n/a												
Gene Conservation Forests (7)	n/a	1,000.00	n/a																				
North slopes of Kaz Mountains	n/a	15,880.00	n/a																				
3.1 Area of degraded agricultural land restored	0	tbd	Limited organic farming and other opportunities may be emerge once target villages confirmed.																				
3.2 Area of forest and forest land restored	7,500	5,455 500	• 5,455 ha of degraded forest fragments across Bayramic, Çan, Kalkim and Yenice districts restored (part of total forest area of 131,167 ha under IFFMP - see 4.1 below). • 500 ha of forest across Project Area (5 districts) estimated for restoring NWFP production of mushrooms, medicinal and aromatic plants, and plantations for beekeeping. NOTE: PIF target of 7,500 ha considered overambitious and revised to 5,955 ha.																				
4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified) <i>Note that 25,000 ha of forest under improved integrated management will buffer the periphery of Kazdaglari NP.</i>	25,000	25,000	Forest under Integrated management in Project Area (21 FMUs across 4 Forest Districts) • 2 Integrated Functional Forest Management Plans (IFFMPs) for 2 forest sub-districts (i.e. Forest Management Unit, FMUs): one in Bayramic, the other in Kalkim Forest District. [GEF Contribution: USD 150,000]																				
	0	106,167	• 19 FMPs upgraded to IFFMPs in Bayramic, Çan, Kalkim and Yenice districts (less 5,955 ha restored) [Co-financing: USD 380,000]																				
	n/a	n/a	Definition of local Level SFM Criteria & Indicators in Bayramic and Kalkim districts: [GEF Contribution: USD 40,000, Co-financing: USD 10,000]																				
6.1 Carbon Sequestered or Emissions Avoided in the AFOLU sector	909,454	2,318,452	Tons of CO2 equivalent avoided/captured. Please refer to EX-ACT calculations																				
11. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF	1,500	2,800	Generated from capacity development program under Output 3.1.2																				

104. Project design has also been strengthened within the existing PIF framework in a number of ways in order to take advantage of recent international developments:

- Global standards will be adopted for Turkey’s PAs, using not only the IUCN PA management categories classification system but also their **governance typology**, for which detailed guidance is available, enabling the PAs network to be more readily assessed in terms of its ‘fitness for purpose’ and refined as needed.
- The 2020 CBD provisions for *conserved areas* that do not meet the globally accepted IUCN definition of a PA to be recognised and registered as OECMs is incorporated for piloting in the project area.
- The proposed KBA assessment will be undertaken in accordance with the *KBA Global Standard*, approved by the IUCN Council and launched at its World Conservation Congress in 2016, and the 2020 guidelines prepared by the KBA Standards and Appeals Committee of IUCN’s SSC and WCPA. Other recent supporting tools include the *IUCN Red List of Ecosystems*, which provides a global framework to monitor the status of ecosystems, and the global typology of the Earth’s ecosystems now available on-line.
- Given the way in which *ecotourism* principles are often mispracticed in Turkey (and elsewhere across much of the globe) and the importance of ensuring that local communities benefit maximally from the project, its investments in promoting tourism will be limited to *community-based ecotourism*.

1.b Project Map and Geo-Coordinates.

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

105. The Project Area (184,297 ha) is located in Balıkesir and Çanakkale Regional Forest Directorates, comprising five Forest Districts, their respective 25 sub-districts and a single National Park Administration. Whereas Kalkım Forest District is located entirely within the Project Area, only parts of the other four Forest Districts occupy the Project Area. Refer to the project's App for an extensive set of map overlays:

<https://projectgeffao.users.earthengine.app/view/kazdaglari-app>

Project intervention sites

106. Project interventions are targeted at national, regional, Project Area and site levels in various ways:

- **National level** most importantly relates to re-determination of Turkey's KBAs using the Global Standard for their identification; and to strengthening the planning, management and governance of the PAs system nationally through improved and new policies demonstrated in the Project Area. Likewise, forest restoration measures coupled with improved livelihoods of villagers undertaken in the Project Area can be mainstreamed nationally post-project.
- **Regional level** refers to the Kazdağları Region (2,291,476 ha), defined for purposes of this project as the Forest Regional Directorates of Balıkesir and Çanakkale, except for Anafartalar and Kesan forest districts that lie across the Çanakkale Strait. 64 Kazdağları Region will be targeted for development of a Vision to conserve its biodiversity, based on upscaling the ILM approach demonstrated in the Project Area and incorporating lessons learnt. The Vision, including the establishment of an international certification in part or all of the Project Area, will be mainstreamed post-project.

107. Project sites lie within the Project Area and these are the targets of specific interventions. Such targets include the following:

- Integrated land management will be applied across Bayramiç, Çan, Kalkım and Yenice Forest Management Directorates (Districts), covering 137,122 ha (74.4%) of the Project Area (184,297 ha). Integrated Functional Forest Management Plans (IFFMPs) will be prepared and piloted in two Forest Management Units (i.e. forest management sub-districts) during the life of the project. These will cover at least 25,000 ha (13.6%) of the Project Area, one in Bayramiç and one in Kalkım FMD. The outstanding 19 FMPs will be reviewed and upscaled to IFFMPs during the project's life for subsequent implementation.
- Forest restoration stands in Bayramiç, Çan, Kalkım and Yenice FMDs amounting to 5,455 ha (3%) of the Project Area, have been identified on the basis of their fragmented and degraded condition, stakeholder readiness to engage with the project, and geographic distribution peripheral to Kazdağı National Park and Kazdağı Göknaarı Nature Reserve. These core biodiversity hotspots and other smaller PAs will be reconnected and better buffered as a result of restoration efforts. Most of these restoration stands lie in Bayramiç and Kalkım FMDs, whereas the forest canopy is reasonably intact immediately to the west, south and east of Kazdağı National Park in Edremit FMD
- Restoration of 500 h of non-forest land will be undertaken for production and enhancement of NWFPs.
- Protected areas within the Project Area will be subject to demonstrated improvements in their categorization according to global standards, governance, planning and management. Target PAs will be Kazdağı National Park, Darıdere and Ayazma Pınarı Nature Parks, Kazdağı Göknaarı Nature Reserve, plus at least one example of other potential PA categories (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest). Some Conserved Areas (CAs) that do not meet that do not meet the internationally accepted IUCN definition of a PA may qualify as "other effective area- based conservation measures" (OECM), as defined under

Decision 14/8 taken at the CBD COP14 in 2018. Maps and profiles of the four PAs within the Project Area are provided in Annex E.

- Communities within the project area will also be targeted with respect to raising awareness about PAs and ILM, providing technical support in sustainable land management (especially pastures and cultivations) and improving the sustainability and resilience of their livelihoods. Given that catchment considerations are a pre-requisite of ILM, the project will prioritise communities located in the catchments where restoration work is planned in order to reinforce such interventions. Thus, it is anticipated that all villages (≥ 32) in Bayramiç and Kalkım FMDs will benefit directly or indirectly from the project's restoration interventions, as well as others more widely through community-based ecotourism, NWFPs and handicrafts, Good Agricultural Practice and forest biodiversity.⁹²

1.c Child Project

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

108. Not applicable

2. Stakeholders.

Please provide the Stakeholder Engagement Plan or equivalent mapping/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. Please identify disadvantaged or vulnerable groups/individuals that may be affected by the project for appropriate consideration in the stakeholder engagement plan and in the risk matrix or environmental and social management plan.

(Type response here; if available, upload document or provide link)

Select what role civil society will play in the project:

- Consulted only;
- Member of Advisory Body; contractor;
- Co-financier;
- Member of project steering committee or equivalent decision-making body;
- Executor or co-executor;
- Other (Please explain)

109. In line with GEF Policy on Stakeholder Engagement and Implementation Guidelines guidance, meaningful and regular stakeholder engagement during project design and implementation is crucial to maximize country ownership and ensure enduring results at scale. Moreover, the project intends to strengthen polycentric, multi-stakeholder governance mechanisms within the identified PAs and surrounding landscapes to improve biodiversity conservation and sustainable forest management in the Kazdağlari Region for environmental and socio-economic benefits.

110. Existing and potential stakeholder individuals, groups and entities were identified and consulted during the PPG process through meetings with key partners and various wide-ranging initiatives, many of which were undertaken remotely due to the COVID-19 pandemic restrictions. Formal events comprised a comprehensive field work and a national inception workshop held on 1-5 March 2021; landscape-level consultations on 7-8 September 2021; and the validation workshop (delayed by COVID restrictions for two months) held in Canakkale and Balikesir provinces from 27 September to 1 October 2021. Other initiatives included various questionnaire surveys of government agencies by email; village heads (82 of 83) and individual households (135) in the Project Area by telephone; and a range of other

organizations using on-line software. Further consultations will continue during the project’s inception phase.

111. A participatory stakeholder analysis was undertaken during the PPG phase using FAO’s methodology to identify key, primary and secondary stakeholders with respect to the project’s overall objective across national and sub-national (i.e. landscape) scales, as described in **Figure 3**.

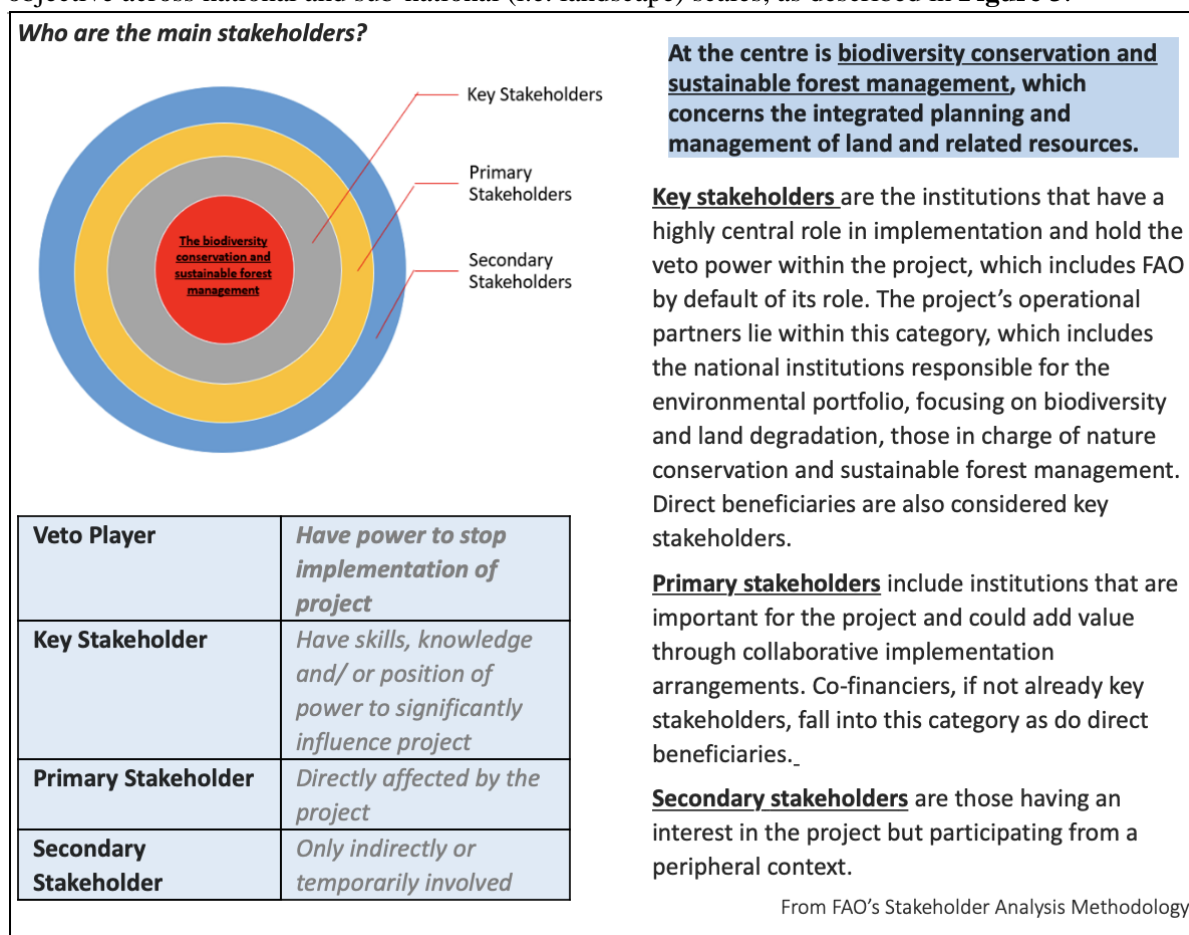


Figure 3 Stakeholder analysis methodology used to define the different types of stakeholder, levels of engagement with them, their respective roles and ultimately their ownership of the project.

112. In general, the project will work closely with a wide range of stakeholders including national and local government agencies, universities, research institutions, civil society organizations, private enterprises and local communities in the Project Area. MAF will be the main partner for project execution under GDF and GDNCNP, supported by respective provincial and district government agencies.

113. At local level the project team will work closely with GDF on operationalizing the landscape approach and GDNCNP on strengthening PA management, as well as with local administrations and many of the 83 settlements within the Project Area throughout project implementation. Stakeholders are identified in **Table XX** and their potential roles elaborated. A Stakeholder Engagement Plan has been developed and included in **Annex I-2**.

Table 9 List of stakeholders consulted during PPG process: findings, role and means of engagement in project

Stakeholder Name	Stakeholder Type	Consultation Dates and Methods	Key findings from consultation (during PPG)	Potential role in project implementation
a) National and local government				
Ministry of Agriculture and Forestry (MAF)	Key Direct beneficiary and Lead Executing Agency	01-05 March 2021 (Inception workshop and field visits) Communication via: • Email, phone, face-to-face meetings. • Workshops. • Publications, project flyers, brochures	Project design was elaborated in close collaboration and consultation with MAF.	MAF will be the Lead Executing Agency.
b) Local communities and community groups				
Local farmers, forest villagers and mukhtars (women and men)	Primary Direct beneficiary	01-05 March 2021 Communication via: • Email, face-to-face meetings. • Phone questionnaire and survey.	Consulted during project design. Had limited information about the project. They will be closely informed and involved in the project implementation. Raised issue of low income and needs for increase non-wood productions. This will be addressed through value chain activities.	Main beneficiaries of project interventions. Will be closely involved and consulted. Will benefit from capacity building and development of value chains.
c) Regional and international organizations, development partners				
Food and Agriculture Organization of the United Nations (FAO)	Key Lead Implementing Agency for GEF		Led detailed project design.	GEF Lead Implementing Agency.
South Marmara Development Agency	Key	07-08 September 2021 Communication via: • Email, face-to-face meetings. • interview	Existing funds to income generation and to prevent environmental degradation	Main supporter to the project intervention on non-wood products and value chain
Foundation for the Support of Women's Work (KEDV)	Secondary	07-08 September 2021 Communication via: • Email, face-to-face meetings. • interview	need for income generation and women empowerment	They will support to develop income generation activities and will support to implementation of capacity development during the implementation

Çanakkale Business and Professional Women's Association	Primary	07-08 September 2021 Communication via; • Email, face-to-face meetings. • interview	need for income generation and women empowerment	They will support to develop income generation activities and will support to implementation of capacity development during the implementation
Çanakkale Entrepreneurs and Contemporary Women's Association	Primary	07-08 September 2021 Communication via: • Email, face-to-face meetings. • interview	<i>need for income generation and women empowerment</i>	They will support to develop income generation activities and will support to implementation of capacity development during the implementation

Buğday Association Çamtepe Ecological Life Culture Center	Secondary	1-2 March 2021 Communication via: • Email, face-to-face meetings. • interview	License areas of mining and ecological destruction projects, increasing environmental degradation in the region	The project will be implemented with the participation of NGOs, those that are currently helping build the capacity of local land users and managers in from forest and agricultural sector.
Kazdağları Ecology Platform	Secondary	1-2 March 2021 Communication via • Email, face-to-face meetings. • interview	License areas of mining and ecological destruction projects, ecosystem degradation,	
Edremit Environment Platform	Secondary	1-2 March 2021 Communication via • Email, face-to-face meetings. • interview	license areas of mining and ecological destruction projects, again. ecosystem degradation	
e) Academia/research institutions				
Canakkale 18 Mart University (COMU)	Secondary	01-05 March 2021 (inception workshop) Communication via: • Email, phone, face-to-face meetings. • Workshops • Publications, project flyers, brochures.	Consulted during project design. Had limited information about the project. They will be closely informed and involved in the project implementation. Raised issue was to women empowerment in the region and will be addressed by the capacity development.	The project's activities will be developed in cooperation with the COMU include Çanakkale Onsekiz Mart University Women's Studies Application and Research Center
Balikesir University (BU)	Secondary	01-05 March 2021 inception workshop) Communication via: • Email, phone, face-to-face meetings. • Workshops. • Publications, project flyers, brochures.	Consulted during project design. Had limited information about the project. They will be closely informed and involved in the project implementation. Raised issue is the importance of biodiversity of Kazdaglari and necessity to protect them. This will be addressed by component 1 &2.	The project activities related to rapid ecological assessment can be developed in cooperation with BU.
f) Private sector				
Cooperatives	Key Direct beneficiary		Lack of cash flow and access to new technologies/provide techniques.	Beneficiaries of project interventions and key organizations for the implementation of Outcome 2.3 on value chains and related capacity development.

Mining Association	Secondary	1-2 March 2021 Communication via interview		May be involved in establishing sustainable financing mechanisms for nature reserves, Component 3; will be involved in planning of sustainable land use and biodiversity conservation, Component 1.
--------------------	-----------	---	--	---

3. Gender Equality and Women's Empowerment.

Provide the gender analysis or equivalent socio-economic assessment. If available provide document in annex and/or provide link.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes /no) If yes, please explain and upload/annex **Gender Action Plan** or equivalent⁷⁰.

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making; and or

Generating socio-economic benefits or services for women.

Does the project's results framework or logical framework include gender-sensitive indicators? (yes /no)

114. Gender considerations are taken into account in the project since women and men might be exposed to different kinds, levels, and their related impacts due to social and cultural factors. In this respect, the concept of gender mainstreaming is a globally agreed strategy for achieving gender equality and women empowerment and it was defined by the United Nations Economic and Social Council in 1997 as " a strategy for making women's as well as men's concerns and experiences integral dimensions of policies and programs in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated". Therefore, gender mainstreaming is a part of the project, as it is helpful to identify gaps in gender equality.

115. The proposed project will record gender-disaggregated data and will set targets for women's participation at all stages of the project.. The guidance sources for incorporating gender mainstreaming in the project include (i)the GEF Gender Equality Guidance, (ii) the Guide to mainstreaming gender into FAO's project, and (iii) the UN System-wide Policy on Gender Equality and the Empowerment of Women

116. The project aims to include gender-sensitive measures promoting gender equality and women's empowerment to address gender inequalities. The main issues that the project aims to contribute to gender equality are:

- closing gender inequalities in access to and control of natural resources;
- improving women's participation and decision-making; and or
- to produce socio-economic benefits or services for women.
- including gender sensitive indicators in the results framework or logical framework of the project

117. The overall objective of the gender assessment study carried out is to mainstream gender issues into the Project process and ensure the implementation of gender-responsive scoping, identification, assessment, and evaluation stages of the Project. Specific objectives are as follows:

- To collect and collate existing and baseline gender-disaggregated information relevant to the project area
- To identify the types of gender-related environmental and social impacts, risks, and mitigation measures.
- To map key women stakeholders and ensure women's involvement in stakeholder analysis in the Project Area. Analyze women community members, including the most vulnerable ones and women-led institutions' interests, concerns, and incentives, and ensure that their opinions are taken into account in the project. This Gender Action Plan is based on a holistic gender analysis that recognizes gender-differentiated roles, gaps and opportunities in the Kazdağları Region. Gender equality assessments were embedded into three stages of the Project study.

⁷⁰ Please refer to [GEF Gender Equality Guidelines](#), [Guide to mainstreaming gender in FAO's project cycle](#), [GEF Gender Guidelines](#).

118. The key finding findings of the interviews and meetings are:

- The geographical position of the villages/settlements around Kazdağları present a variety of opportunities, challenges and risks (see Appendix 1 of the socioeconomic assessment).
 - Forest village populations are declining.
 - Majority of the forest communities having access to forest for wood and other wood related products and non-wood products such as mushrooms, chestnuts, herbs and medicinal plants.
- Edremit villages in the south of Kazdağları are in better condition in the scope of socio-economic perspective.. Villages there are more open and social.
- Most of the adjacent villages in the region close to the forest on the slope are Turkmen villages. Turkmen villages are a bit more egalitarian, but in other respects, women do not make much difference, they are like women in other villages.
 - The means of living in the villages in Edremit district are agricultural work, forest work, and pension from the Directorate of Forestry. Aside from these, there is also tourism.
- Few women work in forestry in the region. These jobs are predominantly held by men.
- There is inequality between the wages of men and women in the region.
- The local women of the region are also quite backward in political life: for example, very few women are mukhtars. Most members of a village are women. Particularly in mountain villages, women's participation in decisions is more limited.
- The situation is the same for institutional mechanisms and in decision-making mechanisms in both villages and towns, from which women are almost absent.
- There are certain ecological movements in Kazdağları, in which women are more predominant.
- Bayramiç is one of the best districts in terms of activities in the region. They have had seed exchange festivities for years. Many young women with high environmental awareness have settled in this district. Çan and Yenice are a little less advanced in this regard.
- There are women's cooperative initiatives in Kazdağları These cooperatives support the sale of natural products from the villages. There are few retail outlets for those who produce natural products in the region. This is their biggest problem.
- Körfez Independent Women's Solidarity Group is located in the region. They work on violence against women and are active in the follow-up of femicides.
- There is an Equal Women Platform in the region, lead by women who champion gender equality.
- Some women act as spokespersons in the Ecology Union.
- Pollution of the streams in the surrounding area requires increased environmental awareness.
- Associations in the region have studies and projects for the protection of Kazdağları.
- Some women have immigrated to the region to continue their ecological struggle for the protection of Kazdağları, while other environmental platform activists are living part-time in the region.
- There are women who will support the establishment of a producer women's cooperative.
- There are some active women working in the Kazdağları Conservation Association.
- Studies on the climate crisis and women's labor are carried out in cooperation with the Mount Ida Women's Association and the Tourism Economy Association.
- Attempts to establish a Women's Solidarity Network in the Bayramiç region have begun.
- There is a project of “Local Fruit Heritage” in the Bayramiç region. This project aims to revitalise local fruits and increase their production.
- Kazdağları is a region where Turkmens, Yoruks, greengrocers, and immigrants live in live in there. Villages may also differ in terms of customs and traditions, folklore, food, clothing and handicrafts.
- There are also problems experienced by women in organizational structures and networking, sometimes due to their limited educational status and old age, which needs to be addressed.

Gender Action Plan

Project activities to respond to the identified gaps	Indicators and Targets	Timeline	Responsibilities	Budget (US Dollars)
Outcome 1: Raise gender awareness and understanding of the importance of gender integration in agroforestry farms through relevant gender sensitization and training				
<p>Output 1.1. In-service training of agriculture and forestry officials and at national and regional levels, to carry out extension for integrated landscape management.</p> <p>Activity 1.1.1 Ensure deliberate gender representation during all training programs</p> <p>Activity 1.1.3 Provide gender-sensitive training to regional institutions, NGOs, and Local authorities officials project activities.</p> <p>Activity 1.14. Production of training materials and promotion materials</p>	<p>Proportion of women that have attended the training program (30%)</p> <p>Gender-sensitive approaches in trainings and workshops: -Inclusion of women's views</p> <p>of gender-sensitive trainings and Workshops. - At least two gender-specific training per Province</p> <p>Gender mainstreaming in training material: -women's perspectives and activities taken into account in 100% of training material developed</p>	<p>Two Year (2021-2022)</p>	<p>Provincial Directorate of Agriculture and Forestry FAO Local University NGOs</p>	<p>20.000</p>
Outcome 2: Promote and implement gender-responsive production systems for sustainable land and forest management, biodiversity conservation and livelihoods in the project area.				
<p>Output 2.1 Increased number of farms and production units run by women.</p> <p>Activity.2.1.1 Identify areas of the region where integrated farms and production units could be developed and where a greater number of women producers are located.</p> <p>Activity 2.1.2 Increase the visibility of agro-farms and production units and the sustainable practices of women producers, as well as experiences that help create productive spaces for them and can be considered when developing integrated farms and production units.</p>	<p>Gender-based approach designed to prioritize integrated farms</p> <p>Number of village women involved in integrated management projects</p> <p>Number of cooperatives by women</p>		<p>Ministry of Agriculture, FAO District Directorate of Agriculture Universities Private Sectors Municipalities NGOs</p>	<p>30.000</p>

<p>Output 2.2 Empowerment of women with integrated farm projects. Activity 2.2.1 Establish pilot projects for gender-responsive integrated farms and production units that recognize and value gender-differentiated contributions and provide differentiated technical assistance for women. Activity 2.2.2 Increase coverage of integrated farms and production units run by women through the expansion, improvement, and simplification of financial instruments, such as the TKDK, or the design of specific loans for women owners and non-owners.</p>	<p>Gender-responsive technical assistance and outreach strategy established.</p> <p>Percentage of women participating in training and exchange of experiences (%50) Number of support trainings for women At least 4 support trainings per Province.</p>	<p>3 years (2021-23)</p>	<p>District Directorate of Agriculture and FAO Universities NGOs Private Sectors Municipalities</p>	<p>30.000</p>
<p>Output 2.4 Women leaders share their experiences and knowledge with other women and men of various ages. . Activity 2.4.1 Identify local women who are interested in sharing experiences and knowledge Activity 2.4.2. Create the capacities that will enable these women to lead formal training processes to share their traditional knowledge and new environmentally friendly technologies. Activity 2.4.3. Carry out an annual exchange of experiences at the regional or national level among various women’s organizations, in order to strengthen their technical capacities to develop integrated farms or production units Activity 2.4.4. Establish “Women Teaching Other Women” field schools as part of the courses offered to them by various NGOs, institutions.</p>	<p>National exchange of experiences organized and promoted by women’s associations with government support.</p> <p>Number of field schools run by women Number of courses offered Number of attendees to such courses. Number of local media coverage about women managed farms or productive units</p> <p>.</p>	<p>2 years (2021-22)</p>	<p>Ministry of Agriculture, FAO District Directorate of Agriculture Ministry of National Education, Universities NGOs</p>	<p>40.000</p>
<p>Outcome 3 Promote positive financial mechanisms, benefiting men and women equally, for the conservation and sustainable management of forests</p>				

<p>Output 3.1 A simplified method of financing that facilitates the entry of women engaged in forest protection and management activities.</p> <p>Activity 3.1.1 Identify the profile of women in forest and non-forest villages.</p> <p>Activity 3.1.2. Systematize the gender-differentiated characteristics of farms and non-farm productive spaces that do not meet the criteria of current financing mechanisms, in order to create robust databases and build baselines.</p> <p>Activity 3.1.3. Identify the types of requirements and expectations of women owners and non-owners who do not receive funding.</p> <p>Activity 3.1.4. Design a user-friendly, effective, and gender-responsive system of access to information on funding</p> <p>Activity 3.1.5 Implement a gender-responsive training and technical assistance system to manage forms and requirements.</p> <p>Activity 3.1.6 Carry out a negotiation consulting process designed for women producers.</p>	<p>A needs assessment research for identify profile engaged to women.</p> <p>Agroforestry systems modality that takes into account the gaps and characteristics of women’s farms.</p> <ul style="list-style-type: none"> - Percentage of women producers benefiting from environmental financing mechanisms 	<p>Two years (2021-2023)</p>	<p>Ministry of Agriculture, FAO District Directorate of Agriculture</p>	<p>50.000</p>
<p>Outcome 4: Promote the restoration of forest landscapes and ecosystems in a gender-responsive manner.</p>				
<p>Output 4.1 Women participate fully and effectively in forest landscape and ecosystem restoration.</p> <p>Activity 4.1.1 Recognize women’s contribution to the restoration of forest landscapes and ecosystems.</p> <p>Activity 4.1.2 Recognize, document, and value women’s knowledge related to restoration.</p> <p>Activity 4.1.3 Identify women leaders who are interested in carrying out restoration activities.</p> <p>Activity 4.1.4 Promote a network of women who can</p>	<p>Documentation of women’s contributions and knowledge with respect to forest landscape and ecosystem restoration.</p> <ul style="list-style-type: none"> - Number of women-led agroforestry initiatives and economic alternatives created 	<p>2 years (2021-22)</p>	<p>Ministry of Agriculture, FAO District Directorate of Agriculture Universities NGOs</p>	<p>20.000</p>

<p>restore and protect forest ecosystems, where experiences can be shared, field practices carried out and knowledge applied.</p> <p>Activity 4.1.5 Promote the implementation of domestic agroforestry systems, vegetable gardens, and other women-led agroforestry systems involving family and community.</p> <p>Activity 4.1.5 Identify forest products that can generate economic alternatives for women and maintain the forest for the future.</p>				
<p>Outcome 5 :Create the enabling conditions to integrate a gender perspective in environmental and climate change initiatives.</p>				
<p>Output 5.1 Gender, environment and climate change network.</p> <p>Activity 5.1.2. Share and disseminate lessons learned and good practices about gender and the environment that drive continuous improvement of technical organizational processes</p> <p>Activity 5.1.3. Implement awareness-raising and training activities supported by practical tools that enable environmental authorities to start integrating, implementing and monitoring gender issues</p>	<p>Network work plan and number of meetings and agreements implemented.</p> <p>-A number of projects and training processes in which the network provided technical support to include a gender perspective.</p>		<p>Ministry of Agriculture, FAO District Directorate of Agriculture Universities NGOs</p>	<p>15.000</p>
<p>Output 5.2. Disseminating information on funding sources and how women can access them.</p> <p>Activity 5.2.1 Identify all existing sources of funding for sustainable rural development in the region .</p> <p>Activity 5.2.2. Identify how information on these funding sources is disseminated</p> <p>Activity 5.2.3 Identify the barriers women experience in accessing this information</p> <p>Activity 5.2.4 To facilitate the development of environmental activities, encourage the establishment of an information platform for rural women where they can call and ask about all available financial and technical support options.</p>	<p>Design of an information platform for Kazdağları women.</p> <p>-Percentage of women who receive information on funding</p>		<p>Ministry of Agriculture, FAO District Directorate of Agriculture Universities NGOs</p>	<p>20.000</p>

<p>Output 5.3. Projects that create sustainable economic opportunities for women and strengthen the conservation and sustainable management of forests within Ministry of Agriculture and Forestry .</p> <p>Activity 5.3.1 Identify innovative project ideas involving women that strengthen forest conservation and sustainable management.</p> <p>Activity 5.3.2. Design pilot projects such as:</p> <ul style="list-style-type: none"> * Project to obtain non-timber forest products that can be distributed to fine cuisine restaurants. * Pilot project to create a network of women-led sightseeing tours. 	<p>Innovative project ideas involving women that strengthen conservation and sustainable management of identified forest sustainable management.</p> <p>Number of innovative pilot projects and gender-sensitive projects funded</p>	3 years (2021-23)	Ministry of Agriculture, FAO District Directorate of Agriculture	40.000
				256.000

4. Private Sector Engagement.

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

119. For-profit sector in Balıkesir and Çanakkale provinces can be divided into two major groups:

- a) Small and medium scale actors (mostly local): local producers, manufacturers, trade, small scale industry, food processing, service sector etc.
- b) Large scale actors (mostly national and international): mining and energy sectors, partly tourism operators (nature tourism, eco-tourism in the Kazdağları ridge) investing in the region, and large scale industry.

120. Locations of some major investments (thermic, geothermal, wind power plants and mines) can be seen on the interactive map prepared by Kazdağı Association for Protection of Natural and Cultural Assets. Apparently, within the project area, there is not any large power plant or major mining activity that might jeopardise the project activities.

121. A Full list of stakeholders, classified in accordance with their sectors, was prepared in the PPG phase. Refer to this list, for the below mentioned organisations that might facilitate the private sector engagement.

122. South Marmara Development Agency's (GMKA) 2014-2023 Regional Plan, (where regional vision described as: "A South Marmara with more qualified labour, competitiveness and viability") was developed together with all stakeholders, including the private sector actors. The development axes of the plan to achieve this vision are:

- Quality Social Life and Qualified People,
- Liveable Environment and Spaces,
- Strong Economy and Competitive Sectors.

123. A number of improvements are prioritised that overlap with the Project's components such as: Efficiency and Quality in the Agricultural Sector, Tourism Sector, etc. GMKA's investment guides on industry, mining, tourism, energy, agriculture and animal husbandry, provide extensive information for the private sector, and can be accessed via GMKA's web site, (<https://www.gmka.gov.tr/en/document-center>). GMKA also provides interactive investment maps for Balıkesir and Çanakkale. According to these interactive maps, apart from the tourism sector potential, which covers Kazdağı National Park, no potential investment is foreseen for major economic sectors within the project area.

Mining

TEMA Foundation's Kazdağları Mining Report, indicates that, there are some mining activities within the boundaries of the project area; furthermore, according to the mining regulation, the whole project area and the wider Kazdağları region including the national park and the other protected areas (under the authority of NCNP), and the production forests (under the authority of GDF) bear potential for licensed mining activities, in case a mining company applies for search and/ or extraction license.

Tourism

124. GMKA foresees a series of tourism initiatives including private sectors and NGOs. Some of them include establishment of hiking and mountain biking routes and camping facilities on Kazdağları, and Alaçam Mountain; development of village tourism activities to provide income generation opportunities for mountain villages; (2014-2023 Regional Plan, p. 219)

Industry and Energy

125. There is no major Industrial Zone (Park), large power plant or wind farms within the project area. There are two thermic power plants around Çan, and one thermic power plant nearby Kalkım. There are two wind farms at the north-east and south of Bayramiç, close to the project area boundaries.

Potential engagement mechanisms for private sector actors in the implementation phase:

126. PMU can cooperate with ‘umbrella’ organisations on local and national levels as an interface to access private sector actors.

- **South Marmara Development Agency (GMKA):** Exclusively provides service to Balıkesir and Çanakkale provinces. GMKA works with all sectors, including private sector, entrepreneurs and investors, from and outside of the region. GMKA was visited by PPG Team in September 2021, and GMKA team attended verification workshop in September 2021. GMKA is willing to cooperate with the PMU in the implementation phase and potential collaboration fields were identified as follows, (METT Field Work Notes, September 2021): i) GMKA can provide mentorship/ capacity building services to rural cooperatives and agricultural unions that fall in the Project area. ii) assist accessing to stakeholders that should take part in the local governance mechanisms. iii) taking part in the planned Stakeholder Forum and function as facilitator. Within the second item mentioned above, GMKA can provide access to local private sector actors.
- **Provincial and sub-provincial trade chambers (and where available industry chambers):** There are provincial level industry and trade chambers both in Balıkesir and Çanakkale. Balıkesir has separate chambers for industry and trade. List of member companies in both provinces can be accessed online. Both provinces have commodity exchange markets too. PPG Team detected only one trade chamber in a major sub-province on the south east of the project area, namely: Edremit.
- **Chambers of merchants and craftsmen:** For smaller scale business and trade, there are provincial level unions for chambers of merchants and craftsmen both in Balıkesir and Çanakkale. Additionally, there are sub-provincial chambers in some of the districts nearby the project area, namely: Edremit, Bayramiç, Çan and Yenice.
- **Professional chambers:** Chamber of Mining Engineers have branches both in Balıkesir and Çanakkale. Although these chambers do not represent the mining industry, they are the umbrella organisations of the engineers working in the mining sector. Chamber of Forest engineers and Foresters' Association of Turkey could be interfaces for engagement of the wood products sector.
- **Local cooperatives:** During the PPG phase, 52 active cooperatives were identified in the region; 17 of them are women cooperatives. Most of the cooperatives are entitled as ‘Agricultural Development Cooperatives’ and engaged mainly in logging in the five forest districts..

5. Risks.

Risk management is a structured, methodical approach to identifying and managing risks for the achievement of project objectives. The risk management plan will allow stakeholders to manage risks by specifying and monitoring mitigation actions throughout implementation. Part A of this section focuses on external risks to the project and Part B on the identified environmental and social risks from the project.

Section A: Risks to the project

In the section below, elaborate on indicated risks **to the project**, including climate risks⁷¹, potential social environmental, political or fiduciary 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.

Description of risk	Impact ⁷²	Probability of occurrence ³	Mitigation actions	Responsible party
Political: Limited or decrease in project support from the government [PIF rating = Low]	H	L	The government authorities have fully backed the development of this concept and all concerned government stakeholders will be fully involved in project preparation and implementation to ensure continued support. Moreover, the project fits into national development and environmental priorities. High level of cofinancing is positive indicator of commitment.	MAF / FAO
Institutional: Low institutional capacity at national and local level hampering project progress [PIF rating = Medium]	M	M	To mitigate this risk, the project design incorporates institutional capacity building measures taking into account specific needs of stakeholders, based on modular training programme that will be institutionalized post-project.	PIU
Implementation: 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) [PIF rating = Low-Medium]	M	L	Under Component 1, a multisectoral coordination and governance mechanism will be established, within and beyond the project context, to ensure coordination between all relevant government actors. Stakeholder Forum will be established at regional level, contributing to delivery of a regional vision. Consultations have been held with all relevant government departments and this process will continue throughout the project preparation and subsequent implementation to ensure that the project progress and impacts generated do not happen in isolation.	PIU/MAF
Climate Change: Natural changes in ecosystems and associated non- wood species due to gradual changes in climate and extreme weather events. [PIF rating = Low]	H	L	The monitoring system developed in the project will identify changes in ecosystems, specifically in relation to non-wood forest products that are likely to be linked to climate change, so that remedial actions can be taken. Risk is considered to be low in terms of any significant changes over project's duration but monitoring any changes or trends will contributing to building	PIU

⁷¹ GEF-STAP guidance on climate risk screening: <https://www.stapgef.org/stap-guidance-climate-risk-screening>

⁷² H: High; M: Moderate; L: Low.

Description of risk	Impact ⁷²	Probability of occurrence ³	Mitigation actions	Responsible party
			resilience to climate changes into project interventions.	
Technical: Current gold mining activities taking place in Kazdağlari region [PIF rating = Low]	M	L	Mining risk is considered low, given the metamorphic geological texture and structure of project site. However, there are some small, abandoned mine sites that will be rehabilitated with forests. Note: recent demonstrations (2019) regarding gold mining activities by the Canadian firm Alamo are far from project site (approximately 40 km as the crows flies).	MAF
Stakeholders: Reluctance of local population to involve and participate effectively in the project activities [PIF rating = Low-Medium]			Local communities (through community and civil society representatives) will be 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. Note also that the Regional Forum will include community representatives.	PIU
Natural hazards, including weather phenomena and epidemiological risks (e.g. COVID-19) that could delay programme activities.	M	H	Identification of alternatives to in-person meetings and consultations, awareness-raising on the situation in the field between interest groups, and identification of green recovery measures. The evolution of the COVID-19 epidemic will be monitored closely, to allow sufficient time for mitigation plans to be prepared As concerns COVID-19, during project preparation a series of on-the-ground assessments were made with local actors. Given current conditions, it is clear that costs have risen, particularly for travel and in-person meetings. The project will ensure that meetings follow national guidelines to avoid contagion, and will supervise any impact that could delay implementation.	PIU
Climate change: Forest restoration and conservation activities can be seriously affected by the adverse consequences of climate change, e.g. droughts and high temperatures that could cause wildfires, increase pests, or lead to the	M	H	The programme is implemented precisely to strengthen resilience by restoring forests, habitats and livelihoods, reducing GHG emissions and strengthening capacities to respond to extreme events.	

Description of risk	Impact ⁷²	Probability of occurrence ³	Mitigation actions	Responsible party
extinction of threatened species.				

Section B: Environmental and Social risks from the project.

Corresponding to section 9 in CEO Endorsement module of the GEF Portal.

Environmental and Social Risk Classification: low risk moderate risk high risk

127. **Identification of environmental and social risks: verification and detection.** The project's environmental and social risks are classified as moderate. The intervention will take place in and around a large protected area, the Kazdagi Natural Park, and several other Nature Reserves and other protection categories (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest). 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 reduce deforestation and biodiversity loss, while strengthening ecosystemic services in order to promote access to more resilient livelihood options.

- The following table summarizes these risks and mitigation measures:

	Question	YES	NO
1	Would this project: <ul style="list-style-type: none"> result in the degradation (biological or physical) of soils or undermine sustainable land management practices; or include the development of a large irrigation scheme, dam construction, use of waste water or affect the quality of water; or reduce the adaptive capacity to climate change or increase GHG emissions significantly; or result in any changes to existing tenure rights⁷³ (formal and informal⁷⁴) of individuals, communities or others to land, fishery and forest resources? 		X
2	Would this project be executed in or around protected areas or natural habitats, decrease the biodiversity or alter the ecosystem functionality, use alien species, or use genetic resources?	X	
3	Would this project: <ul style="list-style-type: none"> Introduce crops and varieties previously not grown, and/or; Provide seeds/planting material for cultivation, and/or; Involve the importing or transfer of seeds and or planting material for cultivation or research and development; Supply or use modern biotechnologies or their products in crop production, and/or Establish or manage planted forests? 		X
4	Would this project introduce non-native or non-locally adapted species, breeds, genotypes or other genetic material to an area or production system, or modify in any way the surrounding habitat or production system used by existing genetic resources?		X
5	Would this project: <ul style="list-style-type: none"> result in the direct or indirect procurement, supply or use of pesticides⁷⁵: <ul style="list-style-type: none"> on crops, livestock, aquaculture, forestry, household; or as seed/crop treatment in field or storage; or 		X

⁷³ ⁷³ Tenure rights are rights to own, use or benefit from natural resources such as land, water bodies or forestsx

⁷⁴ Socially or traditionally recognized tenure rights that are not defined in law may still be considered to be 'legitimate tenure rights'.

⁷⁵ Pesticide means any substance, or mixture of substances of chemical or biological ingredients intended for repelling, destroying or controlling any pest, or regulating plant growth.

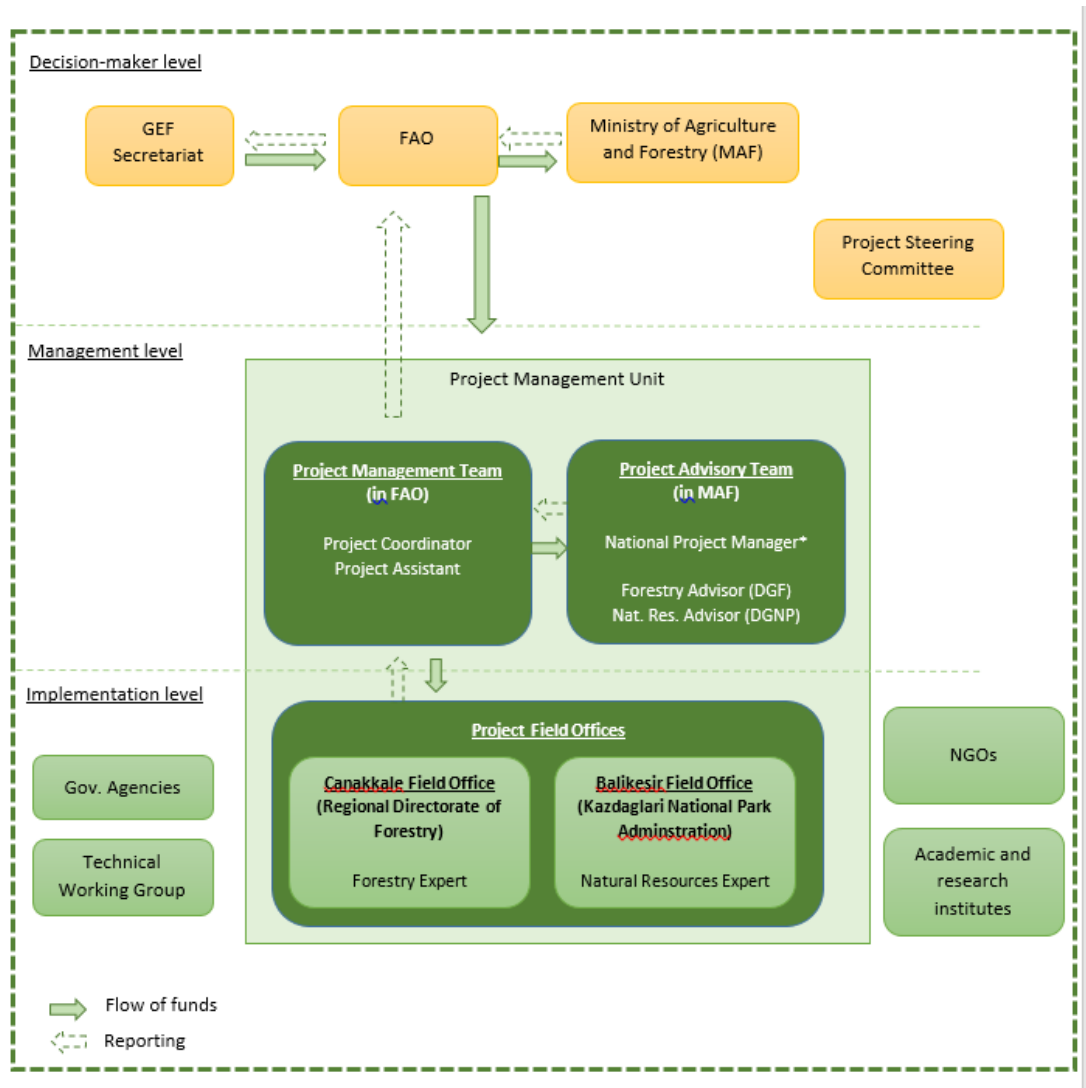
	<ul style="list-style-type: none"> ▪ through input supply programmes including voucher schemes; or ▪ for small demonstration and research purposes; or ▪ for strategic stocks (locust) and emergencies; or ▪ causing adverse effects to health and/or environment; or • result in an increased use of pesticides in the project area as a result of production intensification; or • result in the management or disposal of pesticide waste and pesticide contaminated materials; or • result in violations of the Code of Conduct? 		
6	Would this project permanently or temporarily remove people from their homes or means of production/livelihood or restrict their access to their means of livelihood?		X
7	Would this project affect the current or future employment situation of the rural poor, and in particular the labour productivity, employability, labour conditions and rights at work of self-employed rural producers and other rural workers?		X
8	Could this project risk overlooking existing gender inequalities in access to productive resources, goods, services, markets, decent employment and decision-making? For example, by not addressing existing discrimination against women and girls, or by not taking into account the different needs of men and women.		X
9	<p>Would this project:</p> <ul style="list-style-type: none"> • have indigenous peoples* living outside the project area¹ where activities will take place; or • have indigenous peoples living in the project area where activities will take place; or • adversely or seriously affect on indigenous peoples' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (physical² and non-physical or intangible³) inside and/or outside the project area; or • be located in an area where cultural resources exist? <p>* FAO considers the following criteria to identify indigenous peoples: priority in time with respect to occupation and use of a specific territory; the voluntary perpetuation of cultural distinctiveness (e.g. languages, laws and institutions); self-identification; an experience of subjugation, marginalization, dispossession, exclusion or discrimination (whether or not these conditions persist).</p> <p>¹The phrase "Outside the project area" should be read taking into consideration the likelihood of project activities to influence the livelihoods, land access and/or rights of Indigenous Peoples' irrespective of physical distance. In example: If an indigenous community is living 100 km away from a project area where fishing activities will affect the river yield which is also accessed by this community, then the user should answer "YES" to the question.</p> <p>²Physical defined as movable or immovable objects, sites, structures, group of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance located in urban or rural settings, ground, underground or underwater.</p> <p>³Non-physical or intangible defined as "the practices, representations, expressions, knowledge and skills as well as the instruments, objects, artifacts and cultural spaces associated therewith that communities, groups, and in some cases individuals, recognize as part of their spiritual and/or cultural heritage"</p>		X

6. Institutional Arrangements and Coordination.

6.a Institutional arrangements for project implementation.

128. The Ministry of Agriculture and Forestry (MAF) will be the main project partner. At the request of the MAF, FAO will administer project funds. The project will have a Steering Committee (PSC) led

by the MAF, and other participating ministries and local governments. The Project Coordinating Unit (PCU) in FAO, financed with resources from the GEF under Project Management Cost and in part with co-financing, will be led by a project manager responsible for executing the day-to-day activities of the project. Considering the characteristics of the project, the proposed organizational structure is as follows:



Executing and implementing agency

129. Upon request of Ministry, FAO will be both the GEF implementing and executing agency. As the GEF Agency, FAO will be responsible for project oversight to ensure that GEF policies and criteria are adhered to, and that the project efficiently and effectively meets its objectives and achieves expected outcomes and outputs as established in the project document. FAO will report on project progress to the GEF Secretariat and financial reporting will be to the GEF Trustee.

130. Executing Responsibilities (Budget Holder):

131. Under FAO's Direct Execution modality, the FAO Representative in Turkey will be the Budget Holder (BH) of this project. The BH, provided with the technical assistance of the Lead Technical Officer (LTO), will be responsible for timely operational, administrative and financial management of the project. The BH will head the multidisciplinary Project Task Force that will be established to support the implementation of the project and will ensure that technical support and project inputs are provided in a timely manner. The BH will be responsible for financial reporting, procurement of goods and contracting of services for project activities in accordance with FAO rules and procedures. Final approval of the use of GEF resources rests with the BH, also in accordance with FAO rules and procedures.

Project Steering Committee (PSC)

132. The PSC is the highest-level decision-making body in the overall project management and will coordinate between the different actors. The PSC will approve Annual Work Plans and Budgets on a yearly basis and will provide strategic guidance to the Project Management Team and to all executing partners. The National Project Steering Committee (PSC) will consist of representatives from MAF and FAO. The Project Steering Committee (PSC) will establish the project policies and strategies and provide guidance and supervision to the activities financed by the GEF and project co-financiers.

133. Other activities of the Steering Committee will include: (i) overall monitoring of project progress and the achievement of the overall results, these will be presented in semi-annual and annual progress reports; (ii) provide strategic guidance for decision making; (iii) review and agree on the strategy and methodology of the project, as well as the changes and modifications derived from the implementation of such; (iv) call and organize meetings with different national, regional and local actors; and (v) review and approve operational budgets and progress reports (semi-annual and annual).

134. The Steering Committee may seek support to monitor the project from the technical working group, which include various entities such as local and academic institutions/organizations. The PSC will meet at least once a year; however, if its members consider it necessary, the PSC may call for extraordinary meetings. Its functions will be detailed in the project manual or guide that will be prepared by the Project Management Unit. The Project Manager will act as the secretary in said meetings.

National Project Manager

135. The MAF will assign government staff at the managerial level from the Ministry of Agriculture and Forestry to lead project implementation -. The National Project Manager (MPM) 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. The NPM will chair the Project Steering Committee.

The Project Management Unit (PMU)

136. Project Management will be shared between FAO (administrative support) and the MAF. The PMU will include a Project Manager and a Project Assistant who will be supported by technical experts on biodiversity conservation and forestry. The field offices will be located in Balikesir and Canakkale under the Regional Directorates of Forestry and the National Parks Administrations, respectively. The PMU will be under the direct supervision of the Executive Director of the Project.

137. The PMU will be in charge of the daily coordination and management of the project through work plans and Term of Reference and carefully designed administrative arrangements that meet the requirements of the Implementing Agency. The PMU staff will be comprised of the following:

138. **Project Coordinator (PC):** will be in charge of project implementation, management, and oversight of the 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). Detailed TORs for the NPC can be seen in Annex N. The NPC will have an administrative role. The NPC will be responsible, among others, for:

- i. Lead project execution, including preparation of Annual Work Plans and Budgets (AWP/B) for approval by the PSC, preparation of terms of reference and contracts to implement the AWP/B, monitoring the implementation of project activities, and ensuring coordination with relevant initiatives
- ii. Ensure project monitoring and evaluation follows GEF guidance, including leading the preparation of the annual Project Implementation Review (PIRs), FAO Project Progress Reports, and ensuring Mid-Term and Final Evaluations are implemented on time.
- iii. Ensuring compliance with donor requirements, including ensuring implementation of the Gender Action Plan and the Stakeholder Engagement Plan, and informing the Project Steering Committee and FAO of any technical difficulties or delays that arise during project implementation
- iv. Ensure financial resources are used appropriately in alignment with the PSC-approved AWP/B, submitting six-monthly technical and financial reports to FAO, and managing requests for funding as per FAO rules

139. The **Project Assistant** will support the PC in the implementation of the project activities. She/he will work under the supervision of the Project Coordinator and will coordinate their work with the MAF team as well as other interested actors in order to ensure proper implementation of the project. She/he will provide secretarial and administrative support for the project management and will be responsible for properly directing the acquisition of the different supplies for the project, following FAO procedures.

140. Two technical advisors (Natural Resource Management Advisor and Forest Expert) will provide expert advice to the PMU and will ensure alignment with interests and policies of both the Directorate of Natural Parks and the Directorate of Forestry within the MAF. Specifically, the **National Resource Management Advisor (NRMA)** will be a technical expert with expertise in biodiversity conservation. The NRMA will support activities within (i) Component 1 dealing with strengthening protected areas management within a sustainable landscape management context and (ii) Component 2 in relation to the integrated management of the Kazdaglari Region to safeguard its unique biodiversity and enhance the functioning of its ecosystems to ensure the provision of goods and services. Similarly, the Forestry Expert(FE) will support activities under Component 2 related to the integration and sustainable management of forest, agricultural and other production systems.

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

141. The proposed project will coordinate with the ongoing FAO/GEF project on “Sustainable Land Management and Climate Friendly Agriculture” in Konya (Turkey) which aims to rehabilitate degraded dry lands and mainstream biodiversity conservation into production landscapes, and the FAO/GEF project (under preparation) on “Conservation and Sustainable Management of Turkey’s Steppe Ecosystems” which aims at introducing the landscape approach to strengthens the PA system and mainstreams biodiversity conservation into production landscapes. The proposed project will also benefit from MRV system developed and the methods for integration of biodiversity conservation into forest landscape management established under the ongoing UNDP/GEF project on Integrated

Approach to Management of Forests in Turkey, with demonstration sites in high conservation value forests in the Mediterranean region.

142. Finally, 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 land use planning, as well as with the monitoring systems being developed to report on LDN achievement.

7. Consistency with National Priorities.

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

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury
- Minamata Initial Assessment (MIA) under Minamata Convention
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD
- National Implementation Plan (NIP) under POPs
- Poverty Reduction Strategy Paper (PRSP)
- National Portfolio Formulation Exercise (NPFE) under GEFSEC
- Biennial Update Report (BUR) under UNFCCC
- National Legislation, Governance and provisions for Environmental and Social Risk Management
- Others

143. National Development Plan: With respect to GoT national development plans, the project will directly contribute to the Eleventh Development Plan of Turkey (2019-2023), and specifically the objective “To protect the environment and natural resources, improve its quality, ensure effective, integrated and sustainable management, implement environmental and climate-friendly practices in all areas, and increase environmental awareness and sensitivity of all segments of the society.” The project’s promotion of integrated management of productive forest landscapes and improved biodiversity conservation in PAs, will significantly support this priority of the Development Plan.

144. 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 contributes to these objectives.

145. 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, over consumption of natural resources, genetic erosion and pollution.

This proposal aims at improving the management of Protected Areas in the target Region. Pressures to biological diversity will be tackled through the revision of demarcation criteria for the Kazdagi National Park, a strategy for strengthen protected area governance models, training of Government staff in best practices concerning landscape restoration and forest landscape 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 protected areas in the target Region. Moreover, it will establish and pilot a monitoring system for rehabilitated forests. As a part of the Integrated forest management plans to be implemented, the proposal will establish biodiversity monitoring and 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 on ecosystem services will be raised among public and private sectors, and training of specialists will be ensured.

This proposal will include training Government staff (at least 250 govt. staff and 500 local stakeholders) at the National Park Directorate and Provincial Division Directorate 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 degraded ecosystems (marine, forest, wetland etc.) will be provided, monitoring and inspection thereof will be performed.

This proposal will implement sustainable financing measures that aims to restore 5,000 hectares of degraded forest landscape in the Kazdagi region.

146. Finally, the project is contribute to Turkey LDN strategy as follows:

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.

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. Please also describe how the project is incorporating lessons learned from previous interventions in the same context⁷⁶. Finally, describe the project’s communication strategy.

147. 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 an Integrated Landscape Management (ILM) approach, to preserve biodiversity, ecosystems and natural habitats. 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.

148. The communication strategy will be a key component for mainstreaming ILM approaches and enhancing key policy, institutional and finance-related reforms and initiatives, as well as to secure the support of the local communities in and around the project area (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.

149. The project’s third component focuses on communication and capacity development: “Enhancing awareness, understanding and capacities to integrate management for conservation and production purposes across landscapes.” To achieve the objective of the 3rd component, a Communications Strategy and Action Plan (output 3.1.1) will be prepared and implemented including events, outreach materials and knowledge products within the project, to reach out and ensure active engagement of all the stakeholders (including educational activities in schools and visitors), and to promote gender equity and integrated management at landscape scales.

150. Modular capacity development training program for protected areas and landscape management (output 3.1.2) will be designed and delivered across relevant sectors within national and local governments, communities, NGOs and private enterprises. The training program is intended to support all aspects of capacity development supported by the project, particularly with respect to Outcomes 2.2

⁷⁶ [FAO’s Knowledge Management Strategy](#) requires formulators and implementers to consider sound knowledge management practices throughout the project cycle.

and 2.3, and target some 2,800 project stakeholders of which an estimated 1,172 are from government/other professionals and the rest are from the local communities.

151. Under output 3.2.1, a transparent, gender-sensitive Monitoring & Evaluation plan will be designed to inform project implementation, decision-making and adaptive management. Management performance of the PA's will be measured via METT forms, taking the September 2021 METT data as baseline.

152. The Project's KM approach extends towards outside the project area (on national and international scales). Project results and lessons learned will be shared with project stakeholders and disseminated nationally and more widely across Caucasus and Middle East, (output 3.2.2).

153. Under output 3.2.2, specific attention will be given to various types of knowledge products, such as: a basic project website for its stakeholders and other potentially interested parties; a quarterly newsletter to inform stakeholders about implementation progress; technical reports (survey results, strategies and action plans, management plans and best practice guidelines), project's terminal report. This will ensure maximum impact of the project activities and guarantee an effective visibility and dissemination of the project related results at the national and regional levels.

154. The design of the Communication Strategy is expected to be informed by the results of the Knowledge, Attitude and Practice (KAP) survey undertaken at the beginning of the project, (output 3.1.1). enabling it to be aimed at integrating biodiversity conservation and production management across key land use decision-making processes (e.g. sector planning, land use planning, community development plans) at landscape scales. Additionally, mid-term and end-of-project surveys will be conducted to monitor and evaluate the efficiency and effectiveness of the project implementation. As a way forward, the surveys themselves will also raise the profile of the project and contribute to mainstreaming of landscape approach, since KAP methodology will track gender, age group and social background of survey participants, many of whom will be stakeholders and potential project beneficiaries.

155. The designed Communications Strategy and Action Plan 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.

9. Monitoring and Evaluation.

Describe the budgeted M & E plan including a timeline of planned Monitoring and Evaluation Activities, expected dates of submission of Terminal Evaluations and any Mid-Term Reviews, a budget, and roles and responsibilities. In addition please ensure that arrangements for Stakeholder Engagement and information disclosure are specified here or in the Stakeholder Engagement section of this Project Document.

156. "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."

157. Project oversight will be carried out by the PSC, FAO GEF Coordination Unit and relevant technical units in FAO headquarters. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and lead to the achievement of project outcomes; (ii) project outcomes lead 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/adaptation benefits are being delivered. 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.

158. Project monitoring will be carried out by the PMU and the FAO Budget Holder (BH). Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At project inception, the results matrix will be reviewed to finalize identification of: i) outputs; ii) indicators; and iii) any missing baseline information and targets. A detailed M&E plan, 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 Knowledge Management/ M&E Officer appointed at the PMU.

159. Specific reports that will be prepared under the M&E program are: (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, assessment of the relevant GEF-7 Core Indicators against the baselines will be required at mid-term and final project evaluation.

160. **Project Inception Report.** It is recommended that the PMU prepare a draft project inception report in consultation with the LTO, BH and other project partners. Elements of this report should be discussed during the project Inception Workshop and the report subsequently finalized. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, and a detailed project monitoring plan. The draft inception report will be circulated via e-mail to the PSC for review and comments before its finalization, no later than one month after project start-up. The report should 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.

161. **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 the PMU will submit a final draft AWP/B within two weeks of the workshop to the BH. For subsequent AWP/B, the PMU will organize a project progress review and planning meeting for its review and adaptive management. Once PSC comments have been incorporated, the BH will circulate the AWP/B to the LTO and the FAO GEF Coordination Unit for comments/clearance prior to uploading in FPMIS by the BH. The AWP/B must be linked to the project's Results Framework indicators so that the project's work is 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 and the FAO GEF Coordination Unit, and uploaded on the FPMIS by the BH.

Budgeted Project Monitoring and Evaluation Plan

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Inception Workshop	Project Management Unit (PMU)	Within two months of project document signature	5,000
Project Inception Report	PMU	Within two weeks of inception workshop	No extra costs

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Annual PSC meetings and bi-annual TF meetings	PMU	Annually	Covered by co-financing
Project Progress Reports (PPRs)	PMU	Annually	M&E Expert
Project Implementation Review report (PIR)	PMU	Annually in July	Covered by above
Co-financing Reports	PMU	Annually	No extra costs
International exchange visits	PMU and BH	Y2 , Y3 and Y4	80,000
Mid-term Review	PMU and BH	In the 3 rd quarter of the 3 rd year of the project	35,000
Final Evaluation	BH, FAO Office of Evaluation	At least three months before the end date of the project	45,000
Total Budget			USD 165,000

162. **Project Progress Reports (PPR):** PPRs will be prepared by the PMU based on the systematic monitoring of output and outcome indicators identified in the project’s Results Framework (Annex A1). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. PPRs will also report on projects risks and implementation of the risk mitigation plan. 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.

163. **Annual Project Implementation Review (PIR):** The PMU (in collaboration with the BH and the LTO) will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the FAO GEF Coordination Unit Funding Liaison Officer (FLO) for review and approval no later than (check each year with GEF Unit but roughly end June/early July each year). The PMU will submit the PIR to the FAO GEF Coordination Unit as part of the Annual Monitoring Review report of the FAO-GEF portfolio. PIRs will be submitted to the GEF and uploaded on the FPMIS by the FAO GEF Coordination Unit.

164. **Technical Reports:** Technical reports will be prepared by national, international consultants (partner organizations under Letters of Agreement) as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the PMU to the BH who will share it with the LTO. The LTO will be responsible for ensuring appropriate technical review and clearance of said report. The BH will upload the final cleared reports onto the FPMIS. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.

165. **Co-financing Reports:** The BH, with support from the PMU, will be responsible for collecting the required information and reporting on co-financing as indicated in the Project Document/CEO Endorsement Request. The PMU will compile the information received from the executing partners and transmit it in a timely manner to the LTO and BH. The report, which covers the period 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The format and tables to report on co-financing are in the PIR.

166. **Terminal Report:** Within two months before the end date of the project, the PMU will submit to the BH and LTO 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, without unnecessary background, narrative or technical details. 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 to ensure sustainability of project results.

Evaluation Provisions

167. Two independent project evaluations, a Mid-Term Review (MTR) in the 3rd quarter of project year 3 and a Final Evaluation (FE) three months prior to the terminal review meeting of the project partners (at least 2 weeks before the project end date), will be carried out. The BH will arrange an independent MTR in consultation with the PSC, the PMU, the LTO and the FAO-GEF Coordination Unit. The MTR will be conducted to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. The MTR will allow mid-course corrective actions, if needed. The MTR will provide a systematic analysis of the information on project progress in the achievement of expected results against budget expenditures. It will refer to the Project Budget (see Annex A2) and the approved AWP/Bs. It will highlight replicable good practices and key issues faced during project implementation and will suggest mitigation actions to be discussed by the PSC, the LTO and FAO-GEF Coordination Unit.

168. An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting. The FE will aim to identify the project impacts, sustainability of project outcomes and the degree of achievement of long-term results. The FE will also have the purpose of indicating future actions needed to expand the existing project results, mainstream and upscale its products and practices, and disseminate information to management authorities and institutions with responsibilities for food systems, land use and restoration, and improvement of agricultural livelihoods to assure continuity of the project initiatives. Both the MTR and FE will pay special attention to outcome indicators, including the GEF Core Indicators.

Disclosure

169. 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)? Please also explain how the project promotes full and productive employment and decent work in rural areas, aiming at the progressive realization of their right to Decent Rural Employment ⁷⁷.

⁷⁷ Specific guidance on how FAO can promote the Four Pillars of Decent Work in rural areas is provided in the [Quick reference for addressing decent rural employment](#) (as well as in the full corresponding [Guidance document](#)). For more information on FAO's work on decent rural employment and related guidance materials please consult the FAO thematic website at: <http://www.fao.org/rural-employment/en/>.

PART III: ANNEXES

Annex A1: Project Results Framework ⁷⁸

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: To improve biodiversity conservation and sustainable forest management in the Kazdağları region for environmental and socio-economic benefits							
Component 1: Strengthening Turkey's PAs system within a sustainable landscape management context.							
Outcome 1.1: Protected areas system underpinned by strengthened policies and monitoring systems	A national Pas Policy document is prepared	Existing strategies and legislation on Pas of: GDF, GDNCNP, GDPNA and other public institutions in charge of conservation. Existing nature conservation works and approaches of other organisations (e.g. WWF-Turkey, Doga Koruma Merkezi, etc.)	a comprehensive review, update and expansion of PA policies drafted	a comprehensive review, update and expansion of PA policies is ready	A national Pas policy document	- public institutions will work closely to draft the Pas policy document - other organisations (e.g. academia, NGOs) will contribute to-strengthen the policy document	NCNP, PMU
	Tools to inform and monitor of Pas effective management applied to Kazdağları project area	Currently national tools and programs are used	Tools to inform and monitor of Pas listed	Monitoring program and individual Action Plans for target protected areas in the project site finalized; and operational.	Monitoring program Tools and monitoring program are applied to PAs targeted under Output 1.2.2	Tools and monitoring program do not conflict with the existing system	MAF, PMU

⁷⁸ Please note that output based indicators are recommended but not mandatory as long as the targets for each output are well defined. GEF core indicators must be captured in outcome level indicators. Objective level indicators are not a requirement in FAO GEF Results frameworks.

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output.1.1.1 Policies aligned with IUCN's Protected Areas Categories system, developed to underpin subsequent legislation on the governance and financing of different protected area types,	Global standard with respect to definition of PA formally adopted by MAF	Currently national standard is used	MAF formally adopts the global standard and applies the IUCN management categories	--	PSC meetings minutes		
	Policy document on strengthening PAs adopted by MAF	Current guidance builds on the Natura 2000 assessment for Turkey	Draft policy guidance developed for the national PA system ready for testing in the Kazdaglari region	Final policy document adopted by MAF, including stakeholder feedback and lessons learnt from 1.2.2.	Final document, PSC meeting minutes		
1.1.2 Systematic Monitoring Framework developed for protected areas system	METT template completed for all Pas	METT template used in Turkey in the context of GEF projects	METT template updated with the 2016 METT Handbook and adopted by MAF	METT template populated for all PAs in Turkey,			
	Ecosystem Health Index (EHI) methodology adapted to Turkish context and applied at the national level	Several methodologies exist to determine ecosystem health, including EHI developed for China and guidance provided by the International	EHI template completed for project target sites and lessons learned shared for application at the national level	Final version of the EHI template applied at national level	Template for each PA		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
		Society for Ecosystem Health and IUCN's Commission on Ecosystem Management					
	Systematic Monitoring Framework (SMF) developed and adopted at national level	PAs are monitored following standards developed by GDNCNP, limited currently to METT	SMF designed, including links to PA national database and ecosystem health considerations	SFM adopted by MAF and operational	SMF annual report. PSC report		
<u>Outcome 1.2:</u> Improved coverage, governance and effective management of protected areas.	(Core Indicator 1) 21,733 ha under improved management	-	Management Plans updated for target national parks	METT scores improve for target national parks			
<u>Output 1.2.1</u> Identification of potential Natura 2000 sites in Marmara Region and new protected areas.	Rapid assessment of site designation for Natura 2000 sites in the Marmara region (almost 67,000km ²) completed	No recent Natura 2000 Assessment for Marmara region	Assessment completed, based on Habitat and Birds Directives requirement and their Annexes	--	Final report together with List of potential Natura 2000 sites		MAF
<u>Output 1.2.2</u> Protected area planning and effective management strengthened for Kazdağı National	Participatory management plans for Kazdağı National Park, Darıdere and Ayazma Pinari Nature Parks , Kazdağı Gökarnı Nature Reserve	Existing data and management plans for Pas in the region	Drafted management plans for 4 Pas in the project area		Final management plans for the four Pas		MAF PMU

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Park, Daridere and Ayazma Pınarı Nature Parks , Kazdağı Göknarı Nature Reserve , and at least one example of other conservation categories (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest).	Participatory planning process extended to other conserved areas in the Project Area that meet OECM criteria.	Areas of interest (Seed Stand, Gene Conservation Forest, Forest Reserve, Protection Forest) have been pre-identified	--	At least 4 new protected areas have a governance system and carry out a participatory planning process	Designation memos		MAF PMU
Outcome 2.1 Kazdağlari Region managed in an integrated, holistic manner to safeguard its unique biodiversity, enhance functioning of its ecosystems and ensure provisioning of goods and services for its social and economic prosperity.	Strategic Vision for Kazdağlari supported by Kazdağlari Working Group,	Existing strategies of several institutions in different sectors (rural development, agriculture, forestry, tourism etc.)	Kazdaglari WG in place,	Vision, Action Plan completed	Final report adopted by	- stakeholders are willing to contribute to the Vision - stakeholders have enough capacity to participate in the process - stakeholder views are taken into consideration by the MAF	PMU, MAF

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	Project Area is nominated to an international certificate program	No regional action plan	- vision and proposed certification under consideration/ formulation	nomination dossier for proposed certification submitted to relevant organizations	Nomination dossier		
<u>Output 2.1.1.</u> Regional Vision and 5-year Action Plan to conserve Kazdağlari's biodiversity, sustainably manage its ecosystem goods and services and restore its degraded lands, generated by a Regional Forum and operational.	Kazdağlari Working Group (KWG) established and meeting periodically, including up to 12 members	No support group for the Regional vision and Action Plan	KWG established in the context of the project	KWG operational and meeting periodically	Minutes from meetings		PMU
	Kazdağlari Regional Vision adopted by the onset of the project's final year	No integrated regional vision	Draft Regional Vision prepared	Kazdağlari Regional Vision adopted by MAF	Adoption documents		PMU/PSC
	Action Plan for post-project implementation of the Vision, including identification of lead partners and resources, adopted by MAF and regional partners	No exit strategy for the project exists	--	Exit strategy prepared and adopted by MAF and regional stakeholders	Adoption documents		PMU/PSC
<u>Output 2.1.2.</u> All or some of Project Area, including its protected areas, buffer zones and ecological corridors, assessed	Boundaries of the proposed certification Reserve defined, including delineation of core area(s), buffer zone(s) and transition areas(s) in accordance with The Statutory	Baseline documentation prepared by MAF	Draft proposal of boundaries prepared and circulated for discussion with interested parties	Boundaries of the proposed certification site defined	Meeting minutes, final document		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
and nominated for international certification, as part of the vision for Kazdağları Region	Framework of the World Network of certification program						
	Appropriate governance structure for the certificated site determined	Baseline documentation prepared by MAF	Draft governance structure prepared and circulated for discussion with interested parties	Appropriate governance structure for the certificated site defined and adopted by relevant parties	Meeting minutes, final document		
	Management plan or management policy for the proposed certificated site developed	Baseline documentation prepared by MAF	Draft management plan or management policy prepared and circulated for discussion with interested parties	Management plan or management policy for the proposed certificated site developed and adopted by relevant parties	Meeting minutes, final document		
	Complete certification process and Nomination Form submitted to MAF	Baseline documentation prepared by MAF	Draft nomination dossier prepared	Complete Nomination dossier submitted to MAF	Meeting minutes, final document		
Outcome 2.2 Improved integration and sustainable landscape-scale management of forest, agricultural and other production systems	131,167 ha, across four districts, under Integrated Functional Forest management plans (GEF Core Indicator 4)	No area under integrated forest management plans (zero hectares)	Draft integrated forest management plans	Finalised and approved integrated forest management plans	integrated forest management plans covering 211,407 ha across four districts	Synergies and conflicts of interest will be addressed through management agreements between relevant parties and based on principles of sustainable, integrated land management	
	5,500 ha of degraded forests restored with 2,000 ha subjected to soil erosion prevention techniques	No restored degraded forest area (zero hectares)	Degraded forest areas for restoration are identified	Restoration techniques are implemented in total of 3,000 ha degraded forest	Written documents on restoration techniques and implementation plan	There will be enough degraded areas for restoration	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	[GEF Core Indicator 3.2]		Appropriate restoration/ erosion prevention techniques are identified for each restoration plot Pilot restoration activities are implemented	Erosion prevention techniques are implemented in total of 2,000 ha Early results are monitored and reported	Implementation records and reports by the implementation team	Restoration does not contradict with other land use interests	
	70% of value chains tentatively identified are significantly improved in value to the producer by 30%, based on reduction in chain links and improvements in access to markets/ marketing	NWFP value chain absent/ insufficient	Current state of NWFP value chains is identified Potential for establishment of new value chains/ improvement of existing value chains are identified 15% improvement in the tentatively identified value chains	30% improvement in the tentatively identified value chains	Number of NWFP value chains established/ improved	- There is need/ demand by local communities for improvement of NWFP value chains - Market demands NWFPs - stakeholders are willing to participate in FDSFs	
<u>Output 2.2.1</u> National LDN targets supported through delivery of a Restoration & Best Practices	Baseline surveys for 185,000 ha undertaken throughout the forest estate in the Project Area	Previous baseline studies that has been investigated by MAF and academicians	Baseline surveys completed	--	Final reports		MAF, PMU
Strategy for degraded forests and unsustainably managed agricultural landscapes in	Strategy for reduced impact logging (RIL) designed based on biodiversity survey findings and available remote sensing data	No specific strategy for RIL in pilot areas	Strategy completed and adopted	--	Final strategy document		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Kazdağlari Project Area.	IFFMPs prepared for two forest management sub-districts, one in Bayramiç and another in Kalkım forest districts,	Guidance on IFFMP provided by MAF	IFFMPs prepared for two forest management subdistricts	--	Final documents		
	At least 5,500 ha of degraded forests restored to their former natural condition as far as possible	0	2,000	5,500	GIS assessments		
<u>Output 2.2.2</u> Improved livelihood opportunities piloted	Stakeholder forums established for each forest district (FDSFs) in which villages will be targeted for livelihood improvements	0	2	One in each forest district	Annual report from the Forum		
	Network of community-run shops established by the Project, with a target of 50% run by women	0	0	1 Network established	PMU supervision mission reports		
	Number of value chains/cooperatives receiving technical support for branding and marketing	0	2	10	PMU supervision mission reports		
	Number of cooperatives supported to increase the capacity of their women members to process, brand and market NWFPs and handicrafts	0	2	10	PMU supervision mission reports		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	Code of Good Agricultural Practice developed and approved by PSC	0	Code of Good Agricultural Practice approved by PSC	--	PSC meeting minutes		
	Number of good agricultural practices showcased and reported to WOCAT, including organic farming	0 (supported by the project)	5	10	WOCAT website		
<u>Outcome 3.1</u> Improved awareness, understanding and capacity to effectively manage protected areas and production systems at landscape scales	Levels of awareness among individuals and government, private and NGO sectors about sustainable ILM and for ecosystem goods and services raised based on KAP surveys	Current levels of awareness about IAS have not been assessed but, in general, they are considered to be low (baseline and targets to be defined during inception phase)	Levels of awareness slightly increased (in line with targets under the Communication Strategy and Action Plan)	Levels of awareness significantly increased (in line with targets under the Communication Strategy and Action Plan)	-KAP surveys -Visitors's satisfaction surveys in the PAs -Feedback from target audience and from general public		
	GEF Core Indicator 11 Gender representation on protected area steering committees, Kazdağlari Regional Forum and other governance-related bodies (at least 30% women). []	Rate of current woman representation is to be identified at the inception phase	20% woman representation in the governance/ steering organs	30% or higher woman representation in the governance/ steering organs	Attendance reports for different for and steering committees	women in the project area are keen to participate in the consultation and decision-making processes - woman organisations, local communities and CSOs facilitate active	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
						participation of women	
<u>Output 3.1.1</u> Communications Strategy and Action Plan prepared and implemented, including events, outreach materials and knowledge products, to promote gender equity and integrated management at landscape scales	KAP surveys designed and implemented	0	1	2	KAP survey results		
	Integrated Landscape Management Communications Strategy & Action Plan developed and implemented	No ILM Communication Strategy and Action Plan available for the region	No ILM Communication Strategy and Action Plan developed and approved by PSC	No ILM Communication Strategy and Action Plan under implementation	PSC meeting minutes		
<u>Output 3.1.2</u> Modular capacity development training programme for protected areas and landscape management designed and delivered across relevant sectors within national and local governments, communities, NGOs and private enterprises	Number of persons trained by the project, disaggregated by gender and youth	0	500	1,172 government/other professionals trained (30% women, 50% youth under 40 years old)	Reports from training sessions		
<u>Outcome 3.2</u> Project effectively and efficiently implemented, including	Project knowledge products (e.g., guidelines, technical reports) and implementation progress	No knowledge product No knowledge platform	Digital (Internet based) knowledge platform is founded and operational	Printed and digital guidelines are disseminated/ electronically published	Number of materials produced: - Guidelines - Reports		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
dissemination of knowledge gained and lessons learned, and fully accountable to its stakeholders,	reports (e.g. annual PIRs, Project Steering Committee minutes) disseminated routinely and accessible via knowledge platform		basic project website designed and operational A quarterly periodic electronic bulletin is circulated to stakeholders Social media accounts are in place Undertake MTR and TE in line with GEF requirements	The periodic electronic bulletin is circulated to stakeholders Social media accounts are publicly followed	Number of e-bulletins published Number of followers in the social media MTR report		
<u>Output 3.2.1</u> Transparent, gender-sensitive M&E Plan in place to inform project implementation, decision-making and adaptive management	Project M&E Plan developed and under implementation	No M&E Plan	M&E Plan developed and adopted	M&E Plan under implementation	Approved M&E Plan		PMU
	Number of Annual Project implementation reports (PIR) prepared	0	2	4	Approved PIRs by FLO		PMU/FAO
	MTR and TE implemented in line with GEF requirements	No evaluation	MTR completed and sent to GEFSEC	FE completed and sent to GEFSEC	Approved MTR and FE by GEF Unit in FAO		PMU/FAO
<u>Output 3.2.2</u> Project results and lessons learned collated, shared with project	Project website created for its stakeholders and other potentially interested parties	No website	Project website and other social media accounts created	Project website operational	Number of visitors per month		

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
stakeholders and disseminated nationally and more widely across Caucasus and East Europe and Central Asia	Bi-annual newsletter prepared to inform stakeholders about implementation progress	0	4	8	Newsletters		
	Percent project technical reports (such as survey results, strategies and action plans, management plans) and best practice guidelines documented and shared online	0	80%	100%	PMU report		

Annex A2: Project Budget

FAO Cost Categories	Unit	Unit cost	No. Units	Component 1			Component 2			Component 3			Subtotal	PMC	Total	M&E	Year 1	Year 2	Year 3	Year 4	Year 5	Executed by OGM	Administered by FAO	Total GEF		
				Outcome	Total	Outcome	Outcome	Total	Outcome	Outcome	Total															
				12	Comp 1	21	22	Comp 2	31	32	Comp 3															
5011 Salaries professionals																										
24 - Contract with Forestry (Livelihood activities)	lump sum	550,000	1		0		650,000	650,000				0	650,000		650,000			162,500	162,500	162,500	162,500					
25 - Forestry Restoration / Implementation of IFFMP	lump sum	150,000	1		0		150,000	150,000				0	150,000		150,000				75,000	75,000						
26 - Ecotourism activities and implementation	lump sum	300,000	1		0		300,000	300,000				0	300,000		300,000		150,000									
27 - Review of forest sub-district plans	lump sum	185,000	1		0	185,000		185,000				0	185,000		185,000			92,500		92,500						
28 - Participatory process for Regional Vision KAADAGARI	lump sum	70,000	1		0	70,000		70,000				0	70,000		70,000		23,333		23,333		23,333					
29 - Development of management plans for 4 PA	lump sum	200,000	1		0	200,000		200,000				0	200,000		200,000				100,000		100,000					
30 - Communications strategy implementation	lump sum	200,000	1		0			200,000				0	200,000		200,000		40,000		40,000		40,000		40,000		40,000	
31 - Capacity building programme	lump sum	385,000	1		0			385,000				0	385,000		385,000		77,000		77,000		77,000		77,000		77,000	
CPIM - Audits	lump sum	6,000	5		0	0		0				0	0		0		0		0		0		0		0	
CPIM Spot-checks	Per unit	5,000	6		0	0		0				0	0		0		0		0		0		0		0	
5010 Sub-total Contracts					400,000	555,000	1,300,000	1,855,000	585,000			585,000	2,840,000	0	2,840,000	0	523,667	778,667	753,667	504,500	279,500	0	0	0	#REF!	
5021 Travel																										
Travel for international consultants	lump sum	2,500	15		19,750	12,500	25,000	37,500				0	56,250	0	56,250	0	14,063		28,125		14,063				0	
Travel for national consultants	lump sum	750	70		17,500	8,750	8,750	17,500	8,750	8,750	17,500	0	52,500	0	52,500	0	10,500		10,500		10,500		10,500		10,500	
Travel for PMU	lump sum	500	150		25,000	12,500	12,500	25,000	12,500	12,500	25,000	0	75,000	0	75,000	0	15,000		15,000		15,000		15,000		15,000	
5021 Sub-total travel					61,250	33,750		80,000	21,250			42,500	183,750	0	183,750	0	39,563		53,625		39,563		25,500		25,500	
5023 Training																										
Workshop	Workshop	5,000	1		0			0				5,000	5,000	5,000	0	5,000	5,000	5,000							10,000	
Steering Committee Meetings	Meeting	2,000	5		0			0				10,000	10,000	10,000	0	10,000	2,000		2,000		2,000		2,000		2,000	
International exchange visits	Mission	20,000	4		0			0				80,000	80,000	80,000	0	80,000	80,000				32,000		32,000		16,000	
International short term trainings	Mission	20,000	5		0			0				100,000	100,000	100,000	0	100,000					50,000		50,000			
5023 Sub-total training					0	0		0	100,000			205,000	205,000	0	205,000	85,000	7,000		84,000		84,000		18,000		12,000	
5024 Expendable procurement																										
Acquisition of high resolution satellite images (intervention sites)	lump sum	20,000	1		0	10,000	10,000	20,000				0	20,000	0	20,000		20,000									0
Inputs for FLR activities (seeds, plantlets, fences)	lump sum	200,000	1		0		200,000	200,000				0	200,000	0	200,000				100,000		100,000					0
Supplies / kits for marketing	lump sum	21,750	1		0		21,750	21,750				0	21,750	0	21,750											0
Park infrastructure (signs, information boards)	lump sum	150,000	1		150,000							0	150,000		150,000					75,000		75,000				0
Certification of products (livelihoods activities, eq. organic)	lump sum	42,000	1		0		42,000	42,000				0	42,000		42,000					21,000		21,000				0
5024 Sub-total expendable procurement					150,000	10,000		283,750	0			0	433,750	0	433,750	0	20,000		0		196,000		196,000		0	0
5100 Non-expendable procurement																										
1x4 vehicle for PMU (one per field office)	Unit	30,000	0		0			0				0	0	0	0		120,000		0		0		0		0	0
Computers and licenses for PMU	Unit	2,000	6		0			0				0	12,000	12,000			13,440		0		0		8,064		0	
Printer (1 for each office)	Unit	1,000	2		0			0				0	2,000	2,000			2,000									0
Videocamera, camera, telescope binoculars	Unit	1,000	2		0			0				0	2,000	2,000			2,000									0
Office equipment	Unit	10,000	1		0			0				0	10,000	10,000			0									0
5100 Sub-total non-expendable procurement					0	0		0	0			0	26,000	16,000	0	137,440	0	0		0	0	8,064	0	0	0	#REF!
5028 GOE budget																										
Office rental (provided by GoT)	months		60		0	0		0				0	0	0	0		0		0		0		0		0	0
Office supplies (2 offices)	months	200			0	0		0				0	12,000	12,000			2,400		2,400		2,400		2,400		2,400	0
Correction		34	1		0			0				0	34	34			34									0
5300 Sub-total GOE budget					0	0	0	0	0	0	0	0	12,034	12,034	0	2,434	2,400		2,400		2,400		2,400		2,400	0
TOTAL					817,250	696,250	1,300,000	2,494,750	821,250	80,000	1,127,500	4,439,500	218,034	4,647,534	165,000	871,603	1,100,692		1,252,129		855,464		465,400		0	#REF!

Annex B: Response to Project Reviews

(from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion, and responses to comments from the Convention Secretariat and STAP at PIF).

(pending)

Annex C: Status of Utilization of Project Preparation Grant (PPG)

PPG Grant Approved at PIF	\$136,986		
Project Preparation Activities Implemented	Budgeted Amount	Amount Spent to date	Amount Committed
1. Preparatory Technical Studies and Reviews	\$34,096	\$34,020	
2. Formulation of the Project Document, CEO Endorsement Request and Mandatory and Project Specific Annexes	\$56,890	\$56,890	\$14,278
3. Stakeholder participation workshops	\$46,000	\$31,798	
Total	\$136,986	\$122,708	\$14,278

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities (including workshops and finalization of baseline, when needed) up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

Annex D: Calendar of Expected Reflows (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Funds or to your Agency (and/or revolving fund that will be set up)

170. Not applicable

Annex E: Project Map(s) and Coordinates

Please attach any additional maps, if needed, to complement those already provided in Part II, Section 1b of this project document.

171. Explanations of how project interventions are targeted at national, regional, Project Area and site levels, accompanied by maps, are provided in Part II, Section 1b of this project document. This Annex provides maps and summary information from official sources⁷⁹ on each of the four protected areas in the Project Area, together with more detailed information on Kazdağı National Park's biodiversity for which there is a wealth of valuable data. A full set of map overlays is readily accessible at: <https://projectgeffao.users.earthengine.app/view/kazdaglari-app>.

⁷⁹ Sources: Ministry of Agriculture and Forestry official web site (<https://www.tarimorman.gov.tr/DKMP>); METT forms by PPG Team (September 2021); Online map overlays of Project Area - <https://projectgeffao.users.earthengine.app/view/kazdaglari-app>

Annex F: GEF TF / LDCE/ SCCF Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, Table F to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at anytime during the replenishment period. LDCE and SCCF should complete, instead, the below CCA core indicator and built them into the results framework.

Annex G: GEF Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part I, item G by ticking the most relevant keywords/ topics/themes that best describe this project.

172. Please refer to separate document

Annex H: Work Plan (indicative)

Output	Main Activities	Responsible	Year 1				Year 2				Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1:														
Output 1.1.1:														

Annex I1: Environmental and Social Risk Annexes

For moderate and high risk projects please attach here Environmental and Social Risk Analysis, Assessments/ and/or Environmental and Social Management Plans.

Please refer to separate document

Annex I2: Stakeholder Engagement Matrix, Grievance Redress Mechanism and Disclosure

Disclosure (only for Moderate or High Risk):

Grievance Redress Mechanism⁸⁰

Grievance Mechanism

Focal Point Information	
Contact Details	
Explain how the grievance mechanism will be/ has been communicated to stakeholders	

173. FAO is committed to ensuring that its programs are implemented in accordance with the Organization's environmental and social obligations. In order to better achieve these goals, and to ensure that beneficiaries of FAO programs have access to an effective and timely mechanism to address their concerns about non-compliance with these obligations, the Organization, in order to supplement measures for receiving, reviewing and acting as appropriate on these concerns at the program management level, has entrusted the Office of the Inspector-General with the mandate to independently review the complaints that cannot be resolved at that level.

174. FAO will facilitate the resolution of concerns of beneficiaries of FAO programs regarding alleged or potential violations of FAO's social and environmental commitments. For this purpose, concerns may be communicated in accordance with the eligibility criteria of the Guidelines for Compliance Reviews Following Complaints Related to the Organization's Environmental and Social Standards⁸¹, which applies to all FAO programs and projects.

175. Concerns must be addressed at the closest appropriate level, i.e. at the project management/technical level, and if necessary at the Regional Office level. If a concern or grievance cannot be resolved through consultations and measures at the project management level, a complaint requesting a Compliance Review may be filed with the Office of the Inspector-General (OIG) in accordance with the Guidelines. Program and project managers will have the responsibility to address concerns brought to the attention of the focal point.

176. The principles to be followed during the complaint resolution process include: impartiality, respect for human rights, including those pertaining to indigenous peoples, compliance of national norms, coherence with the norms, equality, transparency, honesty, and mutual respect.

Project-level grievance mechanism

177. The project will establish a grievance mechanism at field level to file complaints during project inception phase. Contact information and information on the process to file a complaint will be disclosed in all meetings, workshops and other related events throughout the life of the project. In addition, it is expected that all awareness raising material to be distributed will include the necessary information regarding the contacts and the process for filing grievances.

178. The project will also be responsible for documenting and reporting as part of the safeguards performance monitoring on any grievances received and how they were addressed.

179. The mechanism includes the following stages:

⁸⁰ This section must be customized to each specific project.

⁸¹ Compliance Reviews following complaints related to the Organization's environmental and social standards: <http://www.fao.org/aud/42564-03173af392b352dc16b6cec72fa7ab27f.pdf>

- In the instance in which the claimant has the means to directly file the claim, he/she has the right to do so, presenting it directly to the Project Coordination Unit (PCU). The process of filing a complaint will duly consider anonymity as well as any existing traditional or indigenous dispute resolution mechanisms and it will not interfere with the community's self-governance system.
- The complainant files a complaint through one of the channels of the grievance mechanism. This will be sent to the Project Coordinator (PC) to assess whether the complaint is eligible. The confidentiality of the complaint must be preserved during the process.
- The PGC will be responsible for recording the grievance and how it has been addressed if a resolution was agreed.
- If the situation is too complex, or the complainer does not accept the resolution, the complaint must be sent to a higher level, until a solution or acceptance is reached.
- For every complaint received, a written proof will be sent within ten (10) working days; afterwards, a resolution proposal will be made within thirty (30) working days.
- In compliance with the resolution, the person in charge of dealing with the complaint, may interact with the complainant, or may call for interviews and meetings, to better understand the reasons.
- All complaint received, its response and resolutions, must be duly registered.

Internal process

Level 1: Project Management Unit (PCU). The complaint could come in writing or orally to the PCU directly. At this level, received complaints will be registered, investigated and solved by the PCU.

Level 2: If the complaint has not been solved and could not be solve in level 1, then the Project Coordinator (PC) elevates it to the FAO Representative of....

Level 3: Project Steering Committee (PSC). The assistance of the PSC is requested if a resolution was not agreed in levels 1 and 2.

Level 4: FAO Regional Office for _____. FAO Representative will request if necessary the advice of the Regional Office to resolve a grievance, or will transfer the resolution of the grievance entirely to the regional office, if the problem is highly complex.

Level 5: Only on very specific situations or complex problems, the FAO Regional Representative will request the assistance of the FAO Inspector General, who pursuits its own procedures to solve the problem.

Resolution

Upon acceptance a solution by the complainer, a document with the agreement should be signed with the agreement.

Project Coordination Unit (PCU)	Must respond within 5 working days.
FAO Representation in _____	Anyone in the FAO Representation may receive a complaint and must request proof of receipt. If the case is accepted, the FAO Representative must respond within 5 working days in consultation with FAO's Representation and Project Team. FAO Representative: _____ e-mail: _____ Tel: _____
Project Steering Committee (PSC)	If the case cannot be dealt by the FAO Representative, he/she must send the information to all PSC members and call for a meeting to find a solution. The response must be sent within 5 working days after the meeting of the PSC.
FAO Regional Office for _____	Must respond within 5 working days in consultation with FAO's Representation. FAO Regional Representative: _____ e-mail: _____

	Tel: _____
Office of the Inspector General (OIG)	To report possible fraud and bad behavior by fax, confidential: (+39) 06 570 55550 By e-mail: Investigations-hotline@fao.org By confidential hotline: (+ 39) 06 570 52333

Annex J: Indigenous Peoples

Not applicable

Annex K: FAO'S Roles in Internal Organization

FAO will be the GEF Implementing Agency of the project. As such, FAO has the project assurance role and will supervise and provide technical guidance for the overall implementation of the project, including:

- a) Monitor and oversee OP's compliance with the OPA and project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO and GEF;
- b) Commence and completing the responsibilities allocated to it in the Project Document in a timely manner, provided that all necessary reports and other documents are available;
- c) Making transfers of funds, supplies and equipment, as applicable, in accordance with the provisions of the OPA;
- d) Administrate the portion of project GEF funds that has been agreed with the OP to remain for FAO direct implementation. These funds will be managed in accordance with the rules and procedures of FAO;
- e) Organizing and completing monitoring, assessment, assurance activities and evaluation of the Project;
- f) Review, discuss with the OP, and approve the project progress and financial reports, as detailed in the OPA and its annexes. undertaking and completing monitoring, assessment, assurance activities, evaluation and oversight of the project;
- g) Liaising on an ongoing basis, as needed, with the Government (as applicable), other members of the United Nations Country Team, Resource Partner, and other stakeholders;
- h) Providing overall guidance, oversight, technical assistance and leadership, as appropriate, for the Project;
- i) Provide financial and audit services to the project including budget release, budget revisions and administration of funds from GEF in accordance with rules and procedures of FAO;
- j) Oversee financial expenditures against project budgets;
- k) Ensure that all activities, including procurement and financial services are carried out in strict compliance with FAO and GEF relevant procedures and agreements;
- l) Initiate joint review meetings with the OP to agree on the resolution of findings and to document the lessons learned;
- m) Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide consolidated financial reports to the GEF Trustee;
- n) Conduct at least one supervision mission per year;
- o) Lead the Mid-Term Review and Final Evaluation;
- p) Monitor implementation of the plan for social and environmental safeguards, in accordance with the FAO Environmental and Social Safeguards;
- q) Trigger additional reviews, audits and/or evaluations, as necessary.

In collaboration with the Project Management Unit (PMU) and under the overall guidance of the the Project Steering Committee, FAO will participate in the planning of contracting and technical selection processes. FAO will process fund transfers to the OP as per provisions, terms and conditions of the signed OPA.

The FAO Representative in _____ will be the Budget Holder (BH) and will be responsible for timely operational, and financial management of GEF resources implemented -. The budget holder will be also responsible for i) managing OPIM for results, including monitoring of risks and overall compliance with the OPA provisions; ii) review and clear financial and progress reports received from the OP and certify request for funds iii) review and clear budget revisions and annual work plan and budgets; iv) ensure implementation of the Risk Mitigation and Assurance Plan v) follow up and ensure that the OP implements all actions and recommendations agreed upon during Assurance Activities.

As a first step in the implementation of the project, the FAO Representation will establish an interdisciplinary Project Task Force (PTF) within FAO, to guide the implementation of the project. The PTF is a management and consultative body that integrate the necessary technical qualifications from the FAO relevant units to support the project. The PTF is composed of a Budget Holder, a Lead Technical Officer (LTO), the Funding Liaison Officer (FLO) and one or more technical officers based on FAO Headquarters (HQ Technical Officer).

The FAO Representative, in accordance with the PTF, will give its non-objection to the AWP/Bs submitted by the PCU as well as the Project Progress Reports (PPRs). PPRs may be commented by the PTF and should be approved by the LTO before being uploaded by the BH in FPMIS.

The Lead Technical Officer (LTO) for the project will be (insert officer and division). The role of the LTO is central to FAO's comparative advantage for projects. The LTO will oversee and carry out technical backstopping to the project implementation. The LTO will support the BH in the implementation and monitoring of the AWP/Bs, including work plan and budget revisions. The LTO is responsible and accountable for providing or obtaining technical clearance of technical inputs and services procured by the Organization.

In addition, the LTO will provide technical backstopping to the PMU to ensure the delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical support from PTF to respond to requests from the PSC. The LTO will be responsible for the following:

- a) Assess the technical expertise required for project implementation and identify the need for technical support and capacity development of the OP;
- b) Provide technical guidance to the OP on technical aspects and implementation;
- c) Review and give no-objection to TORs for consultancies and contracts to be performed under the project, and to CVs and technical proposals short-listed by the PCU for key project positions and services to be financed by GEF resources;
- d) Review and give clearance for the OP's procurement plans;
- e) Supported by the FAO Representation, review and clear final technical products delivered by consultants and contract holders financed by GEF resources;
- f) Assist with review and provision of technical comments to draft technical products/reports during project implementation;
- g) Review and approve project progress reports submitted by the National Program Director (NPD), in cooperation with the BH;
- h) Support the FAO Representative in examining, reviewing and giving no-objection to AWP/B submitted by the NPD, for their approval by the Project Steering Committee;
- i) Ensure the technical quality of the six-monthly Project Progress Reports (PPRs). The PPRs will be prepared by the NPD, with inputs from the PCU. The BH will submit the PPR to the FAO/GEF

Coordination Unit for comments, and the LTO for technical clearance. The PPRs will be submitted to the PSC for approval twice a year. The FLO will upload the approved PPR to FPMIS.

- j) Supervise the preparation and ensure the technical quality of the annual PIR. The PIR will be drafted by the NPD, with inputs from the PT. The PIR will be submitted to the BH and the FAO-GEF Coordination Unit for approval and finalization. The FAO/GEF Coordination Unit will submit the PIRs to the GEF Secretariat and the GEF Evaluation Office, as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The LTO must ensure that the NPD and the PCU have provided information on the co-financing provided during the year for inclusion in the PIR;
- k) Conduct annual supervision missions;
- l) Provide comments to the TORs for the mid-term and final evaluation; provide information and share all relevant background documentation with the evaluation team; participate in the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation; participate in the final workshop with all key project stakeholders, as relevant. Contribute to the follow-up to recommendations on how to insure sustainability of project outputs and results after the end of the project.
- m) Monitor implementation of the Risk Mitigation Plan, in accordance with the FAO Environmental and Social Safeguards.

The HQ Technical Officer is a member of the PTF, as a mandatory requirement of the FAO Guide to the Project Cycle. The HQ Technical Officer has most relevant technical expertise - within FAO technical departments - related to the thematic of the project. The HQ Technical Officer will provide effective functional advice to the LTO to ensure adherence to FAO corporate technical standards during project implementation, in particular:

- a) Supports the LTO in monitoring and reporting on implementation of environmental and social commitment plans for moderate risk projects. In this project, the HQ officer will support the LTO in monitoring and reporting the identified risks and mitigation measures (Appendix H2) in close coordination with the OP.
- b) Provides technical backstopping for the project work plan.
- c) Clears technical reports, contributes to and oversees the quality of Project Progress Report(s).
- d) May be requested to support the LTO and PTF for implementation and monitoring.
- e) Contribute to the overall ToR of the Mid-term and Final Evaluation, review the composition of the evaluation team and support the evaluation function.

The FAO-GEF Coordination Unit will provide Funding Liaison Officer (FLO) functions. This FAO/GEF Coordination Unit will review and provide a rating in the annual PIR(s) and will undertake supervision missions as necessary. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the FAO GEF Coordination Unit. The FAO GEF Coordination Unit may also participate or lead the mid-term evaluation, and in the development of corrective actions in the project implementation strategy if needed to mitigate eventual risks affecting the timely and effective implementation of the project. The FAO GEF Coordination Unit will in collaboration with the FAO Finance Division to request transfer of project funds from the GEF Trustee based on six-monthly projections of funds needed.

The FAO Financial Division will provide annual Financial Reports to the GEF Trustee and, in collaboration with the FAO-GEF Coordination Unit, request project funds on a six-monthly basis to the GEF Trustee.

Financial management

Financial management in relation to the GEF resources directly managed by FAO will be carried out in accordance with FAO's rules and procedures as outlined below.

Financial Records. FAO shall maintain a separate account in United States dollars for the project's GEF resources showing all income and expenditures. FAO shall administer the project in accordance with its regulations, rules and directives.

Financial Reports. The BH shall prepare quarterly project expenditure accounts and final accounts for the project, showing amount budgeted for the year, amount expended since the beginning of the year, and separately, the un-liquidated obligations as follows: i) Details of project expenditures on outcome-by-outcome basis, reported in line with Project Budget as at 30 June and 31 December each year; ii) Final accounts on completion of the Project on a component-by-component and outcome-by-outcome basis, reported in line with the Project Budget; iii) A final statement of account in line with FAO Oracle Project budget codes, reflecting actual final expenditures under the Project, when all obligations have been liquidated.

Financial reports for submission to the donor (GEF) will include both FAO- and OP-managed resources, will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

Responsibility for Cost Overruns. As regards resources directly managed by FAO, the BH shall utilize the GEF project funds in strict compliance with the Project Budget (Appendix A2) and the approved AWP/Bs. The BH can make variations provided that the total allocated for each budgeted project component is not exceeded and the reallocation of funds does not impact the achievement of any project output as per the project Results Framework (Appendix A1). At least once a year, the BH will submit a budget revision for approval of the LTO and the FAO/GEF Coordination Unit. Cost overruns shall be the sole responsibility of the BH.

Audit. The project shall be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the Governing Bodies of the Organization and reporting directly to them, and an internal audit function headed by the FAO Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO which establish a framework for the terms of reference of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

Procurement. Careful procurement planning is necessary for securing goods, services and works in a timely manner, on a "Best Value for Money" basis. It requires analysis of needs and constraints, including forecast of the reasonable timeframe required to execute the procurement process.

The procurement plan shall be updated every quarter and submitted to FAO BH and LTO for clearance.

Annex L: FAO and Government Obligations

(a) This Annex sets out the basic conditions under which FAO will assist the Government in the implementation of the Project described in the attached Project Document.

(b) The achievement of the objectives set by the Project shall be the joint responsibility of the Government and FAO.

FAO OBLIGATIONS

1. FAO will be responsible for the provision, with due diligence and efficiency, of assistance as provided in the Project Document. FAO and the Government will consult closely with respect to all aspects of the Project.
2. Assistance under the Project will be made available to the Government, or to such entity as provided in the Project, and will be furnished and received (i) in accordance with relevant decisions of the Governing Bodies of FAO, and with its constitutional and budgetary provisions, and (ii) subject to the receipt by FAO of the necessary contribution from the Resource Partner. FAO will disburse the funds received from the Resource Partner in accordance with its regulations, rules and policies. All financial accounts and statements will be expressed in United States Dollars and will be subject exclusively to the internal and external auditing procedures laid down in the financial regulations, rules and directives of FAO.
3. FAO's responsibilities regarding financial management and execution of the Project will be as stipulated in the Project Document. FAO may, in consultation with the Government, implement Project components through partners identified in accordance with FAO procedures. Such partners will have primary responsibility for delivering specific project outputs and activities to the Project in accordance with the partner's rules and regulations, and subject to monitoring and oversight, including audit, by FAO.
4. Assistance under the Project provided directly by FAO, including technical assistance services and/or oversight and monitoring services, will be carried out in accordance with FAO regulations, rules and policies, including on recruitment, travel, salaries, and emoluments of national and international personnel recruited by FAO, procurement of services, supplies and equipment, and subcontracting. The candidacies of senior international technical staff for recruitment by FAO will be submitted to the Government for clearance following FAO procedures.
5. Equipment procured by FAO will remain the property of FAO for the duration of the Project. The Government will provide safe custody of such equipment, which is entrusted to it prior to the end of the Project. The ultimate destination of equipment procured under this Project will be decided by FAO in consultation with the Government and the Resource Partner.

GOVERNMENT OBLIGATIONS

6. With a view to the rapid and efficient execution of the Project, the Government shall grant to FAO, its staff, and all other persons performing services on behalf of FAO, the necessary facilities including:
 - i) The prompt issuance, free of charge, of any visas or permits required;
 - ii) Any permits necessary for the importation and, where appropriate, the subsequent exportation, of equipment, materials and supplies required for use in connection with the Project and exemption from the payment of all customs duties or other levies or charges relating to such importation or exportation;
 - iii) Exemption from the payment of any sales or other tax on local purchases of equipment, materials and supplies for use in connection with the project;
 - iv) Any permits necessary for the importation of property belonging to and intended for the personal use of FAO staff or of other persons performing services on behalf of FAO, and for the subsequent exportation of such property;
 - v) Prompt customs clearance of the equipment, materials, supplies and property referred to in subparagraphs (ii) and (iv) above.
7. The Government will apply to FAO, its property, funds and assets, its officials and all the persons performing services on its behalf in connection with the Project: (i) the provisions of the Convention on Privileges and Immunities of the Specialized Agencies; and (ii) the United Nations currency exchange rate. The persons performing services on behalf of FAO will include any organization, firm or other entity, which FAO may designate to take part in the execution of the Project.

8. The Government will be responsible for dealing with any claims which may be brought by third parties against FAO, its personnel or other persons performing services on its behalf, in connection with the Project, and will hold them harmless in respect to any claim or liability arising in connection with the Project, except when it is agreed by FAO and the Government that such claims arise from gross negligence or wilful misconduct of such persons.
9. The Government will be responsible for the recruitment, salaries, emoluments and social security measures of its own national staff assigned to the project. The Government will also provide, as and when required for the Project, the facilities and supplies indicated in the Project Document. The Government will grant FAO staff, the Resource Partner and persons acting on their behalf, access to the Project offices and sites and to any material or documentation relating to the Project, and will provide any relevant information to such staff or persons.

REPORTING AND EVALUATION

10. FAO will report to the Government (and to the Resource Partner) as scheduled in the Project Document.
11. The Government will agree to the dissemination by FAO of information such as Project descriptions and objectives and results, for the purpose of informing or educating the public. Patent rights, copyright, and any other intellectual property rights over any material or discoveries resulting from FAO assistance under this Project will belong to FAO. FAO hereby grants to the Government a non-exclusive royalty-free license to use, publish, translate and distribute, privately or publicly, any such material or discoveries within the country for non-commercial purposes. In accordance with requirements of some Resource Partners, FAO reserves the right to place information and reports in the public domain.
12. The Project will be subject to independent evaluation according to the arrangements agreed between the Government, the Resource Partner and FAO. The evaluation report will be publicly accessible, in accordance with the applicable policies, along with the Management Response. FAO is authorized to prepare a brief summary of the report for the purpose of broad dissemination of its main findings, issues, lessons and recommendations as well as to make judicious use of the report as an input to evaluation synthesis studies.

FINAL PROVISIONS

13. Any dispute or controversy arising out of or in connection with the Project or this Agreement will be amicably settled through consultations, or through such other means as agreed between the Government and FAO.
14. Nothing in or related to any provision in this Agreement or document or activity of the Project shall be deemed (i) a waiver of the privileges and immunities of FAO; (ii) the acceptance by FAO of the applicability of the laws of any country to FAO, and: (iii) the acceptance by FAO of the jurisdiction of the courts of any country over disputes arising from assistance activities under the Project.
15. This Agreement may be amended or terminated by mutual written consent. Termination will take effect sixty days after receipt by either party of written notice from the other party. In the event of termination, the obligations assumed by the parties under this Agreement will survive its termination to the extent necessary to permit the orderly conclusion of activities, and the withdrawal of personnel, funds and property of FAO.
16. This Agreement will enter into force upon signature by the duly authorized representatives of both parties.

Annex M: Detailed

Year(s)					Project Output or Activity	Capacity Development	On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees
					1.1.1	Policies and guidelines, aligned with IUCN's PAs Categories system ...	
1	2				1.1.1a	IUCN PA management category systems and governance types	150
1	2	3			1.1.1c	Planning, managing, financing and monitoring PAs	150
	2	3			1.1.1c	Integrated landscape and ridge-to-reef approaches	150
					1.1.2	Systematic Monitoring Framework developed for PAs system ...	
		3	4	5	1.1.4	How to attain IUCN Green List Standard and to apply EHI monitoring templates	200
					1.2.1	Identification of potential Natura 2000 sites in Marmara Region and listed new protected areas	
1	2				1.2.1a,b	<i>Technically support rapid biodiversity assessment design for Project Area, and determination of new PAs and new borders for Kazdağı NP.</i>	[1.1.1c]
					1.2.2	PA planning and effective management strengthened for ... (specific PAs)	
1	2	3				<i>Technically support respective designs of participatory processes, strengthen governance structures and management planning of PAs</i>	[1.1.1c]
					2.1.1	Regional Strategy to conserve Kazdağları's biodiversity ... operational.	
1					2.1.1	Regional strategies to conserve biodiversity: experience from around the world	250
					2.1.2	All or some of Project Area ... assessed and nominated for an International Certification Program.	
	2	3	4		2.1.2	<i>Technically support delineation and design of a certification, its governance structure and preparation of its management strategy/plan.</i>	
	2				2.1.2	Study tour to an international certificated site in Turkey	30
		3			2.1.2	Study tour an international certificated site in a nearby country	30
					2.2.1	National LDN targets supported through delivery of a Restoration and Best Practices Strategy for degraded forests ...	
1	2				2.2.1	Officers from principal target FMDs (Bayramiç with 6 sub-districts) and Kalkım (with 9 sub-districts) enrol in Society for Ecological Restoration e-Learning resources for restoration practitioners. Also Chamber of Forest Engineers	100

Year(s)					Project Output or Activity	Capacity Development	On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees
1	2	3			2.2.1	Understanding land degradation, Turkey's national commitment to UNCCD and practical steps towards demonstrating achievement of LDN in Project Area.	250
1	2	3	4		2.2.1b	Technically support preparation and implementation of FLR Action Plan. accompanied by manual. [See Additional Annex 3, Section 3.3]	
1	2	3	4		2.2.1b	FLR theory and practice, including SER's e-Learning Course: Overview of the Practice of Ecological Restoration. [Training-of-trainers approach at forest district level]	150
		3	4		2.2.1b	VRHS: training with study tour, pilot operation in high-value forest and production of guidance and best practice manual.	20
					2.2.1d	Technically support integration of biodiversity surveys and assessments into FMPs, resulting in hybrid IFFMPs. [See Additional Annex 3, Section 4.3]	
					2.2.1e	Technically support enhancement of FEMS open-source software to improve accuracy of tree volumes to be cut and, thereby, avoid over/under harvesting. [See Additional Annex 3, Section 4.3]	
	2	3	4		2.2.1f	RIL strategy: best practices learned, demonstrated and experienced.	100
	2	3	4		2.2.1h	<i>Technically support development and implementation of a strategy that is sensitive to forest fragmentation through optimization of fire breaks and security roads.</i> [See Additional Annex 3, Section 4.3]	
1	2	3	4	5	2.2.1k	<i>Technically support a restricted blockchain design of a forest/biodiversity GIS to monitor forest resources and restoration.</i> [Additional Annex 3, 4.3]	
					2.2.2	Improved livelihoods piloted.	
						<i>Generic</i>	
1	2	3			2.2.2c	Designing and facilitating stakeholder engagement processes at community levels	250
1	2	3	4	5	2.2.2d	Network of community-run shops: supported by GMKA, TKDK and ETKO (certification)	250
						<i>Non Wood Forest Products</i>	
1	2	3	4		2.2.2e	Technically support communities and cooperatives with value chains, branding and marketing	150
	2	3	4		2.2.2e	Value chains, branding and marketing: principles and practices - training of village trainers	150
	2	3	4		2.2.2f	Establishment and strengthening of cooperatives: partnership support from GMKA	
	2	3	4	5	2.2.2f	NWFP inventory, harvesting and monitoring - training and certification of forest staff to train village trainers	10
	2	3	4	5	2.2.2f	Harvesting and monitoring of NWFPs - training and certification of village trainers	150
	2	3	4	5	2.2.2f	online sales strategies trainings	150
1	2	3	4	5	2.2.2g	Cultivation of lavender and other MAPs: partnership support from GMKA (notably lavender); Agriculture Extension officers	150

Year(s)					Project Output or Activity	Capacity Development	On-line
1	2	3	4	5		Training modules and programs / Technical support and partnerships	No. Trainees
1	2	3	4	5	2.2.2g	Cultivation of lavender and other MAPs: training and certification of village trainers	150
1	2	3	4	5	2.2.2h	Additional, specialised training in NWFPs processing, handicrafts and marketing for women, youth and disabled. [Follow-up on introductory module for value chains - 2.3.2e]	90
1	2	3	4	5	2.2.2i	Certification of NTFPs; sourcing, food safety, fair trading and other standards	120
						<i>Ecotourism</i>	
1	2	3	4	5	2.2.2j	Technically support ecotourism	
	2	3	4		2.2.2j	ecotourism: principles and best practices, incorporating an in-country study tour	100
					2.2.2j	Ecotourism: training of local guides in natural and cultural heritage, health & safety for outdoor activities	150
					2.2.2j	Etourism: training of local hosts in hospitality	150
1	2	3	4	5	2.2.2m	Ecotourism: partnership support from Global Ecovillage Network	
					2.2.2	Study tour to a nearby country to experience sharing on ecotorusm	30
						<i>Good Agricultural Practice including organic farming</i>	
1	2	3	4	5	2.2.2n	Technically support Good Agricultural Practice	
1					2.2.2o	Series of training modules for farmers, including 18 organic farmers, identified in GAP Strategy:	
	2	3	4	5		- agronomy (crops for food, fodder and fibre)	60
	2	3	4	5		- horticulture (fruits, nuts, vegetables, mushrooms, herbs, spices, flowers)	60
	2	3	4	5		- animal husbandry (breeding and raising livestock to provide food - dairy and meat, draught power and manure)	60
				5		- bee-keeping (honey, wax)	60
1	2	3	4	5	2.2.2o	Sustainable agriculture: partnership with such as GlobalG.A.P. and relevant authorised certification institutions	
	2	3	4	5	2.2.2o	Agrotourism: partnership support from TKDK	
					2.2.2p	Basic training provided under Activity 2.2.2e, with more focus on processing and marketing under Activity 2.2.2h	
						<i>Forest biodiversity protection</i>	
1	2	3	4	5	2.2.2q,r,s,t	Awareness raising: Agri-environment techniques to minimise land degradation and maintain and enhance connectivity between natural forests and production systems.	150
						TOTAL NUMBER OF PERSONS TRAINED	3,370

Annex N: Project Area, Pas and Biodiversity Values of Region

Explanations of how project interventions are targeted at national, regional, Project Area and site levels, accompanied by maps, are provided in Part II, Section 1b of this project document. This Annex provides maps and summary information from official sources⁸² on each of the four protected areas in the Project Area, together with more detailed information on Kazdağı National Park’s biodiversity for which there is a wealth of valuable data. A full set of map overlays is readily accessible at: <https://projectgeffao.users.earthengine.app/view/kazdaglari-app>.

Profiles of Protected Areas in Kazdağı Project Area

Kazdağı National Park	
IUCN Management Category	II WDPA IP: Not listed
Area (ha)	21,463.00
Type / Type of designation	Terrestrial Protected Area / National
Date of designation	17.04.1994 [Source: NCNP official web site; PA managers stated 17.04.1993 in METT]
Location	Balıkesir and Çanakkale, Turkey
Coordinates	See: https://projectgeffao.users.earthengine.app/view/kazdaglari-app
Main values for designation	Natural, Archaeologic, Mythologic, Anthropological, Ethnographic, Biodiversity, Topographic
Management plan	Management plan exists and is being implemented.
Management authority	Ministry of Agriculture and Forestry
METT score (September 2021)	58
Annual budget: recurrent costs (operational) – excludes staff salaries	US\$327,500
Annual budget: additional funds – excludes staff salaries	US\$302,250
Management objective 1	To develop tools that will harmonise natural assets and human factor within conservation-utilisation equilibrium, to ensure sustainability of the natural equilibrium
Management objective 2	By means of alternative support, to improve the wealth of local people, in harmony with the management objectives of the PA. To increase international visibility of PA.
Main threats	1. Human induced fire 2. Bio-trafficking of endemic (EN and CR) species 3. Over-consumption of tap and potable water sources in/outside NP

⁸² Sources: Ministry of Agriculture and Forestry official web site (<https://www.tarimorman.gov.tr/DKMP>); METT forms by PPG Team (September 2021); Online map overlays of Project Area - <https://projectgeffao.users.earthengine.app/view/kazdaglari-app>

Key Biodiversity Indicators used	<ol style="list-style-type: none">1. Monitoring population density of indicative plant species in PAs2. Monitoring status of IUCN CR and EN category species in PAs3. Monitoring Kazdağı Fir4. Monitoring genetic sources of wild fruit species5. Monitoring population size of herbivores and carnivores
----------------------------------	---

Kazdağı Göknarı Nature Reserve		
IUCN Management Category	Ia	WDPA IP: Not listed
Area (ha)	254.17 (two plots)	
Type / Type of designation	Terrestrial Protected Area / National	
Date of designation	15.06.1988	
Location	Balıkesir, Turkey	
Coordinates	See: https://projectgeffao.users.earthengine.app/view/kazdaglari-app	
Main values for designation	Protection and monitoring of the Kazdağı Fir gene source	
Management plan	No management plan exists	
Management authority	Ministry of Agriculture and Forestry	
METT score (September 2021)	22	
Annual budget: recurrent costs (operational) – excludes staff salaries	0	
Annual budget: additional funds – excludes staff salaries	0	
Management objective 1	Research	
Management objective 2	Monitoring	
Main threats	No specific threats: nature reserve. is under strict protection in accordance with No: 2873 National parks law and byelaw. Its location is far from sources of human impact.	
Key Biodiversity Indicators used	n/a	

Darıdere Nature Park		
IUCN Management Category	V	WDPA IP: Not listed
Area (ha)	10.44	
Type / Type of designation	Terrestrial Protected Area / National	
Date of designation	11.07.2011	
Location	Balıkesir, Turkey	
Coordinates	See: https://projectgeffao.users.earthengine.app/view/kazdaglari-app	
Main values for designation	Recreation: located in Kazdağları range, hence displays similar geological and geomorphological features.	
Management plan	Management plan exists and is being implemented.	

Management authority	Ministry of Agriculture and Forestry
METT score (September 2021)	49
Annual budget: recurrent costs (operational) – excludes staff salaries	US\$ 12,000
Annual budget: additional funds – excludes staff salaries	0
Management objective 1	Identification of recreational activities that can provided for visitors.
Management objective 2	Identify basic principles to protect and sustain the natural vegetation, rare and endangered species and their habitats.
Main threats	1. Fires induced as a result of uncontrolled visitor usage 2. Waste (litter) from recreational use
Key Biodiversity Indicators used	n/a

Ayazmapınarı Nature Park		
IUCN Management Category	V	WDPA IP: Not listed
Area (ha)	5.85	
Type / Type of designation	Terrestrial Protected Area / National	
Date of designation	11.07.2011	
Location	Çanakkale, Turkey	
Coordinates	See: https://projectgeffao.users.earthengine.app/view/kazdaglari-app	
Main values for designation	Natural resources (forest vegetation, natural spring water source, Ayazma)	
Management plan	Management plan exists and is being implemented.	
Management authority	Ministry of Agriculture and Forestry	
METT score (September 2021)	71	
Annual budget: recurrent costs (operational) – excludes staff salaries	US\$ 12,000	
Annual budget: additional funds – excludes staff salaries	US\$ 1,200	
Management objective 1	Conserve the natural values.	

Management objective 2	Sustainable use and increase visitor enjoyment from recreation
Main threats	1. Waste and environmental pollution due to heavy visitor use 2. Commercial intake of water from sources
Key Biodiversity Indicators used	1. Change/increase in overall biodiversity and species populations

Kazdağı (Mount Ida) National Park – more detailed information

Area: 21,463 ha **Altitudinal range:** 5 m – 1,774 m

Designations: The entire mountain was declared a national park on 17 April 1994. It includes a 240 ha Strict Nature Reserve, created on 15 June 1988 to protect important stands of *Abies nordmannianum* ssp. *equi-trojana* and a 4-5 ha seed bank for *Pinus nigra* ssp. *pallasiano*. The National Park has been identified as an Important Plant Area (IPA) on account of its high species diversity (over 800 spp.), including 68 threatened taxa of which 37 are nationally endemic and 23 are endemic to this IPA (Byfield *et al.*, 2010).

Location and natural features: Kazdağı is an isolated mountain range that runs for some 60 km along Turkey’s northern Aegean coast, parallel to the Gulf of Edremit. Its diverse geology, including substantial exposures of schist and limestone; varied climate that includes a maritime Mediterranean climate on southern slopes, cooler and moister continental conditions on northern slopes and an exposed summit; and isolated position along the boundary between Euro-Siberian and Mediterranean floristic regions account for its diverse vegetation and an exceptional flora rich in endemic species. Southern slopes are clothed in marquis, together with Aegean and Black Pine (*Pinus brutia* and *P. nigra* ssp. *pallisiana*, respectively), typical of the mountain’s Mediterranean position. The more humid northern slopes support extensive forests of *Abies nordmanniana* ssp. *equi-trojana*, endemic to this mountain massif, and *Fagus orientalis*. The treeless summit supports extensive alpine cushion communities on both schist and limestone, exceptionally rich in rare species. Kazdağı is considered to be among the most important mountains for plant conservation not only in Turkey but across Europe. Its phyto geography is also particularly interesting for its relatively large number of species found only here in Turkey but also confined to mountains elsewhere in Greece and the Balkans. Refer to Byfield *et al.* (2010) for more details.

Cultural features: Ida is the mountain of the Mother Goddess, Cybele and it was here that Zeus, his wife and other Gods watched the outcome of Battle of Troy, just 20 miles away. Many festivals are celebrated on Ida’s summit.

Local population and visitors: There are no villages within the National Park. Wild plants and animals are protected and collection of plant or animal products is not allowed. In practice, enforcement is limited and some illegal harvesting occurs.

Threats: Pollution from the nearby Çan power station, fired by sulphur-rich lignite, is estimated to indirectly affect 500,000 ha of forest and its users from 117 forest villages; increasing visitor numbers, partly for local traditional festivals, threatens the Sankiz and Nankin summits where the vegetation is fragile and rich in endemic species; uncontrolled collection of medicinal, aromatic and ornamental plants; high incidence of summer fires on the mountain’s southern slopes, mostly caused by careless visitors and locals; and destruction of ancient olive groves on the lower mountain flanks destroyed to make way for development (Byfield *et al.* 2010).

Species diversity

Macrofungi: Kazdağı National Park and its close environs were sampled for macrofungi between 2014 and 2016, resulting in the determination of 207 species belonging to 50 families within two divisions. Among them, 14 species belong to Ascomycota and 193 to Basidiomycota. All determined species were given with their localities, habitats, collecting dates and fungarium numbers.⁸³

Flora⁸⁴: Kazdağı is among the most important floristic areas in Turkey (Ozhatay et al. 2003). Approximately 800 vascular plant taxa belonging to 101 families are recorded from Mount Kazdagi (Gemici et al. 1998). Families with the highest number of taxa include: Compositae (90 taxa), Gramineae (63), Leguminosae (56), Labiatae (48), Cruciferae (39), Rosaceae (36), Umbelliferae (31), Caryophyllaceae (30), Scrophulariaceae (25), Liliaceae (24) and Ranunculaceae (23).

Uysal et al. (2011) collected 189 specific and infraspecific vascular plant taxa from 132 genera and 52 families, of which 45 taxa (23.8%) were national endemics and 21 (11.1%) were endemic to this area. *Matthiola trojana* Dirmenci, Satil & Tümen was recorded as a new species, and *Nepeta sibthorpii* Benth. subsp. *tumeniana* Dirmenci was recorded as a new subspecies of *Iberis saxatilis* L. and as a new record for Turkish flora (Dirmenci 2005, Dirmenci et al. 2005, Dirmenci et al. 2006).

Sideritis trojana and *Thymus pulvinatus* occur only in Kazdağı (Başer et al. 2001, Davis 1965-1988). *Thymus pulvinatus* is known from only two localities on Mt Kazdağı, where its distribution in fields is limited (Başer et al. 2001). *Satureja pilosa* is rare in Mt. Kazdağı (Ekim et al. 2000, Tümen et al. 2000). *Sideritis athoa* is also a rare plant, known from only two locations in Turkey (Başer et al. 2001) where it is collected and used by local people as a herbal tea (Satil et al. 2006, 2007). These species are not gathered for commercial purposes but their habitats are under threat and they are over-harvested, sometimes destructively by pulling out the whole plant from its root, habitat loss, all of which results in loss of genetic diversity.

Kazdağı is the gene centre of the west Anatolian region. Endemic and rare taxa occur on different geological massifs, especially in the pseudo-alpine zone where some endemics recorded by Uysal's team (2010) are critically endangered (CR) or endangered (EN) according to the Red Data Book of Turkish Plants (Ekim et al., 2000): *Achillea fraasii* var. *trojana*, *Allium kurtzianum*, *Armeria trojana*, *Asperula sintenisii*, *Bromus spyleus*, *Centaurea odyseii*, *Cirsium steirolepis*, *Dianthus arpadianus* var. *trojanus*, *Ferulago idaea*, *Festuca ustulata*, *Hieracium idea*, *Hypericum kazdaghense*, *Linum boissieri*, *Matthiola trojana*, *Nepeta sibthorpii* ssp. *tumeniana*, *Paronychia chionaea* var. *latifolia*, *Sideritis trojana*, *Silene balanthoides*, *Thymus pulvinatus* and *Verbascum scamandri* (Karabacak et al., 2006; Celik et al., 2005).

Other endemic plants in Kazdağı, notably *Allium flavum* var. *minus*, *Muscari latifolium*, *A. sibthorpiatum* and *A. reuterianum*, are at risk of extinction from such causes as fire (Uysal 1992,1999). Among endemic medicinal plant species are *Sideritis trojana* (Sarikiz Sage), collected for herbal tea and widely used by local people to treat sore throat and colds (Uysal et al., 1991), and the ethnobotanically important *Digitalis trojana* Ivan. (Uysal and Ozturk, 1991).

Fauna:

Birds⁸⁵: Kazdağı is an important site for birds and biodiversity. It hosts a rich diversity of birds and their habitats, including some globally threatened species. Natural forests on Kaz Dağı are important habitats for some forest species, such as woodpeckers. The drier and open forests and Mediterranean vegetation host a

⁸³ Deniz ALTUNTAŞ , Hakan Allı , Ilgaz AKATA, 2017. Macrofungi of Kazdağı National Park (Turkey) and its close environs. *Biological Diversity and Conservation* 10 (2): 17-25.

⁸⁴ Compiled courtesy of Prof. Dr. Emine Akalın, Head of Pharmaceutical Botany Department, Faculty of Pharmacy, İstanbul University, 6 September 2021.

⁸⁵ Compiled courtesy of Kerem Ali Boyla, Ornithologist & Conservation Biologist, 12 June 2021.

good assemblage of Mediterranean species. The importance for birds is summarised below, followed by a checklist of 159 species. Thus, Kazdağı account for 31% of Turkey's avifauna (517 species).⁸⁶

1. Forests host important woodpeckers and other woodland birds that: require old-growth forests, are local in Turkey and are largely restricted to the Black Sea Forests:
 - a. Black Woodpecker (*Dryocopus martius*)
 - b. White-backed Woodpecker (*Dendrocopos leucotos*)
 - c. Kruper's Nuthatch (*Sitta kruperi*) - near-endemic to Turkey
 - d. Common Rosefinch (*Carpadocus erythrinus*)
 - e. Eurasian Bullfinch (*Pyrrhula pyrrhula*)
 - f. Black Stork (*Ciconia nigra*)
2. There are good populations of some globally 'threatened' and 'near-threatened' species:
 - a. European Turtle-Dove (*Streptopelia turtur*) VU
 - b. Meadow Pipit (*Anthus pratensis*) NT
 - c. Cinereous Bunting (*Emberiza cineracea*) NT - possibly very local and few in number
 - d. Egyptian Vulture (*Neophron percnopterus*) EN - currently known to be a passage migrant but also might possibly breed.Other species include Dalmatian Pelican (*Pelecanus crispus*), which is a passage migrant.
3. The Mediterranean vegetation in Kaz Dağları hosts some range-restricted species of Mediterranean habitats:
 - a. Eleonora's Falcon (*Falco eleonora*)
 - b. Masked Shrike (*Lanius nubicus*)
 - c. Olive-tree Warbler (*Hippolais olivetorum*)
 - d. Cretzschmar's Bunting (*Emberiza caesia*)
 - e. Cinereous Bunting (*Emberiza cineracea*)
 - f. Eastern Bonelli's Warbler (*Phylloscopus orientalis*)
4. The area is listed as an Important Bird Area (Eken et al. 2006) for the following species:
 - a. Golden Eagle (*Aquila chrysaetos*)
 - b. Eagle Owl (*Bubo bubo*)
 - c. Short-toed Snake Eagle (*Circaetus gallicus*)
 - d. Eurasian Roller (*Coracias garrulus*)
 - e. Middle Spotted Woodpecker (*Dendrocopos medius*)
 - f. Syrian Woodpecker (*Dendrocopos syriacus*)
 - g. Cretzschmar's Bunting (*Emberiza caesia*)
 - h. Ortolan Bunting (*Emberiza hortulana*)
 - i. Peregrine Falcon (*Falco peregrinus*)
 - j. Olive-tree Warbler (*Hippolais olivetorum*)
 - k. Masked Shrike (*Lanius nubicus*)

⁸⁶ Source: BirdLife International (<https://avibase.bsc-eoc.org/checklist.jsp?region=TR>)

- l. Wood Lark (*Lullula arborea*)
- m. Kruper's Nuthatch (*Sitta kruperi*)

Checklist, threat status and seasonality of birds of Kaz Dağları (Source: ebird.org, June 2021)

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Mallard	<i>Anas platyrhynchos</i>	LC				x								
Little Grebe	<i>Tachybaptus ruficollis</i>	LC				x	x					x		x
Great Crested Grebe	<i>Podiceps cristatus</i>	LC				x	x							x
Rock Pigeon	<i>Columba livia</i>	LC				x			x			x		
Common Wood-Pigeon	<i>Columba palumbus</i>	LC		x	x	x	x	x	x	x	x			
European Turtle-Dove	<i>Streptopelia turtur</i>	VU					x	x	x	x				
Eurasian Collared-Dove	<i>Streptopelia decaocto</i>	LC			x	x	x	x	x	x	x	x	x	x
Laughing Dove	<i>Streptopelia senegalensis</i>	LC							x					
Great Spotted Cuckoo	<i>Clamator glandarius</i>	LC				x	x							
Common Cuckoo	<i>Cuculus canorus</i>	LC				x	x	x	x					
Eurasian Nightjar	<i>Caprimulgus europaeus</i>	LC							x					
Common Swift	<i>Apus apus</i>	LC				x	x		x					
Water Rail	<i>Rallus aquaticus</i>	LC										x		
Eurasian Moorhen	<i>Gallinula chloropus</i>	LC				x	x	x				x		x
Eurasian Coot	<i>Fulica atra</i>	LC				x	x					x		
Common Snipe	<i>Gallinago gallinago</i>	LC											x	
Wood Sandpiper	<i>Tringa glareola</i>	LC						x						
Common Redshank	<i>Tringa totanus</i>	LC						x						
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	LC				x			x			x	x	x
Mediterranean Gull	<i>Ichthyaeetus melanocephalus</i>	LC				x						x		
Yellow-legged Gull	<i>Larus michahellis</i>	LC				x	x	x	x			x	x	x
Black Stork	<i>Ciconia nigra</i>	LC				x	x	x	x	x	x			
White Stork	<i>Ciconia ciconia</i>	LC					x	x	x	x				
Pygmy Cormorant	<i>Microcarbo pygmaeus</i>	LC					x							
Great Cormorant	<i>Phalacrocorax carbo</i>	LC				x	x		x				x	x
European Shag	<i>Phalacrocorax aristotelis</i>	LC										x		
Dalmatian Pelican	<i>Pelecanus crispus</i>	NT					x		x					
Gray Heron	<i>Ardea cinerea</i>	LC				x	x	x	x	x		x	x	x

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Purple Heron	<i>Ardea purpurea</i>	LC				x								
Great Egret	<i>Ardea alba</i>	LC				x	x		x			x		x
Little Egret	<i>Egretta garzetta</i>	LC				x	x		x					
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	LC					x	x	x					
Eurasian Spoonbill	<i>Platalea leucorodia</i>	LC					x							
Egyptian Vulture	<i>Neophron percnopterus</i>	EN					x							
European Honey-buzzard	<i>Pernis apivorus</i>	LC				x	x	x	x	x	x			
Eurasian Griffon	<i>Gyps fulvus</i>	LC				x								
Short-toed Snake-Eagle	<i>Circaetus gallicus</i>	LC			x	x	x	x	x	x				
Booted Eagle	<i>Hieraaetus pennatus</i>	LC							x					
Eurasian Marsh-Harrier	<i>Circus aeruginosus</i>	LC				x			x					
Eurasian Sparrowhawk	<i>Accipiter nisus</i>	LC			x	x		x			x		x	x
Northern Goshawk	<i>Accipiter gentilis</i>	LC							x	x				
Common Buzzard	<i>Buteo buteo</i>	LC		x	x	x	x	x	x	x	x		x	x
Long-legged Buzzard	<i>Buteo rufinus</i>	LC				x	x		x	x				
Barn Owl	<i>Tyto alba</i>	LC												x
Eurasian Scops-Owl	<i>Otus scops</i>	LC			x									
Little Owl	<i>Athene noctua</i>	LC			x	x	x		x			x	x	
Tawny Owl	<i>Strix aluco</i>	LC			x	x		x			x			
Eurasian Hoopoe	<i>Upupa epops</i>	LC					x	x	x	x				
Common Kingfisher	<i>Alcedo atthis</i>	LC								x				
European Bee-eater	<i>Merops apiaster</i>	LC				x	x	x			x			
Eurasian Wryneck	<i>Jynx torquilla</i>	LC						x						
Middle Spotted Woodpecker	<i>Dendrocoptes medius</i>	LC						x	x		x		x	
White-backed Woodpecker	<i>Dendrocopos leucotos</i>	LC				x			x					
Great Spotted Woodpecker	<i>Dendrocopos major</i>	LC		x		x	x	x	x		x		x	
Syrian Woodpecker	<i>Dendrocopos syriacus</i>	LC		x	x	x	x	x	x	x	x		x	
Lesser Spotted Woodpecker	<i>Dryobates minor</i>	LC			x	x		x	x		x			
Eurasian Green Woodpecker	<i>Picus viridis</i>	LC			x	x	x	x	x	x	x			
Black Woodpecker	<i>Dryocopus martius</i>	LC	x					x						x

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Eurasian Kestrel	<i>Falco tinnunculus</i>	LC			x	x	x		x				x	x
Eleonora's Falcon	<i>Falco eleonora</i>	LC					x	x	x	x				
Eurasian Hobby	<i>Falco subbuteo</i>	LC					x		x		x			
Peregrine Falcon	<i>Falco peregrinus</i>	LC		x	x		x							
Eurasian Golden Oriole	<i>Oriolus oriolus</i>	LC					x	x	x	x	x			
Red-backed Shrike	<i>Lanius collurio</i>	LC					x	x	x	x				
Lesser Gray Shrike	<i>Lanius minor</i>	LC								x				
Masked Shrike	<i>Lanius nubicus</i>	LC				x	x	x	x					
Woodchat Shrike	<i>Lanius senator</i>	LC				x	x	x	x	x				
Eurasian Jay	<i>Garrulus glandarius</i>	LC		x	x	x	x	x	x	x	x		x	
Eurasian Magpie	<i>Pica pica</i>	LC				x		x	x			x	x	
Eurasian Jackdaw	<i>Corvus monedula</i>	LC				x	x		x			x	x	
Hooded Crow	<i>Corvus cornix</i>	LC		x	x	x	x	x	x		x	x	x	x
Common Raven	<i>Corvus corax</i>	LC		x	x	x	x	x	x	x	x		x	
Coal Tit	<i>Parus ater</i>	LC		x	x	x	x	x	x	x	x			
Sombre Tit	<i>Poecile lugubris</i>	LC					x	x	x		x			
Marsh Tit	<i>Poecile palustris</i>	LC		x				x	x					
Eurasian Blue Tit	<i>Cyanistes caeruleus</i>	LC		x	x	x	x	x	x	x	x		x	
Great Tit	<i>Parus major</i>	LC		x	x	x	x	x	x	x	x	x	x	x
Eurasian Penduline-Tit	<i>Remiz pendulinus</i>	LC											x	
Wood Lark	<i>Lullula arborea</i>	LC		x	x	x	x	x						
Eurasian Skylark	<i>Alauda arvensis</i>	LC					x						x	
Crested Lark	<i>Galerida cristata</i>	LC			x	x	x	x	x			x		
Eastern Olivaceous Warbler	<i>Iduna pallida</i>	LC				x	x	x	x					
Olive-tree Warbler	<i>Hippolais olivetorum</i>	LC					x				x			
Icterine Warbler	<i>Hippolais icterina</i>	LC									x			
Eurasian Reed Warbler	<i>Acrocephalus scirpaceus</i>	LC						x						
Great Reed Warbler	<i>Acrocephalus arundinaceus</i>	LC						x						
Bank Swallow	<i>Riparia riparia</i>	LC					x							
Eurasian Crag-Martin	<i>Ptyonoprogne rupestris</i>	LC			x	x	x	x		x			x	

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Barn Swallow	<i>Hirundo rustica</i>	LC			x	x	x	x	x	x	x			
Red-rumped Swallow	<i>Cecropis daurica</i>	LC			x	x	x	x	x	x	x			
Common House-Martin	<i>Delichon urbicum</i>	LC			x	x	x	x	x	x	x			
Wood Warbler	<i>Phylloscopus sibilatrix</i>	LC				x						x		
Eastern Bonelli's Warbler	<i>Phylloscopus orientalis</i>	LC			x	x	x	x	x	x				
Willow Warbler	<i>Phylloscopus trochilus</i>	LC					x					x		
Common Chiffchaff	<i>Phylloscopus collybita</i>	LC			x	x	x	x	x	x	x	x	x	
Cetti's Warbler	<i>Cettia cetti</i>	LC				x	x	x				x		x
Long-tailed Tit	<i>Aegithalos caudatus</i>	LC		x	x	x	x	x	x	x	x		x	
Eurasian Blackcap	<i>Sylvia atricapilla</i>	LC			x	x						x		
Garden Warbler	<i>Sylvia borin</i>	LC										x		
Barred Warbler	<i>Sylvia nisoria</i>	LC					x							
Lesser Whitethroat	<i>Sylvia curruca</i>	LC				x	x	x	x					
Eastern Orphean Warbler	<i>Sylvia crassirostris</i>	LC						x		x				
Subalpine Warbler	<i>Sylvia cantillans</i>	LC				x		x						
Sardinian Warbler	<i>Sylvia melanocephala</i>	LC			x	x	x	x	x	x		x		
Greater Whitethroat	<i>Sylvia communis</i>	LC					x	x	x		x			
Goldcrest	<i>Regulus regulus</i>	LC		x	x	x	x	x	x					
Common Firecrest	<i>Regulus ignicapilla</i>	LC		x	x			x	x	x				
Eurasian Nuthatch	<i>Sitta europaea</i>	LC		x	x	x	x	x	x	x	x		x	
Krüper's Nuthatch	<i>Sitta krueperi</i>	LC			x	x	x	x	x	x	x		x	
Western Rock Nuthatch	<i>Sitta neumayer</i>	LC		x		x		x	x	x				
Eurasian Treecreeper	<i>Certhia familiaris</i>	LC					x	x						
Short-toed Treecreeper	<i>Certhia brachydactyla</i>	LC		x	x	x	x	x	x	x	x		x	
Eurasian Wren	<i>Troglodytes troglodytes</i>	LC		x	x	x	x	x	x	x	x		x	
White-throated Dipper	<i>Cinclus cinclus</i>	LC		x	x	x	x	x		x				
European Starling	<i>Sturnus vulgaris</i>	LC				x	x						x	x
Rosy Starling	<i>Pastor roseus</i>	LC					x							
Mistle Thrush	<i>Turdus viscivorus</i>	LC		x	x	x	x	x	x	x				
Song Thrush	<i>Turdus philomelos</i>	LC		x	x	x	x	x	x		x			

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Redwing	<i>Turdus iliacus</i>	NT												x
Eurasian Blackbird	<i>Turdus merula</i>	LC		x	x	x	x	x	x	x	x		x	
Spotted Flycatcher	<i>Muscicapa striata</i>	LC					x	x	x	x	x			
Rufous-tailed Scrub-Robin	<i>Cercotrichas galactotes</i>	LC							x					
European Robin	<i>Erithacus rubecula</i>	LC		x	x	x	x	x	x	x	x	x	x	x
Common Nightingale	<i>Luscinia megarhynchos</i>	LC				x	x	x	x		x			
Red-breasted Flycatcher	<i>Ficedula parva</i>	LC							x	x				
Collared Flycatcher	<i>Ficedula albicollis</i>	LC								x				
Common Redstart	<i>Phoenicurus phoenicurus</i>	LC				x	x		x					
Black Redstart	<i>Phoenicurus ochruros</i>	LC		x	x	x	x		x	x		x	x	
Rufous-tailed Rock-Thrush	<i>Monticola saxatilis</i>	LC					x							
Blue Rock-Thrush	<i>Monticola solitarius</i>	LC			x					x				
European Stonechat	<i>Saxicola rubicola</i>	LC			x	x	x		x			x		
Northern Wheatear	<i>Oenanthe oenanthe</i>	LC				x	x		x					
Black-eared Wheatear	<i>Oenanthe hispanica</i>	LC			x	x	x	x						
Dunnock	<i>Prunella modularis</i>	LC		x					x					x
House Sparrow	<i>Passer domesticus</i>	LC			x	x	x	x	x	x	x	x	x	x
Spanish Sparrow	<i>Passer hispaniolensis</i>	LC						x	x					
Gray Wagtail	<i>Motacilla cinerea</i>	LC		x	x	x	x	x	x	x				x
Western Yellow Wagtail	<i>Motacilla flava</i>	LC									x			
White Wagtail	<i>Motacilla alba</i>	LC			x	x	x	x	x		x	x	x	x
Meadow Pipit	<i>Anthus pratensis</i>	NT				x								x
Water Pipit	<i>Anthus spinoletta</i>	LC					x		x			x		
Common Chaffinch	<i>Fringilla coelebs</i>	LC		x	x	x	x	x	x	x	x	x	x	x
Brambling	<i>Fringilla montifringilla</i>	LC		x										
Hawfinch	<i>Coccothraustes coccothraustes</i>	LC		x	x			x	x	x				x
Common Rosefinch	<i>Carpodacus erythrinus</i>	LC					x			x				
Eurasian Bullfinch	<i>Pyrrhula pyrrhula</i>	LC			x					x				
European Greenfinch	<i>Chloris chloris</i>	LC		x	x	x	x	x	x	x	x	x		
Eurasian Linnet	<i>Linaria cannabina</i>	LC							x			x		

Common Name	Scientific Name	IUCN	J	F	M	A	M	J	J	A	S	O	N	D
Red Crossbill	<i>Loxia curvirostra</i>	LC	x		x	x	x	x	x					
European Goldfinch	<i>Carduelis carduelis</i>	LC		x	x	x	x	x	x	x	x	x	x	
European Serin	<i>Serinus serinus</i>	LC			x	x	x	x	x		x			
Eurasian Siskin	<i>Spinus spinus</i>	LC												x
Black-headed Bunting	<i>Emberiza melanocephala</i>	LC						x	x					
Corn Bunting	<i>Emberiza calandra</i>	LC			x	x	x	x						x
Cirl Bunting	<i>Emberiza cirlus</i>	LC			x	x	x	x	x	x	x		x	
Cinereous Bunting	<i>Emberiza cineracea</i>	NT			x									
Ortolan Bunting	<i>Emberiza hortulana</i>	LC				x	x		x					
Cretzschmar's Bunting	<i>Emberiza caesia</i>	LC							x					

References

General

Byfield, A., Atay, S. and Ozhatay, N. (2010). *Important Plant Areas in Turkey: 122 Key Turkish Botanical Sites*. WWF Turkey, Istanbul. Pp. 69-72.

Flora

Başer KHC., Satil F., Tümen G. (2001) The Karaca Arboretum Magazine, 6(1).

Celik, Sezgin, Ismet Uysal and Yusuf Menemen: *Centaurea* species in Turkey (A): *Centaurea odyssei* Wagenitz (Asteraceae) in Kazdagi (Mt. Ida) National Park. J. Biodiver. Sci. Manage., 1, 113-120 (2005).

Davis PH. (1965-1988) *Flora of Turkey and the East Aegean Islands*. Vol:1-10, Edinburgh University Press, Edinburgh.

Ekim T., Koyuncu M., Vural M., Duman H., Aytaç Z., and Adıgüzel N. (2000). *Türkiye Bitkileri Kırmızı Kitabı (Red Data Book of Turkish Plants)*. Türkiye Tabiatını Koruma Derneği. Ankara.

Ekim, T., M. Koyuncu, M. Vural, H. Duman, Z. Aytac and N. Adiguzel: *Red Data Book of Turkish Plants*. Turkish Association for the Conservation of Nature and Van Centennial University Publication, No. 18, Van, Turkey (2000).

Gemici Y, Seçmen Ö, Görk G, Acar I, Özel N (1998) Plant Diversity on Kazdağları (Mt. Ida). In: Zincirci N, Kaya Z, Anikster Y, Adams WT (eds), *The Proceedings of International Symposium on In Situ Conservation of Plant Genetic Diversity*, 4-8 November 1996, Ankara, 281-288.

Dirmenci T (2005) A New Subspecies of *Nepeta* (Lamiaceae) from Turkey. *Botanical Journal of the Linnean Society* 147: 229-233.

Dirmenci T, Satil F, Tumen G (2005) A New Record for the Flora of Turkey: *Iberis saxatilis* L. (Brassicaceae). *Turkish Journal of Botany* 29: 471-474.

Dirmenci T, Satil F, Tumen G (2006) A New Species of *Matthiola* R.Br. (Brassicaceae) from Turkey. *Botanical Journal of the Linnean Society* 151 (3): 431-435.

Karabacak, E., I. Uysal and S. Oner: *Flora of Kazdagi (Mt. Ida) pseudo- alpine zone, Turkey*. IV Balkan Botanical Congress, 20-26 June 2006, Sofia-Bulgaria, Book of Abstracts Scientific Area B. p. 180 (2006).

Ozhatay N, Byfield A, Atay S (2003) *Türkiye'nin Önemli Bitki Alanları*. WWF Türkiye Doğal Hayatı Koruma Derneği, Istanbul.

- Satıl F., Dirmenci T., Tümen G. (2006) "The Trade of Wild Plants that are Named as Thyme (Kekik) Collected from Kazdağ", Proceedings of the IVth International Congress of Ethnobotany (ICEB 2005), İstanbul, 201-204.
- Satıl F., Tümen G., Dirmenci T., Çelik A., Arı Y., Malyer H. (2007) Journal of Cultural Inventory, 5, 171- 203.
- Tümen G., Satıl F., Duman H., Başer KHC. (2000) Turk J Bot, 24, 211-214.
- Uysal, Ismet. "An overview of plant diversity of Kazdagi (Mt. Ida) Forest National Park, Turkey." Journal of Environmental Biology 31.1 (2010): 141.
- Uysal I, Karabacak E, Oner S, Kurt F (2011) A Syntaxonomical Study of the Pseudo-Alpine Vegetation of Kazdagi (Turkey) and Two New Endemic Associations. Ekoloji 20 (80): 88-96.
- Uysal, Ismet and Munir Ozturk: Morphology, anatomy and ecology of endemic species *Digitalis trojana* Ivan. Anadolu Univ. J. Sci. Arts, 3, 53-61 (1991).
- Uysal, I.: Morphological and ecological investigations on the endemic plants of Kazdagi (B1 Balikesir) I *Allium flavum* L. subsp. *flavum* var. *minus* Boiss. and *Muscari latifolium* Kirk. Doga-Tr. J. Bot., 16, 299-310 (1992).
- Uysal, I.: Morphological, Anatomical and ecological studies on two Turkish endemic species collected from Kazdagi (B1 Balikesir) *Allium sibthorpiatum* Schultes & Schultes fil. and *Allium reuterianum* Boiss. Turk. J. Bot., 23, 137-149 (1999).
- Uysal, Ismet, Munir Ozturk and Mehmet Pirdal: Morphology, Anatomy and Ecology of *Sideritis trojana* Bornm. Doga-Tr. J. Bot., 15, 371-379 (1991).