



Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits

Part I: Project Information

GEF ID

10352

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits

Countries

Turkmenistan

Agency(ies)

UNDP

Other Executing Partner(s)

Ministry of Agriculture and Environmental Protection

Executing Partner Type

Government

GEF Focal Area

Multi Focal Area

Taxonomy

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

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 1

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

6/5/2021

Expected Implementation Start

1/1/2022

Expected Completion Date

12/31/2026

Duration

60In Months

Agency Fee(\$)

435,404.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
LD-1-1	Maintain or improve flow of agroecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)	GET	1,408,356.00	17,291,214.00
LD-1-4	Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	GET	1,408,356.00	20,089,214.00
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	GET	1,766,484.00	20,147,572.00
Total Project Cost(\$)			4,583,196.00	57,528,000.00

B. Project description summary

Project Objective

To promote land degradation neutrality, restore and improve the use of land and water resources in Turkmenistan's Amudarya watershed to enhance the sustainability and resilience of livelihoods and globally significant ecosystems.

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

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1 Promoting Land Degradation Neutrality	Investment	<p>Outcome 1</p> <p>Land degradation neutrality in Aral basin promoted, as evidenced through: (i) LDN-compatible land use in 660,000 ha of production landscape; (ii) crop resilience to salinization improved in 10,000 ha (iii) 60,000 ha of degraded pasture, forest and arable land restored; (iv) improved livelihoods of 9,750 farmers (30% women) with immediate replication potential for 100,000 people.</p>	<p>Output 1.1</p> <p>Integrated landscape plans for priority areas of Dashoguz and Lebap provinces (incl. mapping; long-term land restoration plans for priority areas in and around KBAs and associated agricultural landscapes; regional Land Degradation Neutrality (LDN) targets established and action plans and monitoring systems agreed for attaining them).</p> <p>Output 1.2</p> <p>Investment in community-based restoration of degraded arable and forest lands in 2 provinces, including saxaul planting in degraded areas; introduction of salt-tolerant crop varieties, and facilitating natural regeneration of tugai forest, with high potential for income for local communities.</p> <p>Output 1.3</p> <p>Efficient water management of irrigated land in</p>	GET	2,201,768.00	35,379,572.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2 Securing Critical Ecosystems for Biodiversity and Ecosystem Services	Investment	<p>Outcome 2</p> <p>Secured biodiversity status in 1,077,554 ha PAs and local community supported ecological corridors covering 292,607 ha KBAs/IBAs in the Amudarya basin landscape as evidenced by: non-deterioration of globally threatened species, including Egyptian vulture, Saker falcon, Dalmatian pelican, Houbara bustard, Cinereous vulture, Ferruginous duck. Management effectiveness increased for targeted protected areas from 20% to 40%. New protection mechanisms established covering additional 60,000 ha of currently unprotected KBAs, increasing PAs coverage of KBA are in</p>	<p>Output 2.1</p> <p>Management effectiveness supported for 2 existing PAs including improved management, and targeted investments; support to local tourism potential to facilitate additional income generation for local communities at targeted PAs; control over illegal activities.</p> <p>Output 2.2</p> <p>New conservation areas operationalized through new and innovative approaches covering 60,000 ha of unprotected high priority ecosystems, supported by: gap analysis, feasibility studies and technical documentation for PAs establishment, analysis of ecological flow water requirements for maintenance and conservation of KBAs at new sites; mapping,</p>	GET	1,536,220.00	19,148,428.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3 International knowledge sharing and cooperation for the Aral Sea Basin	Technical Assistance	<p>Outcome 3</p> <p>Strengthened and better informed engagement of Turkmenistan in implementation of regional cooperation under the International Fund for Saving the Aral Sea (IFAS) for improved management and restoration of Aral Sea Basin land and water resources, as evidenced by:</p> <p>(i) Turkmenistan is better represented at key regional forum and events supporting the restoration of the Aral Sea, and (ii) Support provided to international dialogue and cooperation on IFAS.</p>	<p>Output 3.1</p> <p>Higher capacity for government and scientific institutions for participating in IFAS. IFAS sanctioned activities for the implementation of global and regional initiatives put forward by Turkmenistan to save the Aral Sea e.g. Regional Environment Programme for Sustainable Development in Central Asia (REP4SD), Aral Sea Basin Programme 4 (ASBP-4) aiming at: (i) at least 3 IFAS meetings attended by Turkmenistan delegation where Turkmenistan contributes to decisions at IFAS (ii) Targeted knowledge management and exchange products (web-based, TV programs, trainings for communities and decision makers) on LD and BD issues in the Aral Sea (iii) Outreach and awareness raising on the problems of the</p>	GET	564,461.00	935,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 4 Monitoring and Evaluation	Technical Assistance	Outcome 4 Project Results properly monitored and evaluated	Output 4.1 Set of monitoring and evaluation activities implemented.	GET	62,500.00	65,000.00
Sub Total (\$)					4,364,949.00	55,528,000.00
Project Management Cost (PMC)						
			GET	218,247.00	2,000,000.00	
			Sub Total(\$)	218,247.00	2,000,000.00	
			Total Project Cost(\$)	4,583,196.00	57,528,000.00	

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Agriculture and Environment Protection and State Committee on Water resources and investments from local authorities	Public Investment	Investment mobilized	57,388,000.00
GEF Agency	UNDP	Grant	Investment mobilized	75,000.00
Civil Society Organization	NGO Bosfor	In-kind	Investment mobilized	15,000.00
Civil Society Organization	NGO Tebigy Kuwwat	In-kind	Investment mobilized	30,000.00
Civil Society Organization	NGO Ynanch-Vepa	In-kind	Investment mobilized	20,000.00
Total Co-Financing(\$)				57,528,000.00

Describe how any "Investment Mobilized" was identified

The Government component of the Investment mobilized represents relevant parallel investments in the project areas, towards the rehabilitation of irrigation system on irrigated arable land, improvements of the pastures watering facilities, and strengthening the PAs infrastructure. The parallel finance is channelled through the budgets of the Ministry of Agriculture and Environmental Protection, State Committee for Water Resources, Regional authorities (Hyakimliks) of Lebap and Dashoguz provinces (velayat). The cofinancing commitments have been confirmed in writing as evidenced by the co-financing letters attached to the GEF UNDP Project Document (Annex 22-separate attachment) The NGO component of the Investment mobilized represents grant funding reoriented to specific purposes by the NGOs to complement training and awareness raising project outputs. Section VII of the GEF-UNDP Project Document ?Financial Planning and Management? provides more information about the parallel investments and cofinancing considered under different outputs.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Turkmenistan	Land Degradation	LD STAR Allocation	2,816,712	267,588
UNDP	GET	Turkmenistan	Biodiversity	BD STAR Allocation	1,766,484	167,816
Total Grant Resources(\$)					4,583,196.00	435,404.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **false**

PPG Amount (\$)

120,000

PPG Agency Fee (\$)

11,400

Agency	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)
UNDP	GET	Turkmenistan	Land Degradation	LD STAR Allocation	60,000	5,700
UNDP	GET	Turkmenistan	Biodiversity	BD STAR Allocation	60,000	5,700
Total Project Costs(\$)					120,000.00	11,400.00

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
594,423.00	1,137,554.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
50,000.00	60,000.00	0.00	0.00

Name of the Protected Area	WDP A ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Akula National Park Pitnyak Sanctuary (Output 2.2)- conservation Areas (Output 2.2)	125689 NA	Select Habitat /Species Management Area	50,000.00	40,000.00		
Akula National Park Zengibabagan Goyungirlan Sanctuary	125689 NA	Select Habitat /Species Management Area		20,000.00		

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
544,423.00	1,077,554.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Amu Darya State Nature Reserve	125689	Select Strict Nature Reserve	49,484.00	48,351.00			56.00		
Akula National Park Gapla?gyr State Nature Reserve	125689	Select Strict Nature Reserve	282,200.00	275,735.00			53.00		
Akula National Park Kelif Sanctuary Repetek Nature Reserve	125689	Select Strict Nature Reserve	103,000.00	103,000.00					

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Koyten dag State Nature Reserve	125689	Select Strict Nature Reserve	27,139.00						
Akula National Park Pitnyakskiy zakaznik of the Amudarynskiy zapovednik	125689	Select Habitat/Species Management Area	48,000.00						
Akula National Park Repetek State Nature Reserve	125689	Select Strict Nature Reserve	34,600.00						
Akula National Park Sarygamysh State Nature Sanctuary (part of Gapsan State Nature Reserve)	125689	Select Habitat/Species Management Area		541,466.00					

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Akula National Park Shasenem State Nature Sanctuary (part of Gaplangyr State Nature Reserve)	125689	SelectHabitat/Species Management Area		109,002.00					

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
60000.00	60000.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
4,700.00	4,700.00		

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
5,300.00	5,300.00		

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
50,000.00	50,000.00		

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

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

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
760000.00	746343.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
600,000.00	646,343.00		

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

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

Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
160,000.00	100,000.00		

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

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

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

Title

Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	2028250	2028250	0	0
Expected metric tons of CO ₂ e (indirect)	0	0	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)	2,028,250	2,028,250		
Expected metric tons of CO ₂ e (indirect)	0			
Anticipated start year of accounting	2024	2024		
Duration of accounting	15	15		

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO ₂ e (direct)				
Expected metric tons of CO ₂ e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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

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

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

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

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

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	2,500	3,045		
Male	2,500	7,105		
Total	5000	10150	0	0

Part II. Project Justification

1a. Project Description

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

There have been no substantial changes in terms of the global environmental problems identified since the PIF was designed and approved. The existing problems and root causes have been further analysed in more detail, and presented in the GEF/UNDP Project Document (Section 1.1: Development Challenge)

The project's Theory of Change (ToC) summarizing the remaining barriers and proposed pathways to change, is presented in the GEF/UNDP Project Document (Section 2.4).

2) The baseline scenario and any associated baseline projects;

An updated Baseline scenario is presented below:

A key baseline initiative is the overall body of work and regional efforts for restoration of the Aral Sea, coordinated through the **International Fund for saving the Aral Sea (IFAS)**. IFAS contributes to the sustainability of the Aral Sea basin through the Aral Sea Basin Programme that serve as an umbrella for the relevant national programmes and projects and donor funding. Among international environmental programs of the Aral Sea Basin an important baseline programme is the Action Program to Assist the Countries of the Aral Sea Basin (ASBP). The most recent ASBP-4 is aimed at uniting efforts and potential of the regional states and international community in solving common priority water management, environmental and socio-economic issues of the Aral Sea Basin.

The **Regional Environmental Program for Sustainable Development in Central Asia (REP4SD CA)**, aims at the implementation of the Sustainable Development Goals (SDGs) and UN environmental conventions, development of 'green' economy principles and climate change adaptation. REP4SD CA is the strategic document for the period until 2030 that was developed in the framework of revising the previous Regional Environmental Action Plan for Central Asia.

The project is aligned with the general priority areas under the current Aral Sea Basin Programme (ASBP-4) and the REP4SD CA. The potential synergies will be explored under the following national priorities:

Water Resources: ensuring effective water quality monitoring, including the monitoring of water turbidity on the flow of Amu Darya River; exchange of technologies and experience in restoration and conservation of water-related ecosystems.

Climate change: development of climate scenarios for the Central Asian region; preparation of the Regional Strategy on Climate Risk Reduction in Central Asia; improving education, preparation of qualified staff and public outreach on the issues of climate change.

Desertification and biodiversity: implementation of the Sub-regional Action Programme to Combat Desertification, making the functioning of Central Asian wetlands sustainable by implementing best practices for their management; restoring the Tugai forests of the Amu Darya Valley; creating the Red Book of Central Asia; studying traditional methods of conservation and rational use of genetic resources; developing and implementing methods to prevent the introduction of alien species.

Cooperation, science and technologies: develop cooperation between Central Asian countries in the fields of science, technology and innovative technologies; strengthen the institutional capacity of regional cooperation organizations to facilitate the implementation of national plans aimed at achieving the Global Goals for Sustainable Development, including their indicators.

The National **Program of Socio-Economic Development of Turkmenistan for the period 2011-2030** is another baseline state programme. The main goal of the program is to achieve high growth rates of macroeconomic indicators of the country's economy, its constant growth, to bring the socio-intellectual level of the population to the level of developed countries of the world. The program includes relevant components, such as the 'Ecology and environmental protection' component, which defines the priorities in the field of environmental protection, reflecting environmental problems at the national level and their solution. In particular, this component provides for measures to protect rare and endangered species of flora and fauna (conservation of biodiversity); preservation of unique natural monuments; afforestation and reforestation; suspension of desertification processes, etc. This programme represents a source of co-financing of the project in relation to Outcome 2 'Secured biodiversity status in 1,077,554 ha of PAs and local community supported ecological corridors covering 292,607 ha KBAs in the Amudarya basin landscape as evidenced by: non-deterioration of globally threatened species, including Egyptian vulture, Saker falcon, Dalmatian pelican, Houbara bustard, Cinereous vulture, Ferruginous duck. Management effectiveness increased for targeted protected areas from 20% to 40%. New protection mechanisms established covering additional 60,000 ha of currently unprotected KBAs, increasing PAs coverage of KBA are in the target landscape by approximately 5%'. Approximately \$82,860 pledged co-financing under this programme is directed towards building the PAs infrastructure.

The **Program of the President of Turkmenistan for the socio-economic development of the country for 2019-2025** provides for specific directions and measures for environmental and foresees a range of activities to improve the status of land and water management practices. This government investment program is a major source of project co-financing, as the program goals align fully with the project. Under the programme, special attention will be given to the measures in the Aral Sea basin, and work of the IFAS. Provisions for the development of large and small water storage facilities, increasing capacity of existing large reservoirs, renovation of existing and construction of new

irrigation and drainage canals, as well as careful utilizations of water by application of modern technological solutions are listed as investment priorities. Within the framework of the Program for the development of the Dashoguz velayat, an investment is envisaged for a total amount of \$ 2,349 million of which 48.4% will be directed to production. For the development of the Lebap velayat, there is approximately \$ 9,050 million investment envisaged, of which 87.6% will be directed to the development of production. The total amount of investment foreseen under this programme between 2019-2025 is approximately \$ 65,500 million. This programme represents the main co-financier of the project in relation to Outcome 1,? Land degradation neutrality in Aral basin promoted, as evidenced through: (i) LDN-compatible land use in 746,303 ha of production landscape; (ii) crop resilience to salinization improved in 10,000 ha (iii) 60,000 ha of degraded pasture, forest and arable land restored; (iv) improved livelihoods of 9,750 farmers (30% women) with immediate replication potential for 100,000 people. Part of co-financing dedicated to improving pasture watering infrastructure in production zones will relate to Outcome 2. The co-financing is pledged as follows (i) approx. \$11.4 million in co-financing to this project will be directed towards renovation of existing irrigation system, bank protection and flood control measures along Amudarya River (100.13km) in Lebap region (ii) approx. \$9.8 million of pledged co-financing to this project will be directed towards the reclamation of irrigated land in Lebap region and \$22.7 million in Dashoguz region; (iii) approx. \$4.55 million of pledged co-financing to this project will be directed towards the construction of water wells and measurement of the salinity and level of groundwater and (iv) approx. \$8.82 million towards watering infrastructure of 3,380 thousand hectares of pastures.

In the **Program for the Development of Agriculture of Turkmenistan for the period 2019-2025**, of the total number of planned activities, an important place is given to environmental issues, including environmental protection and ensuring the environmental safety of industrial production, the development of a system of protected areas and the preservation of biodiversity, environmental protection issues in the Turkmen sector of the Caspian Sea, the implementation of the National Strategy of Turkmenistan on climate change, implementation of the National Forest Program, implementation of international environmental cooperation of Turkmenistan, research and practical activities in the field of nature protection. For the development of the country's agricultural complex, the Program provides for a financial investment in the targeted provinces in amount of 6.8 billion manats or \$1,940 million. The total amount of investment foreseen under this programme between 2019-2025 is approximately \$ 8,017 million.

The National Forestry Program of Turkmenistan was adopted with an Action Plan for the period **2013-2020**. The program focuses on forestry issues, forest protection, their rational use and restoration. It is part of a larger government program to plant tens of millions of trees near cities, towns and other localities. In the program, separate sections are devoted to the restoration and preservation of desert and tugai forests, the species of woody plants for the restoration and enrichment of the species composition of these forests are identified. Currently, a new National Forestry Program (NFP) of Turkmenistan for the period 2021-2030 is being prepared. The main objective of NFP is the conservation and rational use of forests and, thereby, ensuring the further development of sustainable forest management. The project will build synergies under the programme. There are plans to expand greening areas and continue to create optimal environmental conditions in the country. Especially relevant for the project Outcome 1, is the cultivation of desert saxaul forests in the north of the country on the territory of the Dashoguz

velayat in the Aral Sea influence zone, expanding nurseries, growing planting material on modern technologies.

UNDP/Adaptation Fund Project ?Scaling Climate Resilience for Farmers in Turkmenistan?

implemented in partnership with the Ministry of Agriculture and Environment Protection, with a budget of \$ 7,000,040 aims at building resilience to climate change among the emerging class of small and medium size private farmers in Turkmenistan, including women farmers, strengthening the agriculture extension services and transitioning towards resilience agriculture practices. Due to ample synergy between the two projects a number of joint activities will be organized such as: the trainings of 50 extension officers and joint awareness sessions. The knowledge generated under both projects will be shared through the online platforms to be set up by the Adaptation Fund project.

Central Asia regional Environmental Center (CAREC) **?Climate Adaptation and Mitigation Programme for Aral Sea Basin (CAMP4ABS)?** 2016-2021, with a budget of \$15 million and implemented in partnership with the WB and EC IFAS, with the objective of solving general problems and challenges related to the climate change effects in Central Asian countries through improving access to the knowledge and data in the field of climate change for the key stakeholders, as well as through increasing investments and technical capacity development. The project will build on the KM approaches and platform set up by CAREC in the implementation of the Knowledge Management Plan.

The Project of the Federal Ministry for Environment, Nature Conservation and Nuclear Safety of Germany (BMUB): **Central Asian Desert Initiative (CADI) ? Conservation and sustainable use of deserts in Turkmenistan**, implemented by Ministries of Agriculture and Environment Protection of Turkmenistan, Kazakhstan, Uzbekistan, Michael Succow Foundation and University of Greifswald (Germany), with a total budget of ? 3 280 963, during 2019-2021 (with possibility of a no-cost extension). The project aims at assisting the biodiversity conservation and development of desert ecosystems? functions in Turkmenistan; preparation of scientific-technical rationale for the inclusion of desert ecosystems into the UNESCO World Heritage List; delivery of events for the management improvement and territory expansion of one of the existing desert protected areas; technical support and delivery of joint field researches, training of protected area?s staff, dissemination of acquired knowledge and public outreach. The project?s strategy builds on these results of the CADI project and good practices in the inventory of wild ungulates, inventories of flora and fauna conducted in Gaplanyr Reserve and the knowledge generated during the process of nomination of the deserts of the temperate zone of Central Asia for inclusion in the UNESCO World Heritage List.

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

The project design is closely aligned to the original PIF. The structure of the project components closely resembles the PIF approved by the GEF. A description of the project components is provided in Section III: Results and Partnerships of the GEF-UNDP Project Document. In addition, some changes were made to the project?s outputs, which do not represent a departure from the project?s strategy as defined originally in the PIF nor will they have an impact on the funds originally budgeted. These changes are described as follows:

PIF Outcomes/Outputs (Component 1)	Project Document Outcomes/Output (Component 1)
-------------------------------------	--

Outcome 1: Land degradation neutrality in Aral basin promoted, as evidenced through:

- LDN-compatible land use in 760,000 ha of production landscape;
 - crop resilience to salinization improved in 10,000 ha
 - 50,000 ha of degraded pasture and forest land restored;
 - improved livelihoods of 5,000 farmers (50% women) directly, with immediate replication potential for 100,000 people.
- (All values to be confirmed at PPG stage)*

Outcome 1 Land degradation neutrality in Aral basin promoted, as evidenced through: (i) LDN-compatible land use in 660,000 ha of production landscape; (ii) crop resilience to salinization improved in 10,000 ha (iii) 60,000 ha of degraded pasture, forest and arable land restored; (iv) improved livelihoods of 9,750 farmers (30% women) with immediate replication potential for 100,000 people.

This outcome was adjusted to indicate the change of the number of hectares of LDN compatible land use which was adjusted to 660,000 of production landscape. This latter figure represents the sum of: 500,000 ha under sustainable use regimes under Output 1.4; 100,000 ha of irrigation areas placed under sustainable management under Output 1.3 (out of which, on 10,000 ha the project demonstrates improved crop resilience to salinization); 10,000 ha of restored arable and forest land (including: 4,700 degraded irrigated land + 5,000 ha degraded forest area + 300 ha of degraded tugai area) under Output 1.2.; and 50,000 ha of restored degraded pasture areas under Output 1.4 .

The number of hectares of ?degraded pasture and forest land restored? was revised from 50,000 ha to 60,000 ha, representing the sum of: 50,000 ha of degraded pastures under Output 1.4+10,000 ha degraded arable and forest land (i.e. 4,700 ha irrigated area+5,000 ha saxaul forest area+300 ha of tugai area).

The number of targeted farmers has been increased from 5,000 farmers (PIF) to 9750 farmers in order to reflect the number of people employed in agriculture in the targeted districts, likely to benefit from the improved pastures and arable land regimes.

The percentage of women has been revised to 30%, which is deemed more realistic, considering the societal norms and the likely possibility of change that the project?s gender sensitive approaches will trigger.

Output 1.1 Integrated landscape plans for priority areas of Dashoguz and Lebap provinces (incl. mapping; long-term land restoration plans for priority areas in and around KBAs and associated agricultural landscapes; regional Land Degradation Neutrality (LDN) targets established and action plans and monitoring systems agreed for attaining them).

This output wording remains unchanged however the project's scope under this output has broadened to include a level of support to the National LDN Voluntary Target Setting (led by the Government of Turkmenistan in partnership with the UNCCD), more so than it was envisaged at PIF stage.

During the PPG, the UNDP/PPG Team has supported the engagement of UNCCD Focal Point with the UNCCD Global Mechanism/ LDN Target Setting Programme. As a result, Turkmenistan has established a formal correspondence with the UNCCD, expressing its commitment to setting the National LDN Voluntary targets to address degradation and desertification.

The project document strategy therefore includes support to the National LDN target setting process at multiple levels. The reason being that the National LDN Target Setting is a key driver towards achieving the project outcome, expressing the national government's commitment to address land degradation. Moreover, the National LDN Target Setting led by the government, will represent a valuable up-scaling platform, for showcasing and replicating the project's direct investments in Dashoguz and Lebap and sharing the regional LDN target setting experience with other regions in the country.

The project's support to the National LDN target setting will be complementary to the UNCCD financial and technical contribution. It will address capacity building (training seminars under Act. 1.1.1.), targeted amendments and technical inputs at policy and regulatory level (explained under Act 1.1.3) and support to Baseline analysis (explained under Act 1.1.4).

Regarding the project's support to LDN Baseline analysis, as explained in the project document (Output 1.1./Act.1.1.4), the assessments and validation of the National LDN baseline and Regional LDN baseline will be done

<p>Output 1.2 Investment in community-based restoration of degraded arable and forest lands in 2 provinces, including saxaul planting in degraded areas; introduction of salt-tolerant crop varieties, and facilitating natural regeneration of tugai forest, with high potential for income for local communities.</p>	<p>Output 1.2 Investment in community-based restoration of degraded arable and forest lands in 2 provinces, including saxaul planting in degraded areas; introduction of salt-tolerant crop varieties, and facilitating natural regeneration of tugai forest, with high potential for income for local communities.</p> <p>The output was reworded, the words ?and/or sea buckthorn? have been deleted.</p> <p>The reason is that the restoration activities will be using native saxaul species. Sea buckthorn is not common in the project area.</p>
<p>Output 1.3 Efficient water management of irrigated land in 4 priority districts, incl: maintenance of water management infrastructure; operationalization of multi-stakeholder Water User Groups (involving local communities); introduction of best practice irrigation technologies.</p>	<p>No changes compared to the PIF</p>
<p>Output 1.4 Sustainable pasture management regimes in 4 priority districts introduced raising productivity of livestock management for local communities, incl: sustainable pasture management plans focusing on rotational grazing and efficient and sustainable livestock watering infrastructure.</p>	<p>No changes in the wording of this output.</p> <p>Activities under this output include the sustainable pasture regimes covering 500,000 ha of pastures and the restoration of 50,000 ha of degraded pastures,</p> <p>The project document is counting the pastures under Output 1.4 (and not under Output 2.3; although the activities are linked because pastures are partially overlapping with KBAs/IBAs).</p>
<p>PIF Outcomes/Outputs (Component 2)</p>	<p>Project Document Outcomes/Outputs (Component 2)</p>

Outcome 2: Secured biodiversity status in **>0.5 mln** ha of KBAs in the Amu Darya basin, as evidenced by:

- non-deterioration of globally threatened species, including Egyptian Vulture, Saker Falcon, Dalmatian Pelican, Houbara Bustard, Cinereous Vulture, Ferruginous Duck;
- Management effectiveness increased for targeted protected areas from ~20% to ~40%;
- New protection mechanisms established covering additional 50,000 of currently unprotected KBAs, increasing PA coverage of KBA area in the target landscape by ~5%, to roughly 50%

(All values to be confirmed at PPG stage)

Outcome 2:

Secured biodiversity status in **1,077,554 ha** PAs and local community supported ecological corridors covering **292,607 ha** KBAs/IBAs in the Amudarya basin landscape as evidenced by:

-non-deterioration of globally threatened species, including Egyptian vulture, Saker falcon, Dalmatian pelican, Houbara bustard, Cinereous vulture, Ferruginous duck.

-Management effectiveness increased for targeted protected areas from 20% to 40%.

-New protection mechanisms established covering additional **60,000 ha** of currently unprotected KBAs, increasing PAs coverage of KBA are in the target landscape by approximately 5%.

The Outcome wording was changed in order to reflect several additions/updates :

-The work on PAs is now represented in the Output title as well (in order to be link with the reference to the METT)

-The number of hectares of targeted PAs has apparently nearly doubled (from 544,423 ha at PIF stage to 1,077,554 ha at PPG stage) primarily due to the fact that it now properly counts the hectarage of Sarygamish and Shasenem sanctuaries that are under the jurisdiction and management of Gaplangyr Reserve. Therefore part of the KBAs territory included under the <0.5 mln ha (PIF stage) is considered already, under the PAs (PPG stage).

-The **0.5 mln ha** of KBAs/IBAs has been revised. At the PIF stage, there was an assumption that the KBAs/IBAs not covered by PAs is about 600,000 ha. This proves not to be the case.

In the two provinces targeted by the project there are 13 KBAs that have a total area of 1,318,714 ha. Within these two provinces there are 8 PAs that were identified in the PIF initially. The hectarage of these 8 PAs in the PIF is 544,423 ha. This amount is not correct as it does not include number of hectares of Shasenem (544,423 ha) and Sarygamish KBA/IBA (100,000 ha)

Output 2.1 Management effectiveness supported for **8** existing PAs, including: (1) improved management, and targeted investments (based on PPG findings); (2) support to local tourism infrastructure—to facilitate additional income generation at for local communities at targeted PAs; (3) control over illegal activities.

Output 2.1. Management effectiveness supported for **2** existing PAs including improved management, and targeted investments; support to local tourism **potential** to facilitate additional income generation for local communities at targeted PAs; control over illegal activities.

The hectarage of protected landscapes is largely unchanged, although it appears to have doubled and the number of designated PAs is apparently reduced, from 8 to 2. This is largely because the sanctuaries (which are under the jurisdictions of the main reserves/PAs) were listed separately at PIF stage, whereas now they are incorporated under the main PAs.

? Initially, the PIF has considered **8** PAs under the project scope with a total coverage of 544, 423 ha: i.e. Gaplangyr State Nature Reserve (282,200 ha); with Shasenem and Sarygamish Sanctuaries; Amudarya State Nature reserve (49,484 ha); Repetek State Nature Reserve (34,600 ha); Koytendag State Nature Reserve (27,139 ha); Kelif Sanctuary(103,000 ha); Pytniaksyki zakaznik (48,000 ha).

? Out of these PAs, 2 PAs are not considered under the scope of the project (Repetek and Koytendag) and one PA does not exist in the official records of the ministry(Pytniak).

Therefore, the total number of PAs now under the **project's focus is 5** (out of which 2 PAs (Sarygamish and Shasenem) are grouped under Gaplangyr Reserve). The remaining PAs listed under this Output are therefore Gaplangyr Reserve (including 2 sanctuaries Sarygamish and Shasenem) and Amudarya Reserve (including Kelif sanctuary).

Output 2.2 New conservation areas operationalized through new and innovative approaches covering 50,000 hectares of unprotected high priority ecosystems, supported by:

- Gap analysis;
- Feasibility studies and technical documentation for PA establishment;
- Analysis of ecological flow water requirements for maintenance and conservation of KBAs at new sites
- Mapping, management, and financial plan preparation, with clear guidance for core and buffer zones, community-based conservation activities and monitoring.

Output 2.2 New conservation areas operationalized through new and innovative approaches covering 60,000 ha of unprotected high priority ecosystems, supported by: gap analysis, feasibility studies and technical documentation for PAs establishment, analysis of ecological flow water requirements for maintenance and conservation of KBAs at new sites; mapping, management and financial plan preparation, with clear guidance for core and buffer zones, community - based conservation activities and monitoring.

This output contains an adjusted number of hectares to reflect the approximate extent of the proposed new PAs: Pitnyak Sanctuary (40,000 ha) and Lake Zengibaba (20,000 ha).

Output 2.3 Implementation of biodiversity-friendly sustainable use regimes in PA buffer zones and corridors covering 600,000 ha aiming to provide alternative income to local communities

Output 2.3. Implementation of biodiversity-friendly sustainable use regimes in PA buffer zones and corridors covering approximately 292,607 ha aiming at increasing security of biodiversity status, promoting environmentally friendly agricultural practices and providing alternative income to local communities.

This output was reworded and number of hectares adjusted. The 0.5 mln ha of KBAs/IBAs has been revised. At the PIF stage, there was an assumption that the KBAs/IBAs not covered by PAs is about 600,000 ha. This proves not to be the case, and therefore the area has been revised (*please see explanation provided earlier/under Outcome 2 Section*)

The area counted under this output (i.e. 292,607 ha) represents community endorsed ecological corridor.

The targeted area is comprised of : 19,988 ha corridor along the Pitnyak-Kabakly-Nargig route; 9,482 ha, 2-2.5 km wide along Amudarya ? Karakum river ? Kelif route; 50,436 ha at Kelif to Yagty-Yol in the vicinity of Mary; Between Tarymgaya Upland and Zengibaba on approx. 45,000 ha; Tellymerjen KBA/IBA (167,701 ha).

However, some areas such as Tallymerjen KBA/IBA may overlap with the pastures counted under Output 1.4 and Output 1.2. Therefore, based on this reasoning, the Results Framework indicator 2, contains only 50% of the total area of 292,607 ha counted under this Output 2.3 (i.e. 50% out of 292,607 ha= 146,303 ha) in order to eliminate the approximate number of hectares representing the territory of Tellymerjen KBA/IBA (167,701 ha) to avoid possibility of overlaps with Output 1.4 and/or Output 1.2.

The exact areas and delineation on the ground of the KBAs/IBAs will be achieved during the project implementation, through the GIS supported mapping and land use

PIF Outcomes/Outputs (Component 3)	Project Document Outcomes/Outputs (Component 3)
<p>Outcome 3: Strengthened and better-informed engagement of Turkmenistan in implementation of regional cooperation under the International Fund for Saving the Aral Sea (IFAS) for improved management and restoration of Aral basin land and water resources, as evidenced by:</p> <ul style="list-style-type: none"> - Turkmenistan is represented at key regional fora and events supporting the restoration of the Aral Sea - Support provided to international dialog and cooperation on IFAS <p><i>(To be confirmed at PPG stage)</i></p>	<p>Outcome 3. Strengthened and better informed engagement of Turkmenistan in implementation of regional cooperation under the International Fund for Saving the Aral Sea (IFAS) for improved management and restoration of Aral Sea Basin land and water resources, as evidenced by: (i) Turkmenistan is better represented at key regional forum and events supporting the restoration of the Aral Sea, and (ii) Support provided to international dialogue and cooperation on IFAS.</p> <p>No change compared to the PIF.</p>

<p>Output 3.1 Higher capacity for government and scientific institutions for participating in IFAS. IFAS sanctioned activities for the implementation of global and regional initiatives put forward by Turkmenistan to save the Aral Sea, (e.g. Special Programme for Saving the Aral Sea)</p> <ul style="list-style-type: none"> - At least 3 IFAS meetings attended by Turkmenistan delegation where Turkmenistan contributes to decisions at IFAS, - Targeted knowledge management and exchange products (web-based, TV programs, trainings for communities and decision makers) on LD and BD issues in the Aral Sea - Outreach and awareness raising on the problems of the Aral Sea basin, supporting Turkmenistan's efforts to address degradation 	<p>Output 3.1 Higher capacity for government and scientific institutions for participating in IFAS. IFAS sanctioned activities for the implementation of global and regional initiatives put forward by Turkmenistan to save the Aral Sea e.g. Regional Environment Programme for Sustainable Development in Central Asia (REP4SD), Aral Sea Basin Programme 4 (ASBP-4) aiming at:</p> <ul style="list-style-type: none"> (i) at least 3 IFAS meetings attended by Turkmenistan delegation where Turkmenistan contributes to decisions at IFAS (ii) Targeted knowledge management and exchange products (web-based, TV programs, trainings for communities and decision makers) on LD and BD issues in the Aral Sea (iii) Outreach and awareness raising on the problems of the Aral Sea basin, supporting Turkmenistan's efforts to address degradation <p>The output is slightly changed to reflect the replacement of the Special Programme for Saving the Aral Sea by two priority regional programmes on which the project will focus:</p> <p>i.e. Regional Environment Programme for Sustainable Development in Central Asia (REP4SD), Aral Sea Basin Programme 4 (ASBP-4).</p> <p>The Special Programme for Saving the Aral Sea has been removed, as this programme has not been endorsed by all the countries and it has been removed .</p>
<p>Output 3.2 Knowledge management</p> <ul style="list-style-type: none"> - Lessons documented and disseminated within project partners and amongst stakeholders 	<p>Output 3.2 Knowledge management Lessons documented and disseminated within project partners and amongst stakeholders;</p> <p>Monitoring and evaluation activities have been moved under Component 4.</p>
<p>PIF Outcomes/Outputs</p>	<p>Project Document Outcomes/Outputs (Component 4)</p>

N/A	<p>Outcome 4.1 Project result properly monitored and evaluated</p> <p>Output 4.1.1 Set of monitoring and evaluation activities implemented</p> <p>Component 4 'Monitoring and Evaluation' was organized into a new and separate component to ensure correspondence with the GEF Budget template</p>
-----	---

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

In working towards its overall objective, the project will generate global environment benefits under two GEF focal areas, by tackling the underlying drivers of land degradation and biodiversity loss. Thus, the project takes strategic direction from the GEF-7 programming guidance for the land degradation and biodiversity focal areas. With respect to biodiversity focal area the project's component 2 is programmed to address direct drivers of biodiversity loss under Objective 2 'Address direct drivers to protect habitats and species by Improving Financial Sustainability, Effective management and Ecosystem Coverage of the Global Protected Area Estate'. The project targets two of the country's PAs (including their sanctuaries) seeking to strengthen the management efficiency of 1, 077,554 ha of existing protected areas. The project will also focus on the KBAs/IBAs within the wider production landscape, with attention to the sustainability of land and water use in the buffer zones and corridors of PAs, within the overall KBA (IBA) areas. The work under Component 2 will be linked to sustainable pasture management regimes under Output 1.4 which covers 500,000 ha of pastures around PAs, KBAs/IBAs.

GEF-7 Biodiversity Results Framework			
Objective	Sub-objective	Strategic Priority	GEF-7 Sub-indicators
BD Objective II. Address direct drivers to protect habitats and species	F) Enhance the effectiveness of protected area systems	BD-2-7: Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	<p>1.1: Terrestrial protected areas newly created</p> <p><i>Project contribution:</i> 60,000 hectares of new PAs created to address critical gaps in coverage of KBAs</p> <p>1.2: Terrestrial protected areas under improved management effectiveness</p> <p><i>Project contribution:</i> 2 PAs covering 1,077,554 hectares of protected areas under improved management effectiveness</p>

With respect to land degradation the project links directly to Turkmenistan's commitment under the UNCCD to achieve the Sustainable Development Goals target 15.3 and has been designed in line with the UNCCD LDN Checklist. Under Component 1 the project will promote LDN compatible integrated and participative land use planning in production zones and will incentivize local communities and entrepreneurs to restore and maintain soil productivity and promote biodiversity friendly agricultural practices. The project's Component 1 is aligned with LD Objective 1 ? Support on the ground implementation of SLM to achieve LDN and strategic focal area elements LD 1-4 ?Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape?. The project is aiming at restoring 5,300 ha of saxaul forest and tugai forest and 4,700 ha irrigated land and 50,000 hectares of severely degraded pastures, while putting under improved management practices approximately 100,000 ha of irrigated land and promoting sustainable rangeland management on 500,000 hectares of pastures.

GEF-7 Land Degradation Results Framework			
Objective	Sub-objective	Strategic Priority	GEF-7 Sub-indicators
LD Objective 3. Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	N/A	LD-1-4: Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	<p>3.1 Area of agricultural land restored</p> <p><i>Project contribution:</i> 4,700 hectares of irrigated land restored</p> <p>3.2: Area of forest and forest land restored</p> <p><i>Project contribution:</i> 5,000 hectares of saxaul woodlands restored; 300 hectares of tugai forest restored through natural regeneration</p> <p>3.3: Area of natural grass and shrublands restored</p> <p><i>Project contribution:</i> 50,000 hectares of pastureland restored through SLM</p>

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and co-financing;

There was an increase in co-financing from \$ 46,730,000 to \$ 57,528,000 by the time of submission of this CEO Endorsement to the GEF SEC as follows (i) The total cumulative co-financing of the Ministry of Agriculture and Environment Protection, the State Committee on Water Resources and the province authorities in Dashoguz and Lebap have increased the co-financing amount from \$46,630,000 (at the PIF stage) to a cumulative total of \$ 57,388,000 (at the CEO Endorsement stage). This increase in co-financing comes primarily from the investments under "The Programme of the President of Turkmenistan for the socio-economic development of the country for 2019-2025". This government investment program is a major source of project co-financing, with respect to measures for the development of large and small water storage facilities, increasing capacity of existing large reservoirs, renovation of existing and construction of new irrigation and drainage canals, as well as careful utilizations of water resources by application of modern technological solutions are listed as investment priorities. In addition, there is a slight increase of the co-financing mobilized from participating NGOs, from \$50,000 to \$ 65,000. The additional \$15,000 comes from the NGO "Bosfor", a branch of Turkmenistan Youth Union, and will support project's awareness events and support to strengthening local extension services in Dashoguz and Lebap provinces. Finally, UNDP co-financing has been increased from 50,000 USD (at the PIF submission) to 75,000 USD to support project management.

6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCE/SCCF);

There was a change to the GEBs to be delivered. In particular there was an increase from 50,000 ha to 60,000 ha new protected areas created (GEF Indicator 1.1). Another change is expressed by the increase of the number of hectares of protected areas under improved management efficiency from 544,423 ha to 1,077,554 ha.

Improved condition of water resources (resulting from efficient irrigation practices) will be attained at 100,000 ha of irrigated arable land in the four targeted districts, demonstrating good practices in efficient water management and improved drainage which will lead to reduced water logging and salinization. Agroforestry and resilient crop farming measures will lead to reduced soil erosion, increased resilience to salinity and increased soil productivity on 10,000 ha. The assessment of the minimum ecological flows of lakes and recommendations/provisions for mandatory minimum ecological flows to lakes and wetlands will be implemented in order to secure ecological integrity of mid and lower reaches lakes. Through the project's supported sustainable pasture management models, approximately 500,000 ha of pastures ecosystems will be stabilized. Ecosystem services of 50,000 ha of degraded pastures will improve due to the project supported restoration of pastureland and improved watering infrastructure. Assisted regeneration techniques and restoration promoted by the project will lead to improve ecosystem services of 5,300 ha of tugai and saxaul forests and 4,700 ha of restored agricultural land. Targeted support to forest and lake ecosystem restoration, in return, will remove the erosion risk of crop fields and pastures. Carbon benefits will accrue as soil carbon is restored and resources regenerate. The project addresses land resources through integrated land use planning, sustainable production and restoration of degraded lands around PAs and KBAs/IBAs. The rehabilitation of degraded lands will support the needs of agriculture without further expansion into the riparian and floodplain tugai and turanga forests. Sizable BD benefits are associated with the improved production zones around PAs and KBAs/IBAs through 5 community based agreements covering 292,607 ha buffer zones and ecological corridors on areas highly affected by agriculture and other development activities.

The project will provide for expansion of PA estates by an increment of 60,000 ha covering KBAs/IBAs. The GEF investment will significantly strengthen the management effectiveness of

1,077,554 ha of existing PAs and stable status of global Red List species. The project will contribute to the national effort toward meeting the Aichi Targets with its incremental effort at preventing the loss of natural habitats and reducing degradation and fragmentation (Aichi Target 5), strengthening management capacity, resilience and financial sustainability of projected areas (Target 11), and restoration and building resilience of key ecosystems and habitats (Targets 10 and 15).The project has been designed using the UNCCD LDN Checklist (Project document Annex 26).

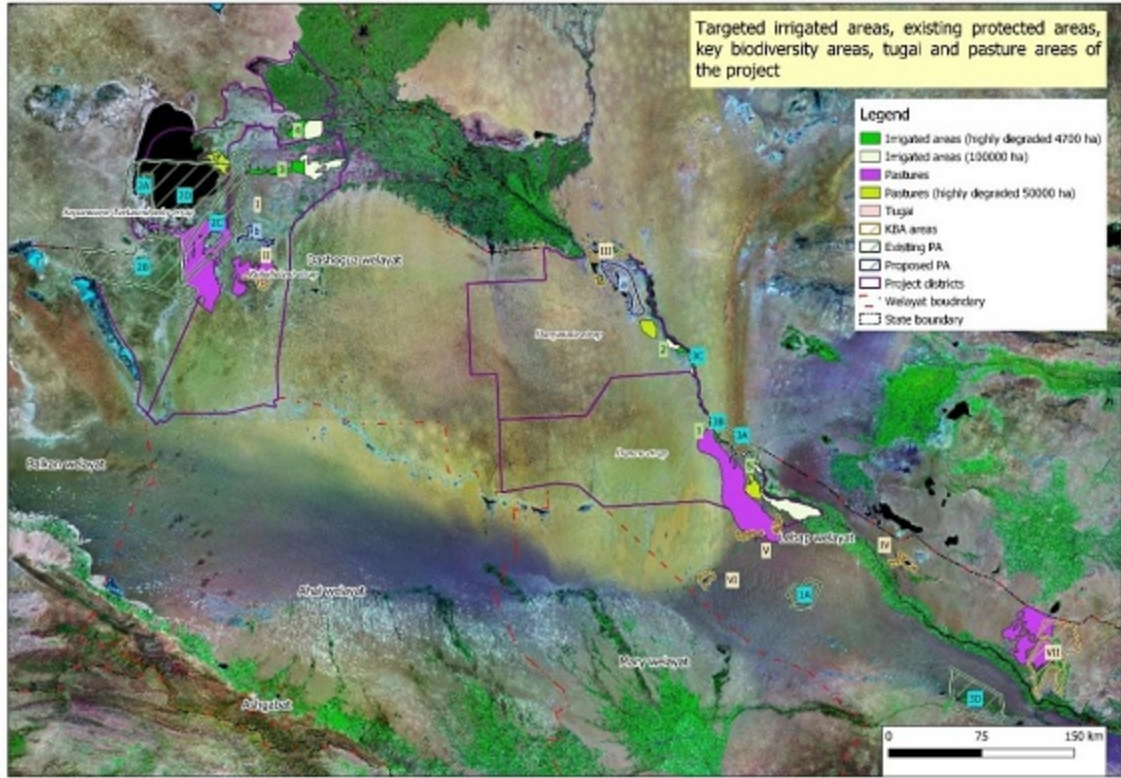
7) Innovativeness, sustainability and potential for scaling up. ?

An updated description of the project's innovativeness, sustainability, and potential for scaling-up is included in Section III. Results and Partnerships (3.1.1 Innovativeness, Sustainability and Potential for Scaling Up) of the GEF-UNDP Project Document.

1b. Project Map and Coordinates

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

Project map and geospatial coordinates



Project sites	Centroid		Extent minimum		Extent maximum	
	X	Y	X	Y	X	Y
Danew district	39? 42' 41.25"	61? 49' 59.78"	39? 6' 26.93"	60? 29' 55.13"	40? 16' 47.14"	63? 29' 49.09"
Darganata district	40? 36' 16.95"	61? 12' 11.09"	40? 0' 1.08"	60? 14' 59.38"	41? 17' 29.54"	62? 23' 36.01"
Saparmurat Turkmenbashi district	41? 34' 13.38"	57? 37' 59.82"	40? 5' 30.72"	56? 29' 47.97"	42? 47' 43.98"	59? 2' 44.19"
Ruhubelent district	41? 5' 19.02"	58? 9' 23.44"	40? 1' 4.06"	57? 10' 14.83"	42? 11' 41.31"	59? 7' 29.52"
Lebap region	38? 53' 58.44"	63? 11' 54.92"	36? 51' 23.04"	60? 14' 59.38"	41? 17' 29.54"	66? 41' 3.49"
Dashoguz region	41? 9' 25.38"	58? 42' 43.79"	39? 27' 56.10"	56? 29' 47.97"	42? 47' 43.98"	61? 0' 39.24"

1c. Child Project?

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

N/A

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

The table below describes the major categories of stakeholders identified and the proposed involvement in the project:

Stakeholders / Partners	Roles and responsibilities	Engagement method
-------------------------	----------------------------	-------------------

<p>Ministry of Agriculture and Environmental Protection (MAEP)</p> <p>Sub-divisions closely involved in the project activities:</p> <ul style="list-style-type: none"> -Central apparatus -Environmental Service, its provincial departments, and reserves -Service of Land Resources and its province/velayat departments Land Resources Service, the Livestock Division and its Production Association Water supply for pastures -Forestry Departments and Forest Seed Production -Natural Parks Protection Service. -Hydrometeorological service 	<p>National Implementing Partner. MAEP will be responsible for the implementation of all project activities at the national and local levels, as well as related trainings for decision makers, farmers and representatives of PAs. The Ministry will participate in the development of national, regional and district water and land use plans in order to achieve Land Degradation Neutrality; it will review and approve the PAs designation dossier; it will review and approve (institutionalize) the recommended Manuals and Guidelines in view of sustainability of results. Provides assistance in determining LDN indicators at the district (etrap), region (velayat) and national levels. Based on the results of the Project, it reviews and approved the updated National Action Plan on Combating Desertification and amendments to Pasture Law and Land Code, submitted by the project.</p> <p>MAEP through its the Land Resources Service, the Livestock Division and its Production Association Forestry Department Water supply for pastures exercises state control over the rational and efficient use and protection of land resources; maintains the state land cadaster and monitors lands; carries out work on state land management, prepares materials for the provision of land plots for ownership, use and lease Their role is extremely important in review and approval of the regional LDN and integrated land use plans.</p> <p>MAEP, as Implementing Partner is responsible for the achievement of the project development outcomes and GEF indicators.</p>	<p>MAEP will chair the Project Steering Committee. It will host the project team at its premises and will ensure facilitation of multi-stakeholders consultation and participation of representatives of local communities including women and youth in the project activities, through the local offices and extension services. It will ensure the delivery of the pledged co-financing and will enlist the support of the Project Board for support to official approval of the project results. Engagement methods: through regular communication and reporting, in-person communication and emails; task groups; project workshops; meetings.</p>
---	--	--

<p>State Committee for Water Resources (SCWR)</p> <p>Sub-divisions:</p> <p>Province (velayat) and district level sub-divisions (Production Departments) of ?Dashoguzsuvkhozhalyk? and ?Lebapsuvkhozhalyk?</p>	<p>The SCWR will review and approve the Integrated Water Management Plans and will ensure delivery of the pledged co-financing. It will ensure alignment and coordination with the national and local water resource management initiatives and strategies. The SCWR representatives will be actively involved in all the actives especially under Output 1.3 (including demonstration / investment projects for efficient irrigation). Will review and approve the Assessments and recommendations for mandatory ecological flows to water dependent Protected Areas and KBAs/IBAs for the maintenance of the ecological integrity of these lakes and wetlands in the Amudarya basin.</p>	<p>SCWC is a beneficiary of the project, a member of the Project Board and local etrap level Committee and participates in the implementation of the project through its local Production Departments and water managers supervising the largest irrigation systems in the project area.</p> <p>Engagement methods: through regular communication and reporting, in-person communication and emails; task groups; project workshops; meetings.</p>
<p>IFAS organizations in Turkmenistan</p>	<p>Ensure project cooperation with riparian states along the Amu Darya. Coordination and harmonization of approaches to solving environmental problems on the basis of ASBP-4 and REP4SD. Participates in the Project Board meetings. Supports awareness and education activities. Facilitates the dissemination of project good practices through available regional platforms.</p>	<p>Engagement methods: through regular communication and reporting, in-person communication and emails; task groups; project workshops; meetings.</p>

<p>Turkmen Agricultural Institute, Dashoguz city</p>	<p>TAI ensures the dissemination of the results of the project, the involvement of students in scientific and awareness work in the pilot areas. It has an advisory role to the project. Agricultural scientific Research Institute has been historically responsible for developing best practices for supporting state crops (e.g. seed selection for cotton and wheat) and managing best practice demonstration plots. The institute maintains some interest in other areas of agricultural production outside the state mandate, but these are limited in size and scope.</p>	<p>The TAI teaches students the basics of systems management, the principles of monitoring, registration and documentation of agrometeorological parameters and will showcase project results. Engagement method: regular communication, Sharing results, soliciting technical input, coordination of ongoing watershed interventions</p>
<p>National Institute of Deserts, Flora and Fauna</p>	<p>Conservation and sustainable use of desert ecosystems and their resources, restoration of forests and pastures. Development of guidelines for determining the estimated capacity of pastures. Recommendations for Phyto melioration of pastures and the introduction of new drought and salt-resistant industrial crops.</p>	<p>The Institute is a Project Advisor . Engagement method: regular communication, Sharing results, soliciting technical input, coordination of ongoing watershed interventions.</p>
<p>State Water Management Research, Production and Design Institute "Turkmenovylymtaslama"</p>	<p>The Water design institute has a focus on effective water management (e.g. efficiency of large-scale water transport (supply and drainage) as well as farm level systems. Research on the quantity and quality of water resources. Irrigation rates, quality of irrigation water, including collector-drainage water.</p>	<p>The Institute is a Project Advisor. All the institutes have sub-national facilities across Turkmenistan which have the potential to be used for demonstration plots. Engagement method: regular communication, Sharing results, soliciting technical input, coordination of ongoing watershed interventions.</p>

<p>Scientific and Production Center of Livestock and Veterinary Medicine at the Turkmen Agricultural University named after S. Niyazov</p>	<p>Carrying out preventive work aimed at protecting against diseases common to humans and animals, researching issues of epizootiology, predicting infectious processes.</p>	<p>The Institute will assist in the development, implementation and evaluation of pilot activities for livestock farms located in desert pastures and provide technical information to assess the ecosystem values of natural pastures in pilot districts/traps. Engagement method: regular communication, Sharing results, soliciting technical input.</p>
<p>Research Department of the Water Design Institute Turkemensuvlymtaslama?</p>	<p>Focused on Water resources analytical research. It will have an advisory role and will support the project's consultations on the national priorities representations into the regional Aral Sea Basin programme and delivery of presentations on the need of building trust and strengthening cooperation on water management in Aral Sea Basin within the framework of the annual Water Diplomacy Seminars.</p>	<p>Engagement method: Regular communication, Sharing results, soliciting technical input, coordination of ongoing watershed interventions.</p>
<p>Velayat/Province (administrative-territorial unit at the regional level)</p>	<p>The velayat/province administration will oversee and support the implementation of education and awareness project activities, and more importantly will participate actively in LDN target setting at regional level (including the identification of the institutional arrangements for LDN monitoring and reporting) and in the land use planning and facilitates the planning, implementation and monitoring of joint activities in targeted areas.</p>	<p>Velayat administration is a member of the Project Board. Engagement methods: through regular communication and reporting, in-person communication and emails; task groups; project workshops; meetings.</p>

<p>Etrap/district (administrative-territorial unit at the district level)</p>	<p>The etrap/district administration will directly participate in the development of the integrated land use plans for the targeted districts (Turkmenbashi, Ruhubelent, Deinau, Darganata) and the review and use of the guidelines, manuals for LDN centered integrated land use planning. It will participate in awareness and education activities, presenting good practices and results piloted at the district level.</p>	<p>Implementing Partner and Member of Etrap Coordinating Committees. Engagement methods: through regular communication and reporting, in-person communication and emails; task groups; project workshops; meetings.</p>
<p>Gengeshi (local government bodies) and Gengeshlik</p>	<p>Gengeshi will support agricultural and livestock farms in planning and implementing activities. Will facilitate local community uptake of SLM practices in the PAs surrounding geographies.</p>	<p>Member of District Coordination Committees. Methods of engagement : Through community outreach programmes, participating in training workshops; Public meetings; Focus group meetings</p>
<p>Daykhan associations and livestock farms</p>	<p>Independent entities, associations of farmers and individuals engaged in agriculture. Represent direct beneficiaries of the project and will facilitate and agree on the validation of targeted pilot/demonstration areas. They will be involved in capacity-building seminars and SLM demonstrations in the targeted districts.</p>	<p>Engagement through community outreach programmes, participating in training workshops; Public meetings; Focus group meetings</p>
<p>Daihan Farms</p>	<p>Daihan farms are state farms-participating in the project as part of pilot farms that include several Daihan farms. These are beneficiaries of the project and will agree on the validation of targeted pilot/demonstration areas. They will be involved in capacity-building seminars and SLM demonstrations in the targeted districts.</p>	<p>Engagement through community outreach programmes, participating in training workshops; Public meetings; Focus group meetings</p>

<p>Dayhanbank</p> <p>Halkbank</p> <p>Rysgal Bank</p>	<p>Daihanbank, Halkbank and Rysgal Bank will be key financial institutions providing loans to pilot Daihan associations; the project will support the development of bank applications and will provide technical assistance to farmers/potential banks clients.</p>	<p>Engagement methods: Build interest in SLM financing, through In person communication, regular communication of socio-economic benefits of SLM demonstrated by the project. Participation into SLM/financing capacity building and awareness activities. Exploration of opportunities for joint training activities.</p>
<p>Society of Hunters and Fishermen of Turkmenistan and its velayat divisions</p>	<p>Carrying out an inventory of assigned hunting grounds / farms, monitoring the state of birds and wild animals, preparing insurance stocks of feed for feeding in the winter. The Society of Hunters and Fishermen will be engaged in the mapping and assessment of key habitats and indicator species, design of conservation measures, delineation of ecological corridors and buffer areas, assessments of eco-tourism potential.</p>	<p>Methods of engagement: Present project information, Gather opinions and views; engage stakeholders in project planning and implementation.</p>
<p>Union of Industrialists and Entrepreneurs (UIET)</p>	<p>Will be invited to participate in the design, implementation, and especially dissemination of demonstration activities, especially with regard to new technologies for efficient water irrigation, canal linings; Sustainable Land Management (SLM) practices to achieve LDN.</p> <p>In addition, the project will work with the UIET within the framework of its collaboration with the Adaptation Fund Project ?Scaling up resilience? , organizing joint trainings and delivery of LDN/SLM training modules.</p>	<p>UIET will support the dissemination of project results through its available platforms and extension services.</p> <p>Methods of engagement: Build personal relations, meetings/ negotiations, in person communication, regular communication. Participation into capacity building and awareness activities.</p>

<p>Partner NGOs</p> <p>Tebigy Kuwwat</p> <p>NGO ? Bosfor?</p> <p>NGO ?Ynanch-Vepa?</p> <p>Nature Conservation Society</p>	<p>Tebigy Kuwwat- is co-financing awareness raising activities and participates in trainings on Biodiversity management, LDN, SLM and sustainable water management.</p> <p>NGO ? Bosfor?- will leverage its programming experience and experience in environmental management and will provide technical advisory services under the Grants component on micro-crediting, land and water legislation and gender issues.</p> <p>NGO ?Ynanch-Vepa? will support the project?s work at local level, with local communities, facilitating their awareness and understanding on the importance of PAs and KBAs/IBAs and their participation into monitoring and awareness activities, as well as facilitating consensus on ecological corridors for wildlife.</p>	<p>The NGOs will be involved in advisory services, training, awareness activities, local community outreach. Methods of engagement: Regular communication focus group discussions, participation in project execution group, meetings, workshops</p>
<p>International NGOs (WWF, CAREC)</p>	<p>Sharing results and exploring synergies between on-going initiatives.</p>	<p>Participation in the project activities, through regular communication, in-person communication and emails; task groups; participation in project planned workshops.</p>
<p>Central Asian Desert Initiative (CADI)</p>	<p>Building on past CADI led initiatives and sharing knowledge. Exploring opportunities for synergistic activities among on-going initiatives and aligned with the UNDP/GEF project scope.</p>	<p>Participation in the project activities, through regular communication, in-person communication and emails; task groups; participation in project planned workshops.</p>

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Please see Annex 16 Stakeholders Engagement Plan of the GEF-UNDP Project Document.

The successful implementation of the project will largely depend on the effective communication and coordination with the multiple project stakeholders and the implementation of mechanisms to ensure these stakeholders' participation. The key national and sub-national stakeholders include the Ministry of Agriculture and Environmental Protection, State Committee on Water Resources including the province level sub-divisions (Production Departments) of 'Dashoguzsuvkhohalyk' and 'Lebapsuvkhohalyk,' as well as the water management entities operating the Tuyamuyun reservoir (partially represented by Uzbek authorities.). For the regional water management related aspects, the project will work with IFAS and representatives of the Interstate Commission on Sustainable Development (ICSD) and Dashoguz branch of the Executive Committee of IFAS, with Central Amudarya Department of the Association Basin Water Management (BWO). The project will implement comprehensive land, water resources assessments and biodiversity surveys, involving specialists from a wide array of research and academic institutes from the Academy of Science, the National Institute of Deserts, Flora and Fauna, the Turkmen Agricultural Institute in Dashoguz, the Turkmen State Pedagogical Institute in Turkmenabat, the Engineering and Technological University of Turkmenistan, the Turkmen Agricultural University, the Turkmen State Water Management research Production and Design Institute 'Turkmensuvylymtaslama'; the Design Institute 'Turkmengiprozem' etc Private sector will be engaged directly in project activities, at local level the project will work with private livestock farmers, water users other farmers associations and daikhan farms and will engage with the representatives of the Union of Industrialists and Entrepreneurs of Turkmenistan. Biodiversity related activities will be conducted with the support of the Nature Conservation Society, the Society of Hunters and Fishermen and the Protected Areas management units and staff. The NGOs will be involved in training, awareness activities and in co-execution of activities. The project will work with the NGO 'Bosfor'- a branch of Youth Union, the NGO 'Ynanch-Vepa' a major player in promoting sustainable natural resource use among NGO community and local levels CBO and the NGO 'Tebigy Kuwwat' a sub-division of Nature Protection Society of Turkmenistan. The project will deploy participatory approaches engaging local authorities at district (etrap) and province (velayat) levels, local communities, farmers, water users, daikhan associations. The project's Stakeholder Engagement Plan includes information summarizing the main PPG bilateral interactions and stakeholder meetings conducted among other aspects.

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

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier; Yes

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Please see Annex 18 Gender Analysis and Action Plan of the GEF UNDP Project Document.

Turkmenistan's Constitution guarantees equal rights for women. The key national gender legislation is the Law of Turkmenistan "On State Guarantees for Ensuring Equal Rights and Equal Opportunities for Women and Men", adopted on August 18, 2015. An important achievement was the development and approval of the National Action Plan for Gender Equality for 2015-2020, which included measures to strengthen support for women in education and the labor market, as well as to raise awareness of their rights and how to ensure them, especially in rural areas. The different responsibilities that women generally have in agricultural activities include: (i) participation in planting and harvesting activities in the production of state crops (around 30% by women), and particularly in growing vegetables and fruit crops on the private households plots (65-70% of cultivation of households plots is done by women); (ii) at the household level, many hours a day in the preparation of food for the farm workers, raising livestock and poultry, fetching water and engaging in non-farm activities (iii) some women are responsible for managing farm finances and marketing products from private household plots; (iv) despite these important roles, women have limited control over land and decision making on agricultural practices as well as limited access to trainings. The experience in the targeted regions shows that apart of donor driven projects there is insufficient attention paid to the participation of women in natural resource users associations, encouraging women to participate into decision making processes at local levels. Management positions within the municipal authorities are predominantly held by men. Therefore, women have generally less access to authority positions, less opportunities to engage in capacity building initiatives and enhance their knowledge. The project strategy will take into considerations these limitations and norms. The project will provide opportunities for women to learn about sustainable land management and integrate best practices into their operations, and ensure that women are also able to access the capacity building and training, required to practice sustainable agriculture, as well as to diversify their livelihoods in more resilient ways. The project will ensure that there is gender balance in project activities (e.g. seminars, community level events) including access to project financial assistance. Gender considerations will inform community level project activities linked to local infrastructure or demonstration plot development, through consultation regarding needs and preferences on types of training and investment. The project will also gather gender-disaggregated data for evaluation purposes and use gender sensitive indicators (particularly around beneficiaries) to facilitate planning, implementation and monitoring. Knowledge management product will be gender sensitive and the knowledge products will take into account the differentiated ways men and women use the natural resources. The project will work with specialized NGOs such as the Nature Conservation Society of Turkmenistan, Bosphorus and Yenme that are active in the areas of environmental information and awareness, rural development, women empowerment and that will be engaged in community outreach and gender mainstreaming efforts. The project will build in lessons and successful approaches to gender mainstreaming of previous GEF and Adaptation Fund projects, including the promotion of women participation and leadership in the management of water users groups and farmers associations, advocating for women empowerment and engagement in the decision making process over efficient use of natural resources.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

Within the structure of agricultural production, the share of the private sector is 62% (Statistics Collection of Turkmenistan, 2017). Approximately 35% of crop production and 78% of the entire livestock production is ensured by the private sector. There were over 8,000 domestic non-state enterprises active in 2016 employing 124,000 people which had revenues equivalent to 15.2% of GDP, most of them active in agriculture, construction and manufacturing. As of 2017, the number of daikhan associations was 521 (83 units less than in 2011). The number of daikhan associations has reached 3.2 thousand units (increased by 1.8 times compared to 2011). A gradual and slow transition towards a market-based approach is anchored in recent government reforms in water and agriculture sectors, including privatization and diversification of agricultural production. The importance of private sector farmers is increasing steadily, larger enterprises having access to finance, advance technologies and practices while the new smaller entrepreneurs waging an unequal struggle against the old, bureaucratic and ineffective state system of command, lack of access to quality arable land, lack of adequate infrastructure (drainage, irrigation) and lack of access to irrigation, lack of access to technical knowledge, lack of affordable access to financing and technologies, are challenges which many find unable to cope with (*Key findings of the EU project ? Support for Further Sustainable Agriculture and Rural Development in Turkmenistan SARD III?*).

Agriculture depends entirely on irrigation (94% of the total withdrawn water) however but irrigation facilities are often inefficient and outdated and there are very limited financial mechanisms or incentives to stimulate modern water saving technologies and practices. The land and water resources of the target regions (Dashoguz and Lebap) cannot be sustainably managed without the full cooperation and support from the private sector. The project will directly engage and involve local small holders in the agricultural sector, which are by and large the main relevant private sector actors with respect to sustainable land use in the rural areas targeted by the project. The project will apply UNDP Private Sector Partnership Due Diligence Risk Screening during project implementation, as needed.

Under the Resolution ?On further improvement of reforms in the Agricultural Sector? signed by the President of Turkmenistan, the daikhan farms and other private entrepreneurs can take up land for longer term lease (99 years) and will benefit from some flexibility of cultivating their own choice of crops (70% of the land will be used for state order crops and 30% for private crops). The Resolution also mentions the creation of a special land fund by re-structuring of daikhan associations and farmers? land, to serve for the allocation of land plots to commodity producers (for the cultivation of vegetables)

who will be taken land under long term lease and it is expected that transfer to private ownership will happen in stages. A considerable proportion of irrigated agricultural land is planned to be transferred to the private sector enterprises. The private sector tenants will include joint-stock companies, daikhan (farmer) cooperatives and unions. These categories of land users are expected to introduce more effective and efficient water use technologies and water saving practices.

The project will work directly with small-scale agricultural producers, including those producing crops, and those in the livestock sector and focusing on the emerging class of farmers. The project will engage with the Union of Industrialists and Entrepreneurs' local branches in Dashoguz and Lebap to deliver a series of trainings to farmers on sustainable agricultural practices and rural entrepreneurship and support to accessing soft loans for procurement of modern water saving technologies. Together with the Adaptation Fund Project 'Scaling Climate Resilience for Farmers in Turkmenistan' and the Union of Industrialists and Entrepreneurs, the project will support the delivery of trainings to 50 extension officers to support farmer's access to knowledge. Apart from the facilitation of access to knowledge there will be a number of farmers Field Schools and facilitated farmer-to farmer exchange, that will be supported by the project. Furthermore, building on the previous UNDP/GEF efforts of the project 'Supporting Climate Resilient Livelihoods in Agricultural Commodities in Drought Prone Areas' the project will contribute to further expansion of extension capacities of the local branches of the Ministry of Agriculture and Environmental Protection, through the addition of 2 extension persons to strengthen the Dashoguz and Lebap local offices of the ministry. The support services will be targeting the emerging class of private farmers who will operate on longer term lease and have the option of making their own crop choices. They will be provided with legal advice on land tenure aspects, technical advice on SLM and water saving measures, guidance on writing loan/bank applications and farm business plans. In addition, targeted 'on-demand' radio shows tailored to farmers' needs (including a segment dedicated to women farmers) will test the feasibility of introducing radio extension services. Direct investments in Sustainable Land Management (SLM) measures are further envisaged under Outputs 1.2, 1.3, 1.4 that will be implemented in cooperation with private entrepreneurs, private livestock farmers in the selected areas. In addition, a micro-grant scheme will be set up under Output 2.3 in order to incentivize private entrepreneurs and livestock farmers away from destructive agricultural practices and demonstrate the ecological and socio-economic benefits of the SLM measures.

The project will also work with local banks in Lebap and Dashoguz regions (Daikhan Bank; Halbank; Rysgall Bank) in order to organize joint training sessions for the farmers on farm business planning and financial instruments accessible to farmers, and methodology of filling bank applications for microloans or soft loans issued by local financial institutions to implement sustainable irrigation measures, purchase seeds, medicinal herb production, to set up handicrafts workshops, green houses with drip irrigation or fodder crop agriculture. The financial institutions will be also targeted by, and expected to participate to many awareness raising events planned under the project's KM component, in order to increase their awareness on the economic benefits of the SLM measures and stimulate transition towards a greener lending. Awareness raising about Land Degradation Neutrality, Sustainable Land Management (SLM) and sustainable water management in the context of climate smart, water saving agriculture, are the project's entry points in engaging the private sector including

financial entities and intermediaries, exploring available and potential new financing instruments and showcasing ecological and economic benefits of LDN/SLM measures that this project will promote.

5. Risks to Achieving Project Objectives

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

Please see an updated description of Risks is included in the Annex 7 of the GEF/UNDP Project Document ?UNDP ATLAS Risk Register?.

#	Description	Risk Category	Impact & Probability	Risk Treatment / Management Measures	Risk Owner
	<p>Enter a brief description of the risk. Risk description should include future event and cause.</p> <p>Risks identified through HACT, PCAT, SES, Private Sector Due Diligence, and other assessments should be included.</p>	<p>Social and Environmental Financial Operational Organizational Political Regulatory Strategic Other</p>	<p>Describe the potential effect on the project if the future event were to occur.</p> <p>Enter likelihood based on 1-5 scale (1 = Not likely; 5 = Expected)</p> <p>Enter impact based on 1-5 scale (1 = Negligible 5 = Extreme)</p> <p><i>Based on Likelihood and Impact, use the Risk Matrix to identify the Risk Level (high, Substantial, Moderate or Low)</i></p>	<p>What actions have been taken/will be taken to manage this risk.</p>	<p>The person or entity with the responsibility to manage the risk.</p>

1	<p>Risk 1. The modification of land use planning in the two targeted regions may lead to land use decisions that are failing to integrate the interests and concerns of the vulnerable people. This may lead to a short term limitation of access to natural resources. This could disproportionately disadvantage women and rural poor.</p> <p><i>SES Principle 2 Human Rights, P5</i></p> <p><i>SESP principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>SES Principle 3, Gender, P11</i></p> <p><i>Principle 5, Accountability, P13</i></p> <p><i>Principle 5, Accountability, P14</i></p> <p><i>Standard 5 Displacement; 5.2</i></p> <p><i>Standard 5 Displacement; 5.4</i></p>	<p>Environmental Financial Operational Organizational Political Regulatory Strategic Other</p>	<p>A key element of the project is the improvement of land governance in the country by implementing Land Degradation Neutrality, through LDN-centred land use planning. To this end, the project will identify and implement Land Degradation Neutrality (LDN) targets and actions to attain and monitor progress towards land degradation neutrality (under Output 1.1.) and will promote LDN-compatible sustainable land management (SLM) measures in the production zones (Output 2.1; 2.3)</p> <p>Land use planning in Turkmenistan is highly centralised and despite its efforts, the project could fail to consider all rural poor's concerns and land use decisions may lead to failure to fully consider the effects of the temporary restrictions in the use of land resources (e.g. temporary grazing limitations on degraded pastures).</p> <p>I=3 L=2 Moderate</p>	<p>The risks will be managed through the implementation of SESA and screening against LDN Check List; implementation of the Stakeholders Engagement Plan, Process Framework, Gender Action Plan and Grievance Redress Mechanism.</p> <p>The risk is partially mitigated by the project activities. One of the requirements for reaching and maintaining land degradation neutrality (LDN) and advancing land restoration and rehabilitation is the adherence to the LDN principles. Among the LDN principles underpinning the vision of LDN there are several principles that are highlighted below, which will be uphold. The project will hire qualified national and international land use and LDN experts to guide local authorities and the LDN land use planning activities to ensure the adherence to the LDN principles.</p> <p>The mere adherence to these principles and the screening against the LDN Checklist (per project Annex 26 LDN Checklist/ activity 1.1.3 and activity 1.1.4) should be able to provide the means to manage the risk of failing to appropriately take into consideration and mitigate the potential economic displacement resulting from LDN centered land use plans. LDN is anchored by several principles that are ensuring a human rights approach, balanced economic-social-environmental sustainability and participatory and inclusive mechanisms. These principles are key in mitigating risk and will be uphold.</p>	<p>UNDP CO RP/IP Project Manager/ CTA Project coordinators</p>
---	--	--	---	--	--

2	<p>Risk 2: The modification of resource management regimes through the implementation of sustainable land management (SLM) measures (e.g. forests, pastures, agricultural lands) implemented in support of long-term sustainability could affect short-term access and use of resources by local communities, including the rural poor and women.</p> <p><i>SES Principle 2 Human Rights, P5 SESP principle 2 Human Rights, P6 SES Principle 3, Gender, P10 SES Principle 3, Gender, P11 Principle 5, Accountability, P13 Principle 5, Accountability, P14 Standard 5 Displacement; 5.2 Standard 5 Displacement; 5.4</i></p>	<p>Environmental Financial Operational Organizational Political Regulatory Strategic Other</p>	<p>The project will be supporting improved management of agricultural lands, pasture resources, and sensitive ecosystems encompassing Key Biodiversity Areas, through the promotion of Sustainable Land Management (SLM) measures that in the medium and long term will lead to an increased land productivity and improved livelihoods. When modifying existing resource use and management regimes, there is always a possibility of some modification to the enjoyment of human rights or potential economic displacement of individuals living near or otherwise using territory included in the targeted area. The Risk is preventatively rated Moderate. However, UNDP has extensive experience working in Turkmenistan on similar types of interventions. In addition, the targeted protected areas are primarily in remote rural areas, and the inhabitants in such regions typically have a higher percentage of people living in poverty, and/or marginalized groups. Therefore there is a risk that the project activities could have an adverse effect on the enjoyment of human rights, and/or possibly restrict availability, quality or access to resources. There is the risk that the populations affected would include the poor or other marginalized</p>	<p>Targeted assessments of potential economic displacement will be carried out by qualified experts in a participatory manner with stakeholders during inception phase. The assessment will evaluate potential economic displacement impacts associated with the planned activities (as noted in the ESMF). Identification of timebound measures to avoid, reduce, mitigate and manage potential impact will be captured in an assessment report and revised SESP. If determined necessary by the targeted assessment, then a stand-alone management plan (i.e. Livelihood Action Plan) will be prepared to capture those management measures (please see ESMF annexes as a separate report/Project Document).</p> <p>In addition, the SESA will cover the Pasture management plans (Output 1.4), Sustainable Water Management Plans (Output 1.3) and Sustainable LDN compatible Land use Plans (Output 1.1.) in order to evaluate the potential social and environmental effects of the project's upstream activity which impacts on resource management regime.</p> <p>The risks are not deemed to be significant due to the fact that the envisaged Sustainable Land Management(SLM) and resilient measures will be implemented on farm land, on farmer associations? areas where the land is already allocated on the basis of long-term leases and only based on their agreement to participate in the project activities. Therefore, issues such as customary rights or land</p>	<p>UNDP CO RP/IP Project Manager/CTA Project coordinators</p>
---	---	--	--	--	---

3	<p>Risk 3: Expansion of PAs system could lead to potential limitations or restrictions of the use of natural resources. Strengthening management of existing PAs, such as improved PAs zoning, strengthening the sanctuaries? protection regimes, and/or creation of ecological corridors could further restrict access to and use of biodiversity resources by local communities, affecting livelihoods.</p> <p><i>SES Principle 2 Human Rights, P5 SESP Principle 2 Human Rights, P6 SES Principle 3, Gender, P10 SES Principle 3, Gender, P11 Principle 5, Accountability, P13 Principle 5, Accountability, P14 Standard 5 Displacement; 5.2 Standard 5 Displacement; 5.</i></p>	Environmental	<p>Local communities in the project area could face economic displacement due to the expansion of the PAs system (new PA designation in Darganata and Ruhubelent districts). Certain land use activities would likely be prohibited or restricted as part of these processes. Together with the significant environmental benefits that come with the designation of new PAs and delineation of community endorsed ecological corridors, there are potential risks for example restrictions/limitations of the use of natural resources that may be at odd with the current agricultural practices of the local communities in project areas. There is a risk that not all key user groups of natural resources at project sites are consulted in project implementation and they will be affected by the restrictions on the use of natural resources.</p> <p>I = 3 L = 3</p> <p>Moderate</p>	<p>The risk management measures will be implemented primarily through the Process Framework, Stakeholder Engagement Plan, Gender Action Plan and project level GRM.</p> <p>The project?s qualified experts (specialised safeguards experts/consultancy company; conservation biologists, environmental economist, pasture and forest expert and community outreach officers), local coordinators, technical support staff and ministry counterparts will support the implementation of the Process Framework, in order to ensure the management of the economic displacement risk</p> <p>During the consultations, the project manager supported by the project?s field coordinators and local community outreach will ensure that any potential risk of economic displacement in the affected communities, resulting from the designation of new PAs will be mitigated through the <i>Process Framework</i> (as per SES requirements, please see ESMF annexed as a separate report). The Process Framework would include the following elements: (i) Assessments of the socio-economic conditions of the local communities, highlighting the type and extent of the community use (and use by men and women) of natural resources in the targeted areas, and the exiting rules and institutions for these and management of natural resources, including customary use rights; (ii) Assessment of threats and impacts on the relevant areas and local communities from various activities (e.g. poachers,</p>	UNDP CO RP/IP Project Manager/ CTA Project coordinators
---	--	---------------	--	--	--

4	<p>Risk 4. Enforcement of PAs regime and of wildlife corridors, following applicable environmental norms and legislation could pose risks to conflicts between rangers and local communities engaged in traditional livelihoods and practices.</p> <p><i>SES Principle 2 Human Rights, P2</i></p> <p><i>SES Principle 2 Human Rights, P7</i></p>	Environmental Social	<p>Enforcement issues of the environmental regulations in the new PA may lead to conflicts between the rangers and the local community or among different local community members. When working in developing countries there exists a risk that the entity responsible for PA management (be it governmental authority or community organization) does not have the full capacity necessary to fulfill their duties in terms of governance, administration, and management of natural resources. The enforcement personnel need to be appropriately trained to implement legal enforcement and manage relationship with local residents.</p> <p>I=3 L=3 Moderate</p>	<p>The Management measures will be addressed through the Process Framework, Stakeholders Engagement Plan, Gender Action Plan and project level Grievance and Redress Mechanism.</p> <p>In addition, the project will ensure that management measures will be include in the new PAs management plans (Sanctuaries, IUCN IV) to be further embedded under in the corresponding larger State Reserves management Plans (i.e. Gaplangyr and Amudarya) , as these Sanctuaries will fall under the jurisdiction of one or the other of above-mentioned state nature reserves. The project?s qualified experts, including the Capacity Development experts, local coordinators, technical support staff and ministry counterparts will work with the Local Advisory Committees (People Councils) and facilitate the assessments, local dialogue and round table meetings that the process involves.</p> <p>In addition, the project will train PA personnel, border inspectors and central and local authorities with an emphasis on human rights principles (in line with the SES).</p> <p>Some of the trainings will target specifically community outreach related topics , and addressing illegal activities <i>"Interaction with local communities" (opportunities for engaging local population in biodiversity conservation, joint patrolling of territories, protection of key sites)- Act. 2.1.3.</i> A total number of 10 training workshops for the PAs staff; 3 trainings for central and local authorities</p>	UNDP CO RP/IP Project Manager/ CTA Project coordinators
---	---	-------------------------	--	---	---

5	<p>Risk 5 Government resource management authorities may not have the capacity to fulfill all aspects of their mandate, and rural resource users may not have the capacity to claim their rights, which could potentially lead to the violation of human rights.</p> <p><i>SES Principle 2 Human Rights, P2</i></p> <p><i>SES Principle 2 Human Rights, P3</i></p>	Social	<p>There is a risk that institutional government duty-bearers related to the management of high value Aral basin ecosystems and land resources do not have the capacity to meet their obligations.</p> <p>In addition, by the same principle and rationale of the fact that the project will be working on natural resource management issues in rural and remote areas, there is a risk that resource users and other rights holders do not have the capacity to claim their rights. Such resource users living in rural and remote areas may not have been fully educated and informed about what their rights are (in this case, in relation to usufruct or other natural resource-related rights), or the procedures to claim those rights. There is a risk that rights holders may not have the legal, self-organizing, or financial means to claim their rights. The risk is assessed based on situation and context that the project will be working in. The fact that there is limited capacity on both the part of the government and rights holders is an inherent element to working on sustainable livelihoods in developing countries. As with the previous risks, the project will be working closely with all stakeholders to support government natural resource management authorities and</p>	<p>Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The project will be working closely with all stakeholders to support government natural resource management authorities and institutions to meet their obligations, and with resource user rights holders to claim their rights.</p> <p>It is expected that the risks will be mitigated by the project's targeted trainings of the local and national decision makers as well as natural resource users on specific themes such as: LDN and no-net-loss approach and Integrated Land Use Planning (Act 1.1.1) ; Efficient water use and integrated water management planning (Act 1.3.1; 1.3.2) ; Sustainable pastures management (Act 1.4.1); Environmental legislation enforcement, PAs patrolling, Human rights (Act 2.1.3-2.1.5); Sustainable management of regional water resources/Water Diplomacy (Act 3.1.1-3.1.2); Strengthening Extension services (Act 3.1.1). The project implementation will include national and local stakeholders' consultation during the development of the training modules and other/different handouts and information materials that will be used during the training seminars and some of them will be based on Training Needs Assessments. The training seminars will include evaluation forms and training formats will be flexible to adapt to participants needs.</p> <p>Multiple stakeholder consultation sessions during all relevant aspects of the project will ensure that all parties are aware of and understand the relevant obligations and rights</p>	<p>UNDP CO RP/IP Project Manager/ CTA Project coordinators Local Project Committee</p>
---	---	--------	---	---	--

6	<p>Risk 6: Project activities intended to reduce threats to critical habitats and environmentally sensitive areas could potentially end up harming them</p> <p><i>SES Standard 1 Biodiversity and NRM, 1.1</i></p> <p><i>SES Standard 1 Biodiversity and NRM, 1.2</i></p> <p><i>SES Standard 1 Biodiversity and NRM, 1.7</i></p>	Environmental	<p>The project specifically targets the conservation and sustainable management of critical habitats, environmentally sensitive areas, and legally protected areas in the high value ecosystems of Turkmenistan's Lower Amu Darya basin. The conservation, protection, and sustainable use of these areas is the objective of the project. Therefore, the probability of these risks is ?expected?. However, given that the objective of the project is to enhance the environmental and social qualities of these areas, the risk of negative social and environmental impacts is considered limited in scale and manageable through applicable standard practices . As with all of the risks, this risk will be consistently monitored throughout project implementation via the standard project management oversight and risk monitoring systems.</p> <p>I = 2</p> <p>L = 3</p> <p>Moderate</p>	<p>Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The ESMF further identifies the steps for detailed screening and assessment of the risks, potentially related to the undefined activities and for preparing and approving the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing these potential adverse impacts The project will conduct targeted impact assessment at sites for activities that are not fully defined.</p> <p>The qualified project's conservation biologists/landscape biologists will work with the safeguards experts/company to properly identify risks and proposed mitigation options for both upstream and downstream activities.</p> <p>During the project inception the exact location of the sites selected at PPG stage with the representatives of the Daikhan Associations, will be clarified , and aligned with the re-structuring process of the Daikhan Farms that was ongoing during the PPG phase. Therefore new screening and assessments of each proposed activities and demonstration site will be implemented prior to the implementation of activities to ensure that any impacts are identified, significance established and management measures selected.</p> <p>Based on the screening of the potential risks during PPG assessments, several management measures have been included in the project design, (e.g. Output 1.3 Act 1.3.3 and Output 1.2/Act 1.2.2) . The project</p>	UNDP CO RP/IP Project Manager/CTA Project coordinators
---	---	---------------	--	--	--

7	<p>Risk 7: The project activities re-planting native tree species could have unforeseen ecological consequences.</p> <p>Standard 1 Biodiversity and NRM, 1.8</p>	Environmental	<p>The planned project activities include small amounts of reforestation. Output 1.2 includes reforestation of high value arid saxaul forest ecosystems. The assisted regeneration of a small portion of tugai forest ecosystem will be further supported by the project. The project team will work with the partner local forestry services and qualified project experts to ensure ecologically appropriate locations for planting trees, and will use native species (this is the purpose of the activity). The relatively small area of tree planting means that any ecological impact will be with a limited impact in case of a potential adverse effect. The overall environmental impact ? considering the benefits of the planted trees ? is expected to be positive. The purpose of the activity is to restore areas of forest that have been degraded.</p> <p>I = 2 L = 2 Low</p>	No measures needed as the risk is low.	UNDP CO RP/IP Project Manager/ CTA Project coordinators M&E consultant
---	---	---------------	---	--	--

8	<p>Risk 8: The expected project impacts of the conservation of endangered and threatened species, restoration of degraded land, and sustainable management of forest and pasture resources could be sensitive to changing climatic conditions in the future.</p> <p><i>SES Standard 2 Climate Change Vulnerability, 2.2</i> <i>SES Standard 2 Climate Change Vulnerability, 2.4</i></p>	Environmental	<p>Adverse impacts of extreme climatic events (drought; sand and windstorms; seasonal floods) can affect project's interventions in the field and the livelihoods of local communities living in the target areas.</p> <p>I=3 L=2 Moderate</p>	<p>Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The management measures will be implemented through the project's envisage climate risk assessments and through activities that will demonstrate and put in place sustainable land management measures grounded by scientific principles and participatory mechanisms that will enable stakeholders to adapt the management of natural resources to any given context and threats. Attention to the current and potential impacts of climate change has been built-in to all aspects of the project.</p> <p>The project team will work with qualified experts and will conduct climate-risk assessment (Act. 1.3.1) to identify the most appropriate mitigation measures. In fact, several multi-disciplinary land and water resources assessments including climate risk assessments, the results of which will inform LDN compliant integrated land use plans and rationalised water management practices in the targeted districts.</p> <p>The climate risks and vulnerability assessments for the water sector includes hydroclimate projections under different climate change scenarios to inform integrated water management planning in the targeted districts. The prioritised climate risks will be followed by the validation of appropriate combination of SLM measures that will address these risks and will consider unique risks posed to vulnerable groups including women. Furthermore, the project adheres to LDN Principles and will screen the activities against the LDN Checklist. The</p>	UNDP CO RP/IP Project Manager/CTA Project coordinators M&E consultant
---	---	---------------	--	--	---

9	<p>Risk 9: Project activities involving local/field interventions and close engagement with local communities may inadvertently contribute to the spread of COVID-19.</p> <p>Standard 3 Community Health, Safety and Security, 3.4</p>	Environmental Social	<p>Activities at local level are based on participatory approaches, and most of the times will include meetings and local consultations. There are a number of training workshops and awareness events, round table meetings etc which will be organized mindful of government regulations and healthy standards and other appropriate safeguards.</p> <p>I=3 L=3 Moderate</p>	<p>The risk will be mitigated through adequate safeguards such as: (i) clear procedures in place in case of COVID19 reinstatement of restrictions, approved during project inception (ii) use of protective equipment, maintaining social distancing and using remote methods of engagement whenever possible (iii) if adequate safeguards cannot be put in place, activities that entail close local communities engagement will be put on hold if necessary, and work programme/budget will be revised as needed. wherever possible on-line meeting platforms will be used and travel decreased. All project meetings will be organized mindful of government regulations and healthy standards and other appropriate safeguards (including those of UNDSS).</p>	<p>UNDP CO RP/IP Project Manager/ CTA Project coordinators</p>
---	---	-------------------------	--	--	--

10	<p>Risk 10: The project may inadvertently contribute to potential perpetuation of discriminations against women. There are lingering disparities between men and women, particularly in rural areas and in the patriarchal cultures of some of the ethnic minority communities, which could be inadvertently replicated.</p> <p><i>SES Principle 3, Gender, P10</i></p>	Social	<p>The Project could potentially perpetuate discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities. In the pilot farmers associations and livestock farming sector, women account for around 51-52% of the population. They are mainly engaged in housekeeping, teaching, and administrative support services. Many more women form part of the unpaid family labor in home farming and lease of agricultural lands.</p> <p>I=2 L=3 Moderate</p>	<p>The management of this risk will be done primarily through the implementation of the Gender Action Plan (GAP) and will be monitored by the project specialized experts. The project design has consistently mainstreamed gender sensitive approaches and has created opportunities for tackling women's needs, ranging from designing tailored training activities to organizing dedicated segments of radio programmes for women farmers. The project will provide ample opportunities for women to learn about LDN and SLM measures and resilient livelihoods and integrate best practices into their farm practices. Though the training programs and Farmer Field Schools, women will also be able to access the capacity building and training required to practice climate-resilient agriculture, as well as to diversify their livelihoods in more resilient ways. The project will ensure gender balance in project activities (e.g. seminars, community level events) including in the membership of different decision-making bodies (Working groups; Project Boards; People Councils; Evaluation Committees) including access to project financial assistance (grant scheme). Gender considerations will inform any community level vulnerability analysis linked to local infrastructure or demonstration plot development through consultation regarding needs and preferences on types of training and investment. The project will also gather gender-disaggregated data for evaluation purposes and use gender sensitive indicators (particularly around beneficiaries) to facilitate planning, implementation</p>	UNDP CO RP/IP Project Manager Gender expert
----	--	--------	---	--	---

11	<p>Risk 11 The project may fail to ensure that labor rights, especially of vulnerable groups, are respected by local subcontractors. There could be risk of forced child labor at project sites.</p> <p><i>SES Standard 7; 7.1</i> <i>SES Standard 7; 7.3</i></p>	Social	<p>Turkmenistan ratified all ILO main conventions. The information on the ILO website with regard to application of labor standards in Turkmenistan reveal no major observations and issues. There are however independent media streams revealing that forced labor is still practiced[1]¹. I=2 L=3 Moderate</p>	<p>The Risk is rated Moderate. The project will ensure that national working standards (Labor Code) are respected for all the project activities</p> <p>The requirements of this Standard are to be applied in an appropriately-scaled manner based on the nature and scale of the project, its specific activities, the project's associated social and environmental risks and impacts, and the type of contractual relationships with project workers.</p> <p>The management procedures will be that specific requirements of the terms and conditions of the employment will be established, that will:</p> <ul style="list-style-type: none"> - Comply with minimum age requirements set out in International Labour Organization (ILO) Conventions or national legislation (whichever offers the greatest protection to young people under the age of 18) and keep records of the dates of birth of all employees verified by official documentation - Check the activities carried out by young workers and ensure that children under 18 are not employed in hazardous work, including in contractor workforces. Hazardous work will normally be defined in national legislation and will be likely to include most tasks in construction and several in 	<p>UNDP CO RP/IP Project manager Field coordinators Local Project Committee</p>
----	--	--------	--	--	---

12	<p>Risk 12 There is a risk that the choice of irrigation technology may lead to an increase in the use of surface water.</p> <p><i>SES Standard 8; 8.6</i></p>	<p>The project's work under Output 1.3. will result in approximately 100,000 ha of irrigated land under sustainable water management. Under this output the project will demonstrate small scale local farm level repairs and improvement of irrigation systems (e.g. pumps; canals). The plans are expected to be funded and implemented by the government; therefore the impact is considered Moderate. Although the water management planning will indicate the technology to be used in order to reduce water wastage and improved resource efficiency, there is the risk that the choice of water irrigation technology would lead to increase water consumption.</p> <p>I=3 L=3 Moderate</p>	<p>This risk will be managed through SESA/ESMF (as needed) In addition, the project's deployment of qualified specialists (hydrologists, engineers) will ensure that the development of the Sustainable Water Use Plans (Act. 1.3.1) and will entail guidelines and specifications for the most efficient irrigation technology and cost effectiveness deliberations are included in the cost benefit analysis. In addition the Sustainable Water Use Plans will include a Monitoring mechanism to be implemented by local authorities and daikhan farms in order to monitor water use trends. With regard to the demonstration activities at sites (Act. 1.3.3.) the project's specialists will ensure that the appropriate technology is used, improvement works are designed and implemented in an appropriate manner and resource efficiency is considered. UNDP has accumulated solid experience in successful demonstration and promotion of water and energy efficient practices, which will be used through this project. The irrigation technologies that UNDP promotes are efficient in terms of rational water use and leave minimal or no drainage waters. Furthermore, more innovative and emission and waste-free options are rigorously being investigated now within the ongoing projects, such as solar-powered water pumping and treatment facilities to satisfy both household and agricultural needs, primarily in remote desert areas, where traditionally diesel is used for similar purposes. Thus, resource efficiency will become the backbone for</p>	<p>UNDP CO RP/IP Project Manager/ CTA Project coordinators Qualified experts</p>
----	---	--	---	--

13	<p>Risk 13 The project's small scale, on-the-ground works may pose safety risks to community members.</p> <p>SES Standard 3; 3.3; 3.6</p>	Environmental Social	<p>Project activities that entail possible public health concerns are not envisaged, quite the contrary, the project will contribute to enhancing public health, as it seeks to improve the social and economic environment as well as the physical environment. All the works envisaged at project sites are at the lowest level of the irrigation system (i.e. at the level of farm canals/pumps/wells) but some risks of ground work infrastructure malfunction that could pose some safety risks may exist (e.g. repairs of wells) or minor disturbance of top soil where slipping or other small safety hazards are not excluded.</p> <p>I=3 L=2 Moderate</p>	<p>The risk is managed through the targeted assessments at site. Targeted assessments are envisaged for all the project activities and restoration works, including specific impact assessment at sites for other activities that are not fully defined.</p> <p>The project will primarily focus on restoring degraded and saline lands and support small repair of on-farm irrigation system. The contractors will ensure that structural elements and services (e.g. transportation) are designed, constructed, operated and decommissioned in accordance with the legal requirements and good international practice. Structural elements of any infrastructure that may pose significant health and/or safety analysis will be constructed by qualified engineers and professionals and include appropriate measures for supervision, quality assurance, operation and maintenance. The project's specialists including the safeguards expert will ensure that actions are taken to avoid or minimize any potential safety risks. The safety specialists appointed by the construction company will ensure compliance with applicable safety rules during the repair works. Appropriate signage and delineation of the works area on the ground will be ensured and temporary used access point should be as close as possible to the project site in order to produce a minimum disturbance on the surrounding environment. Health and Safety Plans will be implemented by sub-contractors for all construction activities according to the applicable legislation. Regular monitoring will be conducted for compliance</p>	UNDP CO RP/IP Project Manager/ CTA Project coordinators Local Project Committee
----	--	-------------------------	---	--	---

14	<p>Risk 14 The project supported demonstration activities may inadvertently be implemented at/in proximity of significant cultural and historical significance sites.</p> <p><i>SES Standard 4; 4.1</i></p>	Social	<p>The project sites have been carefully selected during the PPG based on several criteria chiefly among which is the land condition and water irrigation system and proximity to PAs. The demonstration areas are located on daikhan farm estate and have been already used for decades for agriculture and animal husbandry. The selected sites are located around PAs. There is very low risk that these sites or other demonstration sites that could be further selected, be overlapping with cultural and/or historically significant sites.</p> <p>Turkmenistan has three sites under the List of World Heritage Sites. In the project targeted regions, there is only one site included in the World Heritage List namely the Soltan Tekesh Mausoleum, situated in Dashoguz province in Konye-Urgench city, located on the south side of Amudarya River. All the project's demonstration sites are located in the PAs surrounding geographies and although Dashoguz is one of the targeted project's region, none of the demonstration activities come near this site. However, there may be other culturally significant sites that the project could inadvertently impact. This risk will be monitored attentively, especially because the government has proposed other sites to</p>	<p>The mitigation of this risk will be done through the Process Framework, Stakeholder Engagement Plan and SESA/ESMF. The presence of the sites of cultural or historical significance will be re-assessed during the land use planning activities under Output 1.1.. Moreover, during the inception stage, the comprehensive stakeholders consultations will validate the sites selected at PPG stage. Where potential adverse impact is detected and if deemed significant, then a Cultural Heritage Management Plan should be developed, part of the ESMP. The project will ensure that <i>chance find</i> procedures are included in all plan and contracts regarding project-related constructions, including excavations, movement of earth or other changes to the physical environment, and that these procedures will include notification of relevant authorities. The mitigation of any potential risk will involve consultation with local authorities and stakeholders.</p>	<p>UNDP CO RP/IP Project Manager/ Project coordinators Local Project Committee</p>
----	--	--------	---	--	--

15	<p>Risk 15 There is a risk that the marginalized and vulnerable groups/ farmers cannot access agricultural extension services strengthened by the project's activities and/or are excluded from benefiting from access to technical knowledge</p> <p><i>SES Principle 2 Human Rights, P3</i></p> <p><i>SES Principle 2 Human Rights P5</i></p> <p><i>SESP Principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>Principle 5, Accountability, P14</i></p>	Social	<p>The project beneficiaries are small and medium size private farmers and farming enterprises. One of the project's activity is aimed at making agricultural extension services and resilience advice more accessible to farmers (Act 3.2.1). There is a risk that marginalized and vulnerable groups cannot access extension services or are excluded from the direct project support through Outputs 3.2 and 3.3. This risk is preventatively assessed moderate as access to knowledge within the framework of this project that promotes new innovative practices is deemed essential to achieving the intended outcomes and there is a risk that the vulnerable communities representatives, may not even hear about or be informed about the existence of these services and/or not be able to access due to remoteness of their location.</p> <p>I=2 L=3 Moderate</p>	<p>The risk management and mitigation measures are included in the project design.</p> <p>(i) For example the project includes partnerships with other initiatives (e.g. Adaptation Fund Project) and cooperation with the Union of Industrialists and Entrepreneurs, in order to strengthen extension service providers (Act 3.1.2). The AF Project builds on the process of vulnerability screening for better targeting the agricultural extension service providers while using technology such as mobile extension services, and as such, expanding the network of accessible demonstration plots for climate resilient technologies and on-farm consultations.</p> <p>(ii) In addition, this GEF project will implement ample awareness raising activities (Act 3.1.2) in order to reach out to all farmers and especially those located in remote areas and will strengthen the government's extension services in the targeted regions.</p> <p>(iii) The project's support envisages targeted radio programmes for farmers, including a dedicated segment for women farmers. These tailored radio programmes will test the opportunity and feasibility of setting up radio extension services to reach out to remote locations, and will include targeted programmes, designed based on farmers' needs. The project will work with a PR media company in order to implement these activities. The TORs for this assignment will include specific tasks to mitigate these risks i.e. carry out research and consultations</p>	<p>UNDP CO RP/IP Project Manager/ CTA Project coordinators Local Project Committee</p>
----	---	--------	--	--	--

16	<p>Risk 16 Conflicting government priorities relating to agricultural production and sustainable land use could lead to limited progress in achieving the project's intended outcomes and limited results in the conservation and restoration of degraded lands, and the protection of critical habitats for the long-term maintenance of ecosystem services necessary to support sustainable livelihoods.</p>	Political Strategic	<p>Due to historic conflicting priorities among environment and other economy sectors such as agriculture; due to existing policy/regulatory loopholes; and due the lack of awareness and sufficient information of the decision makers on the negative impact of climate change on natural resources and consequences of unsustainable use of water resources, there is a moderate risk that the project strategic outputs will not be formally approved and therefore not implemented. This may happen due to a lack of consensus and reconciliation between environment and agriculture priorities, and due to a lack of acknowledgement of biodiversity values and the need to change the way agriculture practices are implemented and land use is planned. For example adoption of an integrated participative land use approach is an important step forward from the current centralized way of the water and land governance.</p> <p>I=3 P=3 Moderate</p>	<p>UNDP CO will organize regular quarterly Strategic Risk Meetings chaired by the RR in order to monitor the progress towards the formal approval of strategic project outputs (such as ILUPs/Integrated Land Use Plans; Sustainable Water Management Plans; Regional LDN targets and Action Plans; Legal amendments to Pasture Law; Water Code and Land Code; and new PAs dossier) and address the risk of not securing the official/forma approval of these strategic outputs- which would impact the progress towards outcomes and strategic objective. In case of such a risk, high level meetings with the national counterparts will be organized by UNDP CO and these high level discussions will be expected to mitigate the risk and secure political support and formal approval of the project results.</p> <p>The Risk will be attentively monitored by UNDP and its rating will be changed to High/Critical if needed.</p> <p>The risk is mitigated through different activities. The project will be closely working with a range of government stakeholders, partners, and resource users and managers and will organize education and awareness events (under Component 3) on the need to manage land and water resources in an integrated and sustainable way that will not deplete soil productivity and will not impact negatively on biodiversity . Through the support to National LDN target setting and support to an enabling policy framework (under Component 1/Output 1.1.) the project will facilitate inter-sectorial stakeholders consultations expected to</p>	UNDP RR/ DRR RP/IP Project Board Project manager M&E consultant
----	--	---------------------	--	---	---

17	<p>Risk 17: National and local government institutions responsible for the management of protected areas, pastures and forests do not have adequate capacity to support project activities and build and maintain and enforce working agreements with communities, living in and near KBAs</p>	Operational	<p>Improving zoning around the targeted reserves will be complemented by the delineation of the corridors for wildlife feeding and migration (Act. 2.3.1), aiming to improve the integration of PAs within the wider production landscape. The project will map critical habitats, buffer zones and corridors, and identify spatial and temporal habitat use patterns (e.g. bird nesting times, calving zones etc) and identify buffer zones and corridors for wildlife and develop cooperative land use planning and management agreements for these areas. The project will work with PAs staff, local authorities and forestry enterprises, community representatives and local councils (People Councils). While the initiative could be successful, there is a risk of the relevant authorities not having the necessary capacities to maintain these agreements with the local communities.</p> <p>I=3 P=3 Moderate</p>	<p>The project will strengthen and expand the current capabilities of the PAs administrations, environmental inspectors and border police, local authorities (i.e. key institutions responsible for the planning and management of PAs, enforcement of environmental norms, and pastures and forests management across the high value arid ecosystems of Turkmenistan's Aral Sea basin) . The project will support the development of well-trained and properly equipped management, monitoring, enforcement, community liaison and pastoral and forest groups staff in the targeted PAs, forest management authorities, and district administrations of the target districts. The project's qualified experts, including the Capacity Development experts, local coordinators, technical support staff and ministry counterparts will work with the Local Advisory Committees (People Councils) and facilitate the assessments, local dialogue and round table meetings that the process involves.</p> <p>The ? <i>Council for the Management of Protected Areas</i>? will be set-up under the coordination of the Department of Environmental Protection and Hydrometeorology within the Ministry of Agriculture and Environmental Protection, in order to coordinate the implementation of measures to prevent illegal activities, and keep a closer communication with local communities, involving them in as much as possible in the development of alternative sources of income. The Council for the Management of Protected Areas will then facilitate the</p>	Project manager UNDP CO and IP/RP M&E consultant
----	---	-------------	---	---	--

18	<p>Risk 18: Project implementation delays related to the COVID-19 pandemic.</p>	Operational	<p>The project implementation may be affected by delays, as was the case with other projects, affected by the restrictive measures implemented since the Covid-19 outbreak</p> <p>P = 3 I = 3 Moderate</p>	<p>The project will develop a COVID-19 Strategy and agree on the measures to mitigate any implementation delays that may result due to potential reinstatement of the COVID-19 related restrictions. UNDP issued corporate guidance on 'Managing programmes and projects in the age of Covid-19?'. These guidelines will be included in the Project COVID-19 Response Strategy. This Strategy will be presented and approved at Inception Workshop along with the main health safeguards that will be implemented during the implementation to protect people and environment and prevent the virus spread (i.e. use of masks, social distancing, remote meetings whenever possible; remote field monitoring as much as possible). The risk to the project posed by potential reinstatement of restrictions (travel; lockdown, others) will be mitigated through several steps that could include (but will be not limited to) :</p> <ul style="list-style-type: none"> (i) Re-assessment of the COVID-19 restrictions on the AWP implementation (ii) Create/activate stakeholders and key project partners Telegram/Zoom group and move all the meetings online (iii) if activities will be delayed a few months but workplan will deliver on time and within budget, no formal revision is needed (iv) if activities cannot be completed on time, workplan will be revisited and budgets revised/ clearance by online Board meetings (v) if local activities and local field staff can continue activities, monitoring will be done remotely (using photos from the field) or through a virtual mechanisms (project will reach out to community leaders and key partners in 	<p>IP/RP UNDP CO Project manager PMU staff M&E consultant</p>
----	--	-------------	--	--	---

[1] <https://www.solidaritycenter.org/children-forced-labor-turkmenistan-cotton-fields/>

6. Institutional Arrangement and Coordination

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

Institutional arrangements are described in Section VI Governance and Management Arrangements in the GEF/UNDP Project Document.

The coordination with key stakeholders their roles and responsibilities in the project implementation is described in the Stakeholder Engagement Plan (GEF/UNDP Project Document Annex 16).

Synergies with other existing projects are indicated under GEF/UNDP Project Document/ Annex 24 List of Baseline Programmes and Projects and in the Knowledge Management Plan (Annex 19 of the Project Document) .

This project will be implemented within the context of the UN programming frameworks driven by the Government, particularly the UN Partnership Framework for Development (UNPFD) for Turkmenistan, and the UNDP Country Programme Action Plan for 2021-2025 (CPAP). In turn, these frameworks are congruent with the Government priorities outlined in the National Programme "The Strategy of Economic, Political, and Cultural Development of Turkmenistan Until 2030" and recently adopted Programme of Social and Economic Development of Turkmenistan for 2019-2025, and Programme of Development of the Agricultural complex of Turkmenistan for 2019-2025. As the GEF Agency for this project, the UNDP Country Office (CO) in Turkmenistan will provide quality assurance, in accordance with requirements of the GEF and UNDP Policies and Procedures. The Ministry of Agriculture and Environment Protection (MAEP) is the government institution responsible for the implementation of the project and will act as the Implementing Partner in accordance with the UNDP National Implementation Modality (NIM), implying full national ownership of the project by the MAEP Turkmenistan. This is in line with the Standard Basic Assistance Agreement (SBAA, 1993) and the UN Partnership Framework for Development (UNPFD) 2021-2025 between the UN and the Government of Turkmenistan. The Ministry of Agriculture and Environmental Protection has been involved in the implementation of GEF projects before, including UNDP/GEF projects however, it has never received and operated GEF resources directly, as the earlier projects were implemented with UNDP Country Office support. Financial execution of a stand-alone donor-funded project or programme is beyond the scope and mandate of the Implementing Partner. It is beyond the administrative capacities, internal regulations and fiscal policies of the MAEP to ensure procurement, contract management, accounting/finance functions and controls for the project. The MAEP will have substantive supervisory functions and roles, while the project administration capacities and functions (contracting, recruitment of personnel and experts, finance administration and administrative support to project processes) will be sought from a qualified third party/ Responsible Party (RP). The private enterprise "Ynamly Kepil" has been selected as Responsible Party (RP) as a result of the HACT Micro Assessment conducted. The PCAT Assessment has also demonstrated that private enterprise "Ynamly Kepil" is well capacitated to provide partial execution support for the project. Necessary due diligence has been conducted as part of PCAT for the private entity. The decision on selection has been discussed and consulted with the IP (MAEP). In line with UNDP rules, actual contracting of RP(s) will take place after project approval during the inception phase. At the same time, PCAT and HACT assessments as well as extensive consultations with the MAEP and the potential RPs have indicated certain capacity limitations related to the national legislation and internal regulations of the RPs, especially related to the capacity of executing international payments and procurement and coordination with other international donors and development partners. Due to the RP identified capacity constraints, support services of UNDP will be specifically requested on an exceptional basis, in accordance with the GEF Guidelines on Project Cycle C95.Inf.03 dated 20 July 2020. A strict firewall will be maintained between

the delivery of project oversight and quality assurance performed by UNDP and charged to the GEF Fee and UNDP supported project execution charged to the project management costs. The Government of Turkmenistan will request UNDP direct services for this project, according to its policies and convenience. Upon request, the UNDP project support services would follow the UNDP policies on the recovery of direct costs. The requested support services and their estimated costs are specified in the Letter of Agreement (Annex 21).

In addition to the synergies and coordination highlighted, the project will explore cooperation opportunities with the new GIZ Programme 'Integrative and Climate Sensitive Land Use in Central Asia' (2021-2024), potentially on : (i) Integrated Land Management and multistakeholder engagement under Output 1.1. (ii) Training sessions on LDN target setting (iii) Cooperation with the activities under Uzbekistan's component, in view of joint programming for identification/strengthening of the ecological corridors for the migration of wild ungulates.

Furthermore, the project will coordinate with the Uzbekistan UNDG GEF 'Project Conservation and sustainable management of lakes, wetlands, and riparian corridors as pillars of a resilient and land degradation neutral Aral basin landscape supporting sustainable livelihoods' and a number of cross border approaches have been included under Output 1.3 (aiming at harmonization of water management approaches based on IWRM principles), Output 1.1. (harmonization and knowledge exchange regarding the methodologies and best practices in setting LDN voluntary targets at regional level, and introducing LDN principles in land use planning and Output 2.1 (cross-border programming for the facilitation of migratory routes of wild ungulates).

This project will partner with the new Adaptation Fund Project 'Scaling Climate Resilience for Farmers in Turkmenistan' implemented in partnership with the Ministry of Agriculture and Environment Protection, aiming at building resilience to climate change among the emerging class of small and medium size private farmers in Turkmenistan, including women farmers, strengthening the agriculture extension services and transitioning towards resilience agriculture practices. Due to ample synergies between the two projects a number of joint activities will be organized under KM Component 3: the trainings of 50 extension officers and joint awareness sessions. The knowledge generated under both projects will be shared through the online platforms to be set up by the Adaptation Fund project.

The project will exchange knowledge and project results with the FAO project 'Integrated Natural Resources Management in Drought-Prone and Salt-Affected Agricultural Production Landscapes in Central Asia and Turkey (CACILM 2)'. The overall objective of 'CACILM 2' is to scale up integrated natural resources management (INRM) in drought prone and salt affected agricultural production landscapes in the Central Asian countries and Turkey. There are ample opportunities for synergies. This GEF project has built its strategy on some of the results of CACILM I and it will continue learning from and cooperate with the CACILM II project tested methods, during the implementation phase, in view of sharing knowledge and good practices, harmonizing approaches and advocating for more sustainable agriculture practices.

The Project of the Federal Ministry for Environment, Nature Conservation and Nuclear Safety of Germany (BMUB): Central Asian Desert Initiative (CADI) 'Conservation and sustainable use of deserts in Turkmenistan, implemented by Ministries of Agriculture and Environment Protection of Turkmenistan, Kazakhstan, Uzbekistan, Michael Succow Foundation and University of Greifswald (Germany) (possibly to be extended until end 2022). The project aimed to assist the biodiversity conservation and development of desert ecosystems' functions in Turkmenistan; preparation of scientific-technical rationale for the inclusion of desert ecosystems into the UNESCO World Heritage List; delivery of events for the management improvement and territory expansion of one of the existing desert protected areas; technical support and delivery of joint field researches, training of protected area's staff, dissemination of acquired knowledge and public outreach. CADI project results have informed this project's strategy, e.g. good practices in the inventory of wild ungulates, inventories of flora and fauna conducted in Gaplanyr Reserve

and the knowledge generated during the process of nomination of the deserts of the temperate zone of Central Asia for inclusion in the UNESCO World Heritage List. The proposed GEF project will further contribute to the PA system's data base, building on CADI supported inventories of wildlife.

The project will further coordinate with the UNCCD and will explore innovative software aiding LDN centered integrated land use planning. For example, the project will explore the feasibility to make use of the Innovative Land Use Planning software that is promoted by UNCCD through open source data and will be selected as a result of the recent GEO-LDN Technology Innovation Competition, whose results will be final during the first quarter of 2021[1]. Placing LDN at the centre of land use planning can be challenging, as it was reported by the UNCCD Science-Policy Interface (SPI)[2]. This 'no net loss' land use planning module would help users to map anticipated future impacts of land use decisions for a given area.

This project will coordinate the generated knowledge and exchange research findings with the GEF/UNDP International Waters Project 'Strengthening the Resilience of Central Asian Countries by Enabling Regional Cooperation to Assess High Altitude Glacio-nival Systems to Develop Integrated Methods for Sustainable Development and Adaptation to Climate Change' (GEF ID 10077). The opportunities for knowledge exchange will be used by both projects to strengthen the knowledge base for the achievement of results. The project-born research findings will contribute to the GEF/UNDP International Waters project specific focus on assessing the water flow of Amudarya River especially considering the climate change water shortage predictions. Turkmenistan is one of five countries part-taking in this regional project that will promote and facilitate the establishment/strengthening of national and regional glacier centres and with an eye towards continuously assessing current and future water flow in key rivers, including the Amu Darya, Syr Darya and the Illi River. Both projects will involve IFAS organization, which will further support the coordination. The GEF/UNDP International Waters regional project is fully coordinated with IFAS and will deliver national action plans informed by inter-ministerial dialogues and knowledge and data exchanges and may provide key building blocks for other planned/ongoing projects specific to increasing climate change adaptation and informing management practices.

[1] <https://www.unccd.int/news-events/competition-design-land-use-planning-software-land-degradation-neutrality>

[2] https://knowledge.unccd.int/sites/default/files/2019-08/UNCCD_SPI_2019_Report_1.2.pdf

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:

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

The project is consistent with the national priorities and the project's design is aligned with the country's international commitments under the main UN Environmental Conventions. The project is directly supporting the implementation of Turkmenistan's NBSAP 2018-2023 aligned with a) Goal II ? Sustainable use of biodiversity and habitats influenced by anthropic? particularly Objective 3 ? By 2023 develop and adopt a long term programme for sustainable management of natural pastures?; Objective 5 ? By 2023 develop and start implementing programs for rational use of water resources of Turkmenistan, which include biodiversity? and Target 6 ? By 2023, develop and implement sustainable use of water and biological resources?; and b) Goal IV ?Development of natural protected areas for improving environmental protection and socio economic benefits ?, Target 10 ? By 2023, effective management of the protected territories will be significantly strengthened?.

The project addresses key ecological gaps identified under the CBD POWPA work plan, integrates PAs into the wider landscape and involves communities in conservation efforts. The need for conservation of rare species of the high value ecosystems of the Amu Darya basin is prominent in Turkmenistan's 5th National Report to CBD. It also demonstrates an integrated approach to the improved management of PAs for under-represented ecosystems (i.e. arid ecosystems), covering a number of topics, ranging from technical aspects (capacity building of existing and new protected areas, harmonization of PA management planning, development and implementation of a comprehensive monitoring system for biodiversity and ecosystems) to socio-economic dimensions (support for alternative income-generating activities for local communities such as ecotourism, and apiculture, to integration of PAs with biodiversity conservation and sustainable land use in adjacent areas.

The project directly supports the achievement of Aichi Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained. Through the landscape approach it substantially contributes to the following Aichi Targets: (i)Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced? (ii) Target 11: By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes; (iii) Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

The project is further aligned with Turkmenistan's international commitments under UNCCD through the support to capacity building for the LDN National Voluntary Target Setting and technical support for the development of the National Strategy and Action Plan on Combating Desertification and implementation of LDN compliant measures as well as support to LDN enabling frameworks including measures to enhance the resilience of communities and ecosystems to drought. The project further supports the

country's commitments under the recently ratified Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) by facilitating cross-border wild ungulates conservation measures and joint programmes. The project aligns with the National Climate Change Strategy of Turkmenistan (2012) which includes priorities on the optimisation of agricultural production with focus on drought and salt resistant crops, improved land management (e.g. crop and pasture rotation), soil desalination and drainage measures and sustainable pasture management. It is also consistent with the country's efforts towards National Adaptation Planning with the support of Readiness Programme under the Green Climate Fund (proposal submitted). The project also aligns with the Nationally Determined Contribution of Turkmenistan (2014) and with the adaptation policies which identifies agriculture and water resources as core sectors vulnerable to climate change, with a preliminary estimate of adaptation costs at approximately \$ 10.5 billion.

The project is aligned with the priorities set out in the main legislative framework in agriculture and water sector such as : (i) the Water Code of Turkmenistan, which stipulates (inter-alia) that inter-farm irrigation and drainage belongs to the state water management organizations, while water users are having direct responsibility for operation of irrigation and drainage network and hydrotechnical facilities at their own costs. In August 2012, Turkmenistan acceded to the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes. By joining the Convention, Turkmenistan undertook the review of the Water Code to meet some of the basic provisions of the Convention, including the rational use of water by the transition to the basin principle of water resources management, involvement of water users in the management of water resources, and improving tariffs for water supply services to ensure its more efficient use. The programme for water management of Turkmenistan for 2018 - 2030 is currently under development; (ii) the Land Code of Turkmenistan, lists the measures for efficient use of land resources, procedures for state land management, maintenance of state land resources and monitoring, measures for improving soil fertility and conservation of natural resources.

The project further aligns with the main national policies and programmes such as: (i) The "Strategy of Economic, Political, and Cultural Development of Turkmenistan Until 2030" which sets out targets in relation to agricultural outputs. A considerable proportion of irrigated agricultural land is planned to be transferred to the private sector enterprises. The private sector tenants will include joint-stock companies, daikhan (farmer) cooperatives and unions. These categories of land users are expected to introduce more effective and efficient water use technologies and water saving practices. At a broader level the Strategy states that the overarching national development goal is to shift to a growth model based on innovation and sustainable development; (ii) The Programme of Social and Economic Development of Turkmenistan, 2019-2025, which outlines Turkmenistan's social and economic development objectives for the next years and reflects the main principles, priority directions, required actions and expected outcomes. The primary objectives of this programme are to continue implementation of market reforms and transition to a market-led economy, economic diversification, rational use of natural resources, improving human capital, and improving the living conditions of the population; (iii) The National Action Plan on Gender Equality 2015-2020, sets the country's strategy on achieving gender equality, and highlights 15 targets and 60 activities that include increasing women's competitiveness in labor markets, improving maternal and child health outcomes, and the creation of gender-responsive legislation; and (iv) The "Programme for the Development of Specially Protected Natural Areas of Turkmenistan 2030" which makes provisions for the

increase of the total PAs network up to the 7.18% of the territory, including KBAs/IBAs and Ramsar wetlands, ecological corridors and reserves.

In addition, the project will support the following national priorities within the framework of the Regional Environmental Protection programme for Sustainable Development of Central Asia (REP4SD CA) and under the Aral Sea Basin Assistance Programme 4 (ASBP-4):

Water Resources: ensuring effective water quality monitoring, including the monitoring of water turbidity on the flow of Amu Darya River; exchange of technologies and experience in restoration and conservation of water-related ecosystems.

Climate change: development of climate scenarios for the Central Asian region; preparation of the Regional Strategy on Climate Risk Reduction in Central Asia; improving education, preparation of qualified staff and public outreach on the issues of climate change.

Desertification and biodiversity: implementation of the Sub-regional Action Programme to Combat Desertification, making the functioning of Central Asian wetlands sustainable by implementing best practices for their management; restoring the Tugai forests of the Amu Darya Valley; creating the Red Book of Central Asia; studying traditional methods of conservation and rational use of genetic resources; developing and implementing methods to prevent the introduction of alien species.

Cooperation, science and technologies: develop cooperation between Central Asian countries in the fields of science, technology and innovative technologies; strengthen the institutional capacity of regional cooperation organizations to facilitate the implementation of national plans aimed at achieving the Global Goals for Sustainable Development, including their indicators.

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.

A comprehensive Knowledge Management Plan has been included in Annex 19 of the GEF/UNDP Project Document.

The project knowledge management approach is mainly geared towards addressing capacity gaps and barriers and includes a range of practices to identify, capture, store, create, update, represent and distribute knowledge for use, awareness, and learning. The project has multiple elements that will contribute to the knowledge management approach. The proposed Knowledge Management Plan includes seven elements aligned with the GEF requirements to foster learning and sharing from relevant projects and programmes, initiatives, and evaluations, that will contribute to the project's overall impact and sustainability.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The budgeted M&E Plan is included in Section V of the GEF/UNDP Project Document.

Also, the project Monitoring and Evaluation Plan is copied below.

Monitoring and Evaluation Plan and Budget:				
<i>This M&E plan and budget provides a breakdown of costs for M&E activities to be led by the Project Management Unit during project implementation. These costs are included in Component 4 of the Results Framework and TBWP. For ease of reporting M&E costs, please include all costs reported in the M&E plan under the one technical component. The oversight and participation of the UNDP Country Office/Regional technical advisors/HQ Units are not included as these are covered by the GEF Fee.</i>				
GEF M&E requirements	Responsible Parties	Indicative costs (US\$)		Time frame
		GEF Grant	Co-financing	
Inception Workshop	Implementing Party UNDP Country Office	\$5,000	\$ 15,000	Within 60 days of CEO endorsement of this project.
Inception Report	Project Manager	None	None	Within 90 days of CEO endorsement of this project.
Monitoring of indicators in project results framework	Project Manager Project Task Leaders	Paid through project components	Budgeted as part of co-financing under project components	Annually prior to GEF PIR
GEF Project Implementation Report (PIR)	UNDP Country Office ^[1] UNDP/GEF RTA	None	None	Annually
Monitoring risks (UNDP risk register)	UNDP Country Office Project manager	None	None	Quarterly, annually
Monitoring of social and environmental safeguards	Project Manager Local coordinators UNDP Country Office	Paid through Component 1 and 2	Budgeted as part of co-financing under Component 1	Annually
Supervision missions	UNDP Country Office	None ^[2]	\$5,000	Quarterly, Annually

Update Mid-term GEF Core indicators and METT (at midterm)	Implementing Partner Project Manager UNDP Country office	Paid through Component 2	\$5,000	Before mid-term review mission takes place.
Independent Mid-term Review (MTR)	UNDP Country Office UNDP/GEF RTA	\$19,350	\$10,000	September 30, 2025
Update GEF Core indicators and METT (at project end)	Implementing Partner Project Manager UNDP Country Office	Paid through Component 2	\$5,000	Before terminal evaluation mission takes place
Monitoring of GEB	M&E expert UNDP Country Office	\$6,000	None	Annually
Independent Terminal Evaluation (TE)	UNDP Country Office UNDP/GEF RTA	\$27,150	\$10,000	November 30, 2026
Project final workshops/conferences	Implementing Party UNDP Country Office	\$5,000	\$15,000	At least two months before the end of the project
Project final report	Project Manager	None	None	Within two weeks from the final project workshop/conference
TOTAL indicative COST <i>Do not exceed 5 % when GEF project grant up to USD 5 million.</i>		\$62,500	\$65,000	

[1] Or equivalent for regional or global project

[2] The costs of UNDP CO and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

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 (LDCE/SCCF)?

The envisaged benefits to local and national stakeholders will be interconnected with the aggregated environmental benefits enabled by the project's features: (i) embedded integrated benefits and synergies across focal areas, (ii) mechanisms for integrated decision making and (iii) landscape-scale designed interventions.

The project incentivizes local actors away from destructive behaviour through engaging them in biodiversity friendly livelihoods around protected areas. Adequate awareness, technical knowledge and access to funding are key to ensuring that stakeholders will be able to adopt innovative, environmental-friendly practices. The project therefore aims at increasing capacity of 100 public sector employees and 200 PAs staff who will be participating in training activities. Approximately 10,150 people stand to benefit directly from the project's interventions.

About 100 local farmers and pastoralists will benefit from the project's Micro-scheme support for livelihoods (under Output 2.3) and it is estimated that their income will register at least 20% increase as a result of the implemented SLM measures. This is a conservative percentage, as income generation from recommended SLM measures will likely provide more benefits: e.g. according to past donor-supported projects^[1], application of rotational grazing alone can provide an estimated net profit of up to \$16 per sheep (after subtracting the costs per sheep of about \$8). The repair of the irrigation network (Output 1.3) has proven economically profitable, for example: repair of dams and reservoirs will increase water availability and can support expansion of cultivation areas (that previously were not suitable); the Internal Rate of Return (IRR) is 227% and the payback period is 1 year; the repair and lining of water storage basin will reduce water losses and leads to increased water supply. The IRR is 15% and payback period is 8 years; construction of drip irrigation systems will increase with approximately 40-50% the fruit and vegetable yields and the IRR is 29% and payback period approximately 5 years.

Approximately 9,750 farmers will benefit from the improved refurbishment of irrigation systems on demonstration plots, demonstrative drip irrigation systems, construction of water wells, rainwater harvesting facilities and pasture management regimes and restored degraded land. The generated experience is replicable first to approximately 100,000 people (employed in agriculture) in Dashoguz and Lebap priority districts first, then at the province level, particularly through: the project supported policy (i.e. National Action Plan to Combat Desertification), different Guidelines on LDN compatible land use, manuals, land use planning tools, demonstrated experiences at local level that work, and with the support of the awareness events and radio/TV talk shows. Improved livelihoods resilience is likely to result in reduced economic losses associated with water scarcity, and in greater agricultural productivity, increased revenues and employment prospects and diversification of income sources. The project's gender-sensitive micro-grant scheme will prioritise mid and small farmers located in the selected areas (and identified LDN hot spots) including women, youth and vulnerable people thus prioritising support to the most vulnerable among the farming communities, affected by climate vulnerability but also from a social perspective. Greater resilience will result in reduction in economic losses associated with climate shocks. At national level, these losses are estimated at \$ 2.5 billion per year by 2030. Cost benefit analysis will be undertaken for individual investments to be made on demonstration plots. Due to the awareness and education events and due to the National LDN Target and enabling policies the potential for scaling up sustainable land management measures and integrated LDN compliant land use planning will increase the replication potential.

The mechanisms for integrated decision making that the project will promote under GEF/UNDP Projects Output 1.1 (regarding participative integrated land use planning and regional LDN target setting) and Output 2.1 (regarding the Local Councils and consultative committees to provide for local consultations on the designation of new protected areas and improved protection regimes around KBAs/IBAs and sanctuaries) will provide opportunities to reduce conflicts among resource users or overlaps in institutional mandates. General agreements on potential trade-offs promoted through an integrated and participatory manner, provide the platform for improved environmental and socio-economic benefits. In addition to agricultural activities, as it has been demonstrated by many other projects, during participatory mechanisms, farmers use these opportunities to talk about water, climate, sanitation and social issues and by so doing they are able to engage local authorities as partners in different other proposals for rural development. Finally, the project's focus at landscape-level in the Amudarya Basin landscape and on the implementation of multiple interventions within a spatial unit, allows for generating more synergistic benefits. Healthy ecosystems will ensure resilience of the region to climate and human threats, and the maintenance of ecosystem services for local communities.

[1] Examples recorded in UNCCD/WOCAT database

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification *

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

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

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

QUESTION 1: How Does the Project Integrate the Programming Principles in Order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the project mainstreams the human rights-based approach

The project fully supports UNDP's commitment to a human-rights based approach, and supports the universal respect for, and observance of, human rights and fundamental freedoms for all, but particularly in the case of this project, for the people living in the Lower Amu Darya Basin in Turkmenistan's Dashoguz and Lebap Provinces. The project does this broadly by supporting the sustainable use of natural resources, including access to and use of biological and land resources necessary for the rural communities, including the rural poor, in the project's geographic scope. In addition, the project will ensure and support the human rights principles of participation, inclusion and non-discrimination. More specifically, the project will carry out the following activities that support UNDP's human rights-based approach:

? Throughout all project activities the principles of participation and inclusion will be applied. In practical terms, this means, that all stakeholders will be consulted in planning the details of project activities for the project workplans. Stakeholder groups will be fully represented in the project steering committee, which will have oversight of the project, and provide strategic guidance on project implementation.

? In all aspects of the project, the project will ensure that local communities have meaningful means of raising any concerns, to UNDP or to respective resource management authorities, including government institutions, that are involved in the project. During the project inception phase the project will specifically communicate to all stakeholders and participating communities the specific mechanism and means for raising concerns or grievances to UNDP or to government representatives when activities may adversely affect them.

? The project supports the equality aspect of human rights particularly through supporting the implementation of UNDP's gender mainstreaming policy, as further described in the following question of this SESP.

? During the PPG phase, multiple consultations were held with local communities in the project's target areas. In addition, under activities such as sustainable pasture management under Output 1.4, the project will work with local communities to increase participation and equality in planning how communities will sustainably use their pasture resources to ensure sustainable livelihoods.

? Under Outputs 2.1 and 2.3 the project will work with PA management staff and with local communities to increase the engagement and participation of local communities in the management of PAs. The project will work with PA staff to increase the capacity to engage and educate local community members living near PAs.

? Under Output 1.1 the project will work to improve land use planning and the management of natural resources, and align these processes with LDN principles, by facilitating local communities participation in planning (especially women and youth), access to information, data, and increasing resource management capacity. This will improve the sustainability and equitability of resource management planning in the project's priority districts.

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

The project is fully in-line with and supportive of both the GEF's and UNDP's gender mainstreaming policies. A full gender analysis was completed during the PPG phase, which is the basis of a project Gender Action Plan. Appropriate information gathering and planning has been carried out during the project development involving key stakeholders and including women as much as possible in the local consultations and through the validation workshop. The project supports an appropriate scale of activities to score 2 per the ATLAS Gender Marker. UNDP's gender mainstreaming strategy and Gender Action Plan has identified gender disaggregated indicators, included in the project results framework. There are numerous ways in which gender dimensions are relevant to the project. The project addresses multiple types of agricultural land use, all of which have important gender dimensions, as they relate directly to the sustainability of local livelihoods. The project will work to improve the sustainability of livestock grazing in and around KBAs/IBAs. Although women are not typically directly involved in livestock grazing, they can be involved in decision-making about grazing plans, and in the processing of livestock products. The project will also work on improving land and water management in arable agricultural zones. Women do typically have a more direct role and higher level of involvement in the production of food and fiber crops.

The project will ensure that project activities relating to improved land management, such as local trainings and local decision-making mechanisms have appropriate and adequate gender representation. The project will also be working on improving management of protected areas, and will also ensure the engagement of women in decision-making bodies related to protected areas, such as local management boards. In addition, the project will also work to ensure appropriate gender equality and women's empowerment in project implementation mechanisms, such as on the Project Steering Committee, and amongst the project team of national experts and consultants involved in implementation.

The gender mainstreaming approaches are focusing on three dimensions of gender gaps, consistent with the definitions of the GEF Gender Strategy for implementation in all projects and programs of the Fund, namely: 1) Unequal access to and control over natural resources; 2) Unbalanced participation and involvement in decision making in environmental planning and management at all levels; 3) Unequal access to socio-economic benefits and services [1].

The following gender-related project interventions will be implemented (with more details provided in the Gender Action Plan):

? Support to the active involvement of women in the implementation of the natural resources planning, and decision making, participation into the inter-sectorial and multi-stakeholders platforms facilitated by the project, to ensure their knowledge and innovation are fully integrated into natural resource strategies and management plans; the project promotes and sustains meaningful representation and active involvement of women in local, district and national committees, coordinating mechanism and other decision-making or networking platforms;

? Organization of tailored capacity building/training sessions for women and youth, on alternative income generation (organization of trees nurseries, eco-tourism, arts and crafts, processing fruits, vegetables and medicinal plants); support to market outreach and participation into fairs and bazaars.

? Strengthen rural women's entrepreneurship skill; promote fair and equitable opportunities to access financing under the Micro-grant components of the project; The project will offer technical and financial support to ensure that benefits are widely accessible to women living in KBAs and their peripheries.

? Seek equitable representation of women on the project team and project board.

Organization of radio and TV talk shows with a segment dedicated to women and women farmers;

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

To demonstrate environment sustainability, the project uses innovative approaches to mainstream biodiversity in production zones and this is coupled with the use of protected areas as key mechanisms for conserving the most critical ecosystems within the wider landscape. The project strategy addresses the root causes and barriers by supporting resource managers' access to information about biodiversity distribution and about the carrying capacity of lands for livestock and crop production. In addition, the project strategy aims to develop the necessary capacity for implementing an integrated land use approach that integrates biodiversity in the surrounding geographies, while supporting sustainable livelihoods. Component 1 of the project focuses on addressing the degradation of land resources important for critical ecosystems and sustainable livelihoods. The Lower Amu Darya is primarily a production landscape, with intensive agricultural production in the small areas of this arid landscape that have access to irrigation. Therefore enhancing the sustainability of various forms of agricultural production is key for addressing the large-scale land degradation that exists in this region, which is primarily driven by poor land and water management, such as poor irrigation techniques, overgrazing, unregulated forest use and cutting. Key to the integrated approach is appropriate integrated land use planning to ensure the long-term sustainability of land uses for different soil types, ecosystems, and climatic conditions. The integrated approach supports multiple benefits, including improved biodiversity conservation through biodiversity-friendly land uses in and on the margins of KBAs/IBAs and efficient water management. For these high value arid ecosystems it is critical that the agricultural production (both livestock and crops) be undertaken in an integrated, well-planned manner that ensures biodiversity is not threatened, and that land resources are not degraded. The first component of the project supports resource managers and resource users to identify high priority degraded lands, and support the restoration of these lands. Component 2 of the project focuses on ensuring that the PAs in the wider landscape function as they were intended, in order to conserve biodiversity and serve as a source of critical ecosystem services beyond their boundaries. There are 2 existing protected areas in the scope of the project, covering approximately 1,077,554 ha in total. The project will support strengthening the management effectiveness of the PAs through individual capacity development for the PA staff, and the provision of critical management infrastructure and equipment (e.g. for biodiversity monitoring, enforcement, etc.). The project will also support the financial sustainability of the PAs, including business planning. To further strengthen the conservation of biodiversity in the targeted KBAs/IBAs, the project will expand PA coverage by an additional 60,000 ha (increasing PA coverage of targeted KBA by ~5%), either through the expansion of existing PAs, or the establishment of new PAs including Pitnyak upland and the heights of Altykarash, Zheldi and Muyger, part of the water areas of the Sultansanjar and Koshbulak reservoirs and Lake Zengibaba-Goyungirlan (KBAs/IBAs).

The project applies a precautionary approach to the management of environmental resources in multiple ways. Sustainable management of environmental resources requires a reasonable level of data and information about the existing pressures on those resources, the state of the resources, and current responses to supporting sustainable management. However, in many cases and particularly in Turkmenistan, there is insufficient information regarding pressures and the state of resources. In this case, wherever adequate data is lacking, the project will support the use of biological and natural resources (e.g. forest resources, pasture resources) in a precautionary manner, i.e. at a level that would be the most conservative feasible level under a precautionary approach.

The project is highly relevant to and consistent with Turkmenistan's national priorities related to land degradation and biodiversity conservation, as outlined in key national policy documents.

The project's sustainability is further anchored in, and aligned with, the national priorities and the country's international commitments under the main UN Environmental Conventions. The project is directly supporting the implementation of Turkmenistan's NBSAP 2018-2023 aligned with a) Goal II ? Sustainable use of biodiversity and habitats influenced by anthropic? particularly Objective 3 ? By 2023 develop and adopt a long term programme for sustainable management of natural pastures?; Objective 5 ? By 2023 develop and start implementing programs for rational use of water resources of Turkmenistan, which include biodiversity? and Target 6 ? By 2023, develop and implement sustainable use of water and biological resources?; and b) Goal IV ?Development of natural protected areas for improving environmental protection and socio economic benefits ?, Target 10 ? By 2023, effective management of the protected territories will be significantly strengthened?. The project supports improved policies for use of natural resources, improves the management of protected areas and raises the engagement of communities in their management, all of which are priorities within NBSAP. The project addresses key ecological gaps identified under the CBD POWPA work plan, integrates PAs into the wider landscape and involves communities in conservation efforts. The need for conservation of rare species of the high value ecosystems of the Amu Darya basin is prominent in Turkmenistan's 5th National Report to CBD. It also demonstrates an integrated approach to the improved management of PAs for under-represented ecosystems (i.e. arid ecosystems), covering a number of topics, ranging from technical aspects (capacity building of existing and new protected areas, harmonization of PA management planning, development and implementation of a comprehensive monitoring system for biodiversity and ecosystems) to socio

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

Through its various activities the project promotes accountability to project partners and stakeholders.

- a) The project enables active local community engagement and participation in decision making on the use of natural resource management, actively promoting participation of women, youth and disadvantaged groups. Land use planning (Output 1.1.), sustainable water management planning (Output 1.3.), sustainable pasture management regimes (Output 1.4/1.2), designation of new PAs (Output 2.2), setting up ecological corridors and community supported improved biodiversity management regimes (Output 2.3), participation in supporting grant schemes (Output 2.3) and training initiatives (Output 4.1) benefiting from agricultural extension services (Output 4.1) etc. these are all major project milestones, implemented with embedded mechanisms for meaningful participation of all the stakeholders affected, particularly those at risk of being left behind.
- b) The project ensures that everybody has access to information, through transparency of all the programmatic interventions, provision of timely and accessible information regarding supported activities (primarily captured under Component 4), including on potential environmental and social risks and impacts and necessary management measures that will be implemented based on local consensus, facilitated with the support of Local Project Committees in Dashoguz and Lebap regions and in addition. In addition, in case of designation of new PAs and ecological corridors, the Process Framework will be deployed, in an inclusive and participative manner, supported at local level by project experts and Local Advisory Committees/People Councils (Act. 2.1.1. and 2.2.2) . Transparency and access to information will empower stakeholders to accelerate transition towards accountable decision making processes and more sustainable livelihoods.
- c) The project ensures that all the stakeholders can communicate their concerns and have access to rights-compatible complaints redress processes and mechanisms. The project will ensure that in all interactions with stakeholders (consultations, meetings, web sites) information is available on how to access complaints processes. The Project's Stakeholder Engagement Plan will ensure the stakeholder's are engaged and informed about all activities. In addition to the UNDP Stakeholder Response Mechanism[2] which is embedded in all UNDP projects, this project will set up the project- level Grievance Redress mechanism(GRM) and will designate the Project Board/Local Project Coordination Committees, included in the Project Management Arrangements (please see Section VI project Document) as the project-GRM to ensure first of all that all the people and communities are informed of project-level grievance entry points and avoid/minimize risks of retaliation and reprisal against people who may seek information on project activities or express concerns and/or access project level grievances.
- d) The project will monitor environment and social risk management measures through effective and where possible, participatory engagement of the stakeholders. In addition, the LDN monitoring mechanism (Output 1.1.) will ensure adherence to the LDN principles (e.g. Human rights, Good governance, Participatory processes; Balanced economic, Social and Environmental Sustainability) further strengthening accountability.

Part B. Identifying and Managing Social and Environmental Risks

<p>QUESTION 2: What are the Potential Social and Environmental Risks?</p> <p>Note: Complete SESP Attachment 1 before responding to Question 2.</p>	<p>QUESTION 3: What is the level of significance of the potential social and environmental risks?</p> <p>Note: Respond to Questions 4 and 5 below before proceeding to Question 5</p>			<p>QUESTION 6: Describe the assessment and management measures for each risk rated Moderate, Substantial or High</p>
<p>Risk Description (broken down by event, cause, impact)</p>	<p>Impact and Likelihood (1-5)</p>	<p>Significance (Low, Moderate Substantial, High)</p>	<p>Comments (optional)</p>	<p>Description of assessment and management measures for risks rated as Moderate, Substantial or High</p>

<p>Risk 1. The modification of land use planning in the two targeted regions may lead to land use decisions that are failing to integrate the interests and concerns of the vulnerable people. This may lead to a short term limitation of access to natural resources. This could disproportionately disadvantage women and rural poor.</p> <p><i>SES Principle 2 Human Rights, P5</i></p> <p><i>SESP principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>SES Principle 3, Gender, P11</i></p> <p><i>Principle 5, Accountability, P13</i></p> <p><i>Principle 5, Accountability, P14</i></p> <p><i>Standard 5 Displacement; 5.2</i></p> <p><i>Standard 5 Displacement; 5.4</i></p>	<p>I = 3 L =2</p>	<p>Moderate</p>	<p>A key element of the project is the improvement of land governance in the country by implementing Land Degradation Neutrality, through LDN-centred land use planning. To this end, the project will identify and implement Land Degradation Neutrality (LDN) targets and actions to attain and monitor progress towards land degradation neutrality (under Output 1.1.) and will promote LDN-compatible sustainable land management (SLM) measures in the production zones (Output 2.1; 2.3)</p> <p>Land use planning in Turkmenistan is highly centralised and despite its efforts, the project could fail to consider all rural poor's concerns and land use decisions may lead to failure to fully consider the effects of the temporary restrictions in the use of land resources (e.g. temporary grazing limitations on degraded pastures).</p>	<p>The risks will be managed through the implementation of SESA and screening against LDN Check List; implementation of the Stakeholders Engagement Plan, Process Framework, Gender Action Plan and Grievance Redress Mechanism.</p> <p>The risk is partially mitigated by the project activities. One of the requirements for reaching and maintaining land degradation neutrality (LDN) and advancing land restoration and rehabilitation is the adherence to the LDN principles. Among the LDN principles underpinning the vision of LDN there are several principles that are highlighted below, which will be upheld. The project will hire qualified national and international land use and LDN experts to guide local authorities and the LDN land use planning activities to ensure the adherence to the LDN principles.</p> <p>The mere adherence to these principles and the screening against the LDN Checklist (per project Annex 26 LDN Checklist/ activity 1.1.3 and activity 1.1.4) should be able to provide the means to manage the risk of failing to appropriately take into consideration and mitigate the potential economic displacement resulting from LDN centered land use plans. LDN is anchored by several principles that are ensuring a human rights approach, balanced economic-social-environmental sustainability and participatory and inclusive mechanisms. These principles are key in mitigating risk and will be upheld.</p> <p>However, those plans will nonetheless be prepared following an appropriately scoped/scaled SESA approach (with a subsequent ESMF if determined necessary per the SESA for compliance with the SES and national law).</p> <p>The knowledge and information generated from the land degradation neutrality (LDN) target setting and subsequent implementation and monitoring LDN progress and reporting LDN benefits (Act 1.1.4) further enhances accountability and</p>
--	-----------------------	------------------------	---	--

<p>Risk 2: The modification of resource management regimes through the implementation of sustainable land management (SLM) measures (e.g. forests, pastures, agricultural lands) implemented in support of long-term sustainability could affect short-term access and use of resources by local communities, including the rural poor and women.</p> <p><i>SES Principle 2 Human Rights, P5</i></p> <p><i>SESP principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>SES Principle 3, Gender, P11</i></p> <p><i>Principle 5, Accountability, P13</i></p> <p><i>Principle 5, Accountability, P14</i></p> <p><i>Standard 5 Displacement; 5.2</i></p> <p><i>Standard 5 Displacement; 5.4</i></p>	<p>I = 3 L =2</p>	<p>Moderate</p>	<p>The project will be supporting improved management of agricultural lands, pasture resources, and sensitive ecosystems encompassing Key Biodiversity Areas, through the promotion of Sustainable Land Management (SLM) measures that in the medium and long term will lead to an increased land productivity and improved livelihoods. When modifying existing resource use and management regimes, there is always a possibility of some modification to the enjoyment of human rights or potential economic displacement of individuals living near or otherwise using territory included in the targeted area.</p> <p>The Risk is preventatively rated Moderate. However, UNDP has extensive experience working in Turkmenistan on similar types of interventions.</p>	<p>Targeted assessments of potential economic displacement will be carried out by qualified experts in a participatory manner with stakeholders during inception phase. The assessment will evaluate potential economic displacement impacts associated with the planned activities (as noted in the ESMF). Identification of timebound measures to avoid, reduce, mitigate and manage potential impact will be captured in an assessment report and revised SESP. If determined necessary by the targeted assessment, then a stand-alone management plan (i.e. Livelihood Action Plan) will be prepared to capture those management measures (please see ESMF Annex 30/Project Document).</p> <p>In addition, the SESA will cover the Pasture management plans (Output 1.4), Sustainable Water Management Plans (Output 1.3) and Sustainable LDN compatible Land use Plans (Output 1.1.) in order to evaluate the potential social and environmental effects of the project's upstream activity which impacts on resource management regime.</p> <p>The risks are not deemed to be significant due to the fact that the envisaged Sustainable Land Management(SLM) and resilient measures will be implemented on farm land, on farmer associations? areas where the land is already allocated on the basis of long-term leases and only based on their agreement to participate in the project activities. Therefore, issues such as customary rights or land tenure are unlikely to be triggered by the project. A participatory planning and decision-making process will ensure that any potential restrictions on the use of resources will not be imposed on the members, but defined through a collective decision-making process at the community level.</p> <p>Part of the Stakeholders Engagement Plan a project-level Grievance and Redress Mechanism (GRM) will be established and published so that all stakeholders, including remote communities are aware of its existence. The Project Manager and Local Field</p>
---	-----------------------	------------------------	---	---

<p>Risk 3: Expansion of PAs system could lead to potential limitations or restrictions of the use of natural resources.</p> <p>Strengthening management of existing PAs, such as improved PAs zoning, strengthening the sanctuaries? protection regimes, and/or creation of ecological corridors could further restrict access to and use of biodiversity resources by local communities, affecting livelihoods.</p> <p><i>SES Principle 2 Human Rights, P5</i></p> <p><i>SESP Principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>SES Principle 3, Gender, P11</i></p> <p><i>Principle 5, Accountability, P13</i></p> <p><i>Principle 5, Accountability, P14</i></p> <p><i>Standard 5 Displacement; 5.2</i></p> <p><i>Standard 5 Displacement; 5.4</i></p>	<p>I=3 L=3</p>	<p>Moderate</p>	<p>The project will design two new PAs under Output 2.2. (Act. 2.2.2) based on initial assessments during the PPG and a dialogue with the national authorities. The 40,000 ha Pytniak upland and surroundings and the 20,000 ha Zengibaba Lake have been selected for PA designation.</p> <p>Local communities in the project area could face economic displacement due to the expansion of the PAs system (new PA designation in Darganata and Ruhubelent districts). Certain land use activities would likely be prohibited or restricted as part of these processes.</p> <p>Together with the significant environmental benefits that come with the designation of new PAs and delineation of community endorsed ecological corridors, there are potential risks for example restrictions/limitations of the use of natural resources that may be at odd with the current agricultural practices of the local communities in project areas. There is a risk that not all key user groups of natural resources at project sites are consulted in project implementation and they will be affected by the restrictions on</p>	<p>The risk management measures will be implemented primarily through the Process Framework, Stakeholder Engagement Plan, Gender Action Plan and project level GRM.</p> <p>The project's qualified experts (specialised safeguards experts/consultancy company; conservation biologists, environmental economist, pasture and forest expert and community outreach officers), local coordinators, technical support staff and ministry counterparts will support the implementation of the Process Framework, in order to ensure the management of the economic displacement risk</p> <p>During the consultations, the project manager supported by the project's field coordinators and local community outreach will ensure that any potential risk of economic displacement in the affected communities, resulting from the designation of new PAs will be mitigated through the <i>Process Framework</i> (as per SES requirements, please see ESMF Annex 30). The Process Framework would include the following elements: (i) Assessments of the socio-economic conditions of the local communities, highlighting the type and extent of the community use (and use by men and women) of natural resources in the targeted areas, and the exiting rules and institutions for these and management of natural resources, including customary use rights; (ii) Assessment of threats and impacts on the relevant areas and local communities from various activities (e.g. poachers, traders, development activities) ; (iii) Assessment of the potential livelihoods impacts on men and women of new restrictions on the use of natural resource management in the proposed areas. (Please see Annex 16 Stakeholders Engagement Plan, including the Process Framework template).</p> <p>Facilitation of local round table meetings will be supported by the Local Advisory Committees (People Councils) in the respective districts/villages and by the daikhan associations managing the land. Evaluation of the necessity of compensatory mechanisms and eligibility criteria, describing the measures that will assist the potential affected persons to improve their livelihoods will be identified as the</p>
--	--------------------	------------------------	--	--

<p>Risk 4. Enforcement of PAs regime and of wildlife corridors, following applicable environmental norms and legislation could pose risks to conflicts between rangers and local communities engaged in traditional livelihoods and practices.</p> <p><i>SES Principle 2 Human Rights, P2</i> <i>SES Principle 2 Human Rights, P7</i></p>	<p>I=3 L=3</p>	<p>Moderate</p>	<p>Enforcement issues of the environmental regulations in the new PA may lead to conflicts between the rangers and the local community or among different local community members.</p> <p>When working in developing countries there exists a risk that the entity responsible for PA management (be it governmental authority or community organization) does not have the full capacity necessary to fulfill their duties in terms of governance, administration, and management of natural resources. The enforcement personnel need to be appropriately trained to implement legal enforcement and manage relationship with local residents.</p>	<p>The Management measures will be addressed through the Process Framework, Stakeholders Engagement Plan, Gender Action Plan and project level Grievance and Redress Mechanism.</p> <p>In addition, the project will ensure that management measures will be include in the new PAs management plans (Sanctuaries, IUCN IV) to be further embedded under in the corresponding larger State Reserves management Plans (i.e. Gaplangyr and Amudarya) , as these Sanctuaries will fall under the jurisdiction of one or the other of above-mentioned state nature reserves. The project?s qualified experts, including the Capacity Development experts, local coordinators, technical support staff and ministry counterparts will work with the Local Advisory Committees (People Councils) and facilitate the assessments, local dialogue and round table meetings that the process involves.</p> <p>In addition, the project will train PA personnel, border inspectors and central and local authorities with an emphasis on human rights principles (in line with the SES).</p>
			<p>Some of the trainings will target specifically community outreach related topics , and addressing illegal activities "<i>Interaction with local communities</i>" (<i>opportunities for engaging local population in biodiversity conservation, joint patrolling of territories, protection of key sites</i>)- Act. 2.1.3. A total number of 10 training workshops for the PAs staff; 3 trainings for central and local authorities and 2 trainings for border inspectors will be supported by the project.</p>	<p>Furthermore, the project will facilitate regular meetings between PA managers, ranger patrol staff, communities, inspectorates, border security in or in the proximity of the core areas to analyse trends in monitoring and legal compliance, aiming at addressing ongoing threats in a collaborative manner, including issues related to cross-border migration</p>

<p>Risk 5 Government resource management authorities may not have the capacity to fulfill all aspects of their mandate, and rural resource users may not have the capacity to claim their rights, which could potentially lead to the violation of human rights.</p> <p><i>SES Principle 2 Human Rights, P2</i> <i>SES Principle 2 Human Rights, P3</i></p>	<p>I = 3 L = 3</p>	<p>Moderate</p>	<p>There is a risk that institutional government duty-bearers related to the management of high value Aral basin ecosystems and land resources do not have the capacity to meet their obligations.</p> <p>In addition, by the same principle and rationale of the fact that the project will be working on natural resource management issues in rural and remote areas, there is a risk that resource users and other rights holders do not have the capacity to claim their rights. Such resource users living in rural and remote areas may not be fully educated and informed about what their rights are (in this case, in relation to usufruct or other natural resource-related rights), or the procedures to claim those rights. There is a risk that rights holders may not have the legal, self-organizing, or financial means to claim their rights. The risk is assessed based on situation and context that the project will be working in. The fact that there is limited capacity on both the part of the government and rights holders is an inherent element to working on sustainable livelihoods in developing countries.</p>	<p>Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The project will be working closely with all stakeholders to support government natural resource management authorities and institutions to meet their obligations, and with resource user rights holders to claim their rights.</p> <p>It is expected that the risks will be mitigated by the project's targeted trainings of the local and national decision makers as well as natural resource users on specific themes such as: LDN and no-net-loss approach and Integrated Land Use Planning (Act 1.1.1) ; Efficient water use and integrated water management planning (Act 1.3.1; 1.3.2) ; Sustainable pastures management (Act 1.4.1); Environmental legislation enforcement, PAs patrolling, Human rights (Act 2.1.3-2.1.5); Sustainable management of regional water resources/Water Diplomacy (Act 3.1.1-3.1.2); Strengthening Extension services (Act 3.1.1). The project implementation will include national and local stakeholders' consultation during the development of the training modules and other/different handouts and information materials that will be used during the training seminars and some of them will be based on Training Needs Assessments. The training seminars will include evaluation forms and training formats will be flexible to adapt to participants needs.</p> <p>Multiple stakeholder consultation sessions during all relevant aspects of the project will ensure that all parties are aware of and understand the relevant obligations and rights.</p> <p>As with the previous risks, the project will be working closely with all stakeholders to support government natural resource management authorities and institutions to meet their obligations, and with resource user rights holders to claim their rights. This will be accomplished through multiple stakeholder consultation sessions during all relevant aspects of the project to ensure that all parties are aware of and understand the relevant obligations and rights.</p>
--	------------------------	------------------------	--	--

Risk 6: Project activities intended to reduce threats to critical habitats and environmentally sensitive areas could potentially end up harming them

SES Standard 1 Biodiversity and NRM, 1.1

SES Standard 1 Biodiversity and NRM, 1.2

SES Standard 1 Biodiversity and NRM, 1.7

Standard 8; 8.2

I = 3
L = 3

Moderate

The project specifically targets the conservation and sustainable management of critical habitats, environmentally sensitive areas, and legally protected areas in the high value ecosystems of Turkmenistan's Lower Amu Darya basin. The conservation, protection, and sustainable use of these areas is the objective of the project. Therefore, the likelihood of these risks is moderately likely. However, given that the objective of the project is to enhance the environmental and social qualities of these areas, the risk of negative social and environmental impacts is considered limited in scale and manageable through applicable standard practices. Although the social and environmental risks are considered moderate, limited in scale and with the likelihood of being reasonably managed, and the sites are at sufficient distance from the protected areas, there will be nevertheless minor changes to the farm landscape, existing flora and fauna species at the construction sites and local settlements such as minor changes in land cover and potential damage to the vegetation type; temporary disturbance of rodent burrows or bird nests may be possible.

Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The ESMF further identifies the steps for detailed screening and assessment of the risks, potentially related to the undefined activities and for preparing and approving the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing these potential adverse impacts. The project will conduct targeted impact assessment at sites for activities that are not fully defined.

The qualified project's conservation biologists/landscape biologists will work with the safeguards experts/company to properly identify risks and proposed mitigation options for both upstream and downstream activities.

During the project inception the exact location of the sites selected at PPG stage with the representatives of the Daikhan Associations, will be clarified, and aligned with the restructuring process of the Daikhan Farms that was ongoing during the PPG phase. Therefore new screening and assessments of each proposed activities and demonstration site will be implemented prior to the implementation of activities to ensure that any impacts are identified, significance established and management measures selected.

Based on the screening of the potential risks during PPG assessments, several management measures have been included in the project design, (e.g. Output 1.3 Act 1.3.3 and Output 1.2/Act 1.2.2). The project will select several areas in order to demonstrate sustainable agricultural practices around Protected Areas (PAs) or Key Biodiversity Areas (outside PAs). These demonstrative activities will be agreed with the local authorities, respective land managers (lessees) and project specialists. The project design includes activities with no or minimal risk to the critical or sensitive habitats.

The technologies envisaged to be implemented by the project have been previously tested by various donor supported initiatives including UNDP:

<p>Risk 7: The project activities re-planting native tree species could have unforeseen ecological consequences.</p> <p>Standard 1 Biodiversity and NRM, 1.8</p>	<p>I = 2 L = 2</p>	<p>Low</p>	<p>The planned project activities include small amounts of reforestation. Output 1.2 includes reforestation of high value arid saxaul forest ecosystems. The assisted regeneration of a small portion of tugai forest ecosystem will be further supported by the project. The project team will work with the partner local forestry services and qualified project experts to ensure ecologically appropriate locations for planting trees, and will use native species (this is the purpose of the activity). The relatively small area of tree planting means that any ecological impact will be with a limited impact in case of a potential adverse effect. The overall environmental impact ? considering the benefits of the planted trees ? is expected to be positive. The purpose of the activity is to restore areas of forest that have been degraded.</p>	<p>No measures needed as the risk is low.</p>
---	------------------------	-------------------	--	---

<p>Risk 8: The expected project impacts of the conservation of endangered and threatened species, restoration of degraded land, and sustainable management of forest and pasture resources could be sensitive to changing climatic conditions in the future.</p> <p><i>SES Standard 2 Climate Change Vulnerability, 2.2</i></p> <p><i>SES Standard 2 Climate Change Vulnerability, 2.4</i></p>	<p>I=3 L=2</p>	<p>Moderate</p>	<p>Adverse impacts of extreme climatic events (drought; sand and windstorms; seasonal floods) can affect project's interventions in the field and the livelihoods of local communities living in the target areas.</p>	<p>Based on the SES screening the risk has been revised at PPG stage and rated Moderate. The management measures will be implemented through the project's envisage climate risk assessments and through activities that will demonstrate and put in place sustainable land management measures grounded by scientific principles and participatory mechanisms that will enable stakeholders to adapt the management of natural resources to any given context and threats. Attention to the current and potential impacts of climate change has been built-in to all aspects of the project.</p> <p>The project team will work with qualified experts and will conduct climate-risk assessment (Act. 1.3.1) to identify the most appropriate mitigation measures. In fact, several multi-disciplinary land and water resources assessments including climate risk assessments, the results of which will inform LDN compliant integrated land use plans and rationalised water management practices in the targeted districts.</p> <p>The climate risks and vulnerability assessments for the water sector includes hydroclimate projections under different climate change scenarios to inform integrated water management planning in the targeted districts. The prioritised climate risks will be followed by the validation of appropriate combination of SLM measures that will address these risks and will consider unique risks posed to vulnerable groups including women. Furthermore, the project adheres to LDN Principles and will screen the activities against the LDN Checklist. The ecosystem management benefits will be mostly associated with the resilience of land and water management resources, sustainable management regimes and rationalised and efficient use of water resources for improved management of land and forests</p> <p>The project will further ensure that the partners and stakeholders will apply the best available climate change forecasts data for Turkmenistan's lower Amu Darya basin, and will ensure that all project activities and plans take potential future climate impacts into consideration. For</p>
---	--------------------	------------------------	--	---

<p>Risk 9: Project activities involving local/field interventions and close engagement with local communities may inadvertently contribute to the spread of COVID-19.</p> <p>Standard 3 Community Health, Safety and Security, 3.4</p>	<p>I=3 L=3</p>	<p>Moderate</p>	<p>Activities at local level are based on participatory approaches, and most of the times will include meetings and local consultations. There are a number of training workshops and awareness events, round table meetings etc.</p>	<p>The risk will be mitigated through adequate safeguards such as: (i) clear procedures in place in case of COVID19 reinstatement of restrictions, approved during project inception (ii) use of protective equipment, maintaining social distancing and using remote methods of engagement whenever possible (iii) if adequate safeguards cannot be put in place, activities that entail close local communities engagement will be put on hold if necessary, and work programme/budget will be revised as needed. wherever possible on-line meeting platforms will be used and travel decreased. All project meetings will be organized mindful of government regulations and healthy standards and other appropriate safeguards (including those of UNDSS).</p>
---	--------------------	------------------------	---	--

<p>Risk 10: The project may inadvertently contribute to potential perpetuation of discriminations against women. There are lingering disparities between men and women, particularly in rural areas and in the patriarchal cultures of some of the ethnic minority communities, which could be inadvertently replicated.</p> <p>-</p> <p><i>SES Principle 3, Gender, P10</i></p>	<p>I=2 L=3</p>	<p>Moderate</p>	<p>The Project could potentially perpetuate discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities. In the pilot farmers associations and livestock farming sector, women account for around 51-52% of the population. They are mainly engaged in housekeeping, teaching, and administrative support services. Many more women form part of the unpaid family labor in home farming and lease of agricultural lands.</p>	<p>The management of this risk will be done primarily through the implementation of the Gender Action Plan (GAP) and will be monitored by the project specialized experts. The project design has consistently mainstreamed gender sensitive approaches and has created opportunities for tackling women's needs, ranging from designing tailored training activities to organizing dedicated segments of radio programmes for women farmers. The project will provide ample opportunities for women to learn about LDN and SLM measures and resilient livelihoods and integrate best practices into their farm practices. Through the training programs and Farmer Field Schools, women will also be able to access the capacity building and training required to practice climate-resilient agriculture, as well as to diversify their livelihoods in more resilient ways. The project will ensure gender balance in project activities (e.g. seminars, community level events) including in the membership of different decision-making bodies (Working groups; Project Boards; People Councils; Evaluation Committees) including access to project financial assistance (grant scheme). Gender considerations will inform any community level vulnerability analysis linked to local infrastructure or demonstration plot development through consultation regarding needs and preferences on types of training and investment. The project will also gather gender-disaggregated data for evaluation purposes and use gender sensitive indicators (particularly around beneficiaries) to facilitate planning, implementation and monitoring. Complaints will be addressed through the project level Grievance redress mechanism.</p>
---	--------------------	------------------------	---	---

<p>Risk 11 The project may fail to ensure that labor rights, especially of vulnerable groups, are respected by local subcontractors. There could be risk of forced child labor at project sites.</p> <p><i>SES Standard 7; 7.1</i></p> <p><i>SES Standard 7; 7.3</i></p>	<p>I=2 L=3</p>	<p>Moderate</p>	<p>Turkmenistan ratified all ILO main conventions. The information on the ILO website with regard to application of labor standards in Turkmenistan reveal no major observations and issues. There are however independent media streams revealing that forced labor is still practiced^[3].</p>	<p>The Risk is rated Moderate. The project will ensure that national working standards (Labor Code) are respected for all the project activities</p> <p>The requirements of this Standard are to be applied in an appropriately-scaled manner based on the nature and scale of the project, its specific activities, the project's associated social and environmental risks and impacts, and the type of contractual relationships with project workers.</p> <p>The management procedures will be that specific requirements of the terms and conditions of the employment will be established, that will:</p> <ul style="list-style-type: none"> - Comply with minimum age requirements set out in International Labour Organization (ILO) Conventions or national legislation (whichever offers the greatest protection to young people under the age of 18) and keep records of the dates of birth of all employees verified by official documentation - Check the activities carried out by young workers and ensure that children under 18 are not employed in hazardous work, including in contractor workforces. Hazardous work will normally be defined in national legislation and will be likely to include most tasks in construction and several in agriculture. - Assess the safety risks relating to any work by children under 18 and carry out regular monitoring of their health, working conditions and hours of work - Ensure that any workers aged 13-15 are only doing light work outside school hours, in accordance with national legislation, or working in a government-approved training programme - Ensure that contractors have adequate systems in
---	--------------------	------------------------	--	---

<p>Risk 12 There is a risk that the choice of irrigation technology may lead to an increase in the use of surface water.</p> <p><i>SES Standard 8; 8.6,</i></p> <p><i>SES Standard 1; 1.11</i></p>	<p>I=3</p> <p>L=3</p>	<p>Moderate</p>	<p>The project's work under Output 1.3. will result in approximately 100,000 ha of irrigated land under sustainable water management. Under this output the project will demonstrate small scale local farm level repairs and improvement of irrigation systems (e.g. pumps; canals). The plans are expected to be funded and implemented by the government; therefore the impact is considered Moderate. Although the water management planning will indicate the technology to be used in order to reduce water wastage and improved resource efficiency, there is the risk that the choice of water irrigation technology would lead to increase water consumption.</p>	<p>This risk will be managed through SESA/ESMF (as needed) In addition, the project's deployment of qualified specialists (hydrologists, engineers) will ensure that the development of the Sustainable Water Use Plans (Act. 1.3.1) and will entail guidelines and specifications for the most efficient irrigation technology and cost effectiveness deliberations are included in the cost benefit analysis. In addition the Sustainable Water Use Plans will include a Monitoring mechanism to be implemented by local authorities and daikhan farms in order to monitor water use trends. With regard to the demonstration activities at sites (Act. 1.3.3.) the project's specialists will ensure that the appropriate technology is used, improvement works are designed and implemented in an appropriate manner and resource efficiency is considered. UNDP has accumulated solid experience in successful demonstration and promotion of water and energy efficient practices, which will be used through this project. The irrigation technologies that UNDP promotes are efficient in terms of rational water use and leave minimal or no drainage waters. Furthermore, more innovative and emission and waste-free options are rigorously being investigated now within the ongoing projects, such as solar-powered water pumping and treatment facilities to satisfy both household and agricultural needs, primarily in remote desert areas, where traditionally diesel is used for similar purposes. Thus, resource efficiency will become the backbone for defining and implementing technologies and equipment at the project's proposed sites, each of which will have a dedicated action plan and a cost-estimate.</p>
<p>The design of demonstration projects featuring new water saving technologies will be based on careful hydrological studies in the chosen locations , that follow SES requirements and includes targeted screening at site (as necessary), and that would take into account the hydrographic parameters of the landscape, available water sources, their quantity and quality. Experienced local experts, drawing on international expertise as necessary, will carry out these engineering and hydrological studies. Irrigation technologies will</p>				

<p>Risk 13 The project's small scale, on-the-ground works may pose safety risks to community members.</p> <p>SES Standard 3; 3.3; 3.6</p>	<p>I=3 L=2</p>	<p>Moderate</p>	<p>Project activities that entail possible public health concerns are not envisaged, quite the contrary, the project will contribute to enhancing public health, as it seeks to improve the social and economic environment as well as the physical environment. All the works envisaged at project sites are at the lowest level of the irrigation system (i.e. at the level of farm canals/pumps/wells) but some risks of ground work infrastructure malfunction that could pose some safety risks may exist (e.g. repairs of wells) or minor disturbance of top soil where slipping or other small safety hazards are not excluded.</p>	<p>The risk is managed through the targeted assessments at site. Targeted assessments are envisaged for all the project activities and restoration works, including specific impact assessment at sites for other activities that are not fully defined.</p> <p>The project will primarily focus on restoring degraded and saline lands and support small repair of on-farm irrigation system. The contractors will ensure that structural elements and services (e.g. transportation) are designed, constructed, operated and decommissioned in accordance with the legal requirements and good international practice. Structural elements of any infrastructure that may pose significant health and/or safety analysis will be constructed by qualified engineers and professionals and include appropriate measures for supervision, quality assurance, operation and maintenance. The project's specialists including the safeguards expert will ensure that actions are taken to avoid or minimize any potential safety risks. The safety specialists appointed by the construction company will ensure compliance with applicable safety rules during the repair works. Appropriate signage and delineation of the works area on the ground will be ensured and temporary used access point should be as close as possible to the project site in order to produce a minimum disturbance on the surrounding environment. Health and Safety Plans will be implemented by sub-contractors for all construction activities according to the applicable legislation. Regular monitoring will be conducted for compliance with national construction norms and standards.</p>
--	--------------------	------------------------	--	--

<p>Risk 14 The project supported demonstration activities may inadvertently be implemented at/in proximity of significant cultural and historical significance sites.</p> <p><i>SES Standard 4; 4.1; 4.2</i></p>	<p>I=3 L=3</p>	<p>Moderate</p>	<p>The project sites for outputs 1.3; 1.4 have been carefully selected during the PPG based on several criteria chiefly among which is the land condition and water irrigation system and proximity to PAs. The demonstration areas are located on daikhan farm estate and have been already used for decades for agriculture and animal husbandry. The selected sites are located around PAs. There is very low risk that these sites or other demonstration sites that could be further selected (for output 1.2), be overlapping with cultural and/or historically significant sites.</p> <p>Turkmenistan has three sites under the List of World Heritage Sites. In the project targeted regions, there is only one site included in the World Heritage List namely the Soltan Tekesh Mausoleum, situated in Dashoguz province in Konye-Urgench city, located on the south side of Amudarya River. All the project's demonstration sites are located in the PAs surrounding geographies and although Dashoguz is one of the targeted project's region, none of the demonstration activities come near this site. However, there may be other culturally significant sites that the project</p>	<p>The mitigation of this risk will be done through the Process Framework, Stakeholder Engagement Plan and SESA/ESMF. The presence of the sites of cultural or historical significance will be re-assessed during the land use planning activities under Output 1.1.. Moreover, during the inception stage, the comprehensive stakeholders consultations will validate the sites selected at PPG stage. Where potential adverse impact is detected and if deemed significant, then a Cultural Heritage Management Plan should be developed, part of the ESMP. The project will ensure that <i>chance find</i> procedures are included in all plan and contracts regarding project-related constructions, including excavations, movement of earth or other changes to the physical environment, and that these procedures will include notification of relevant authorities. The mitigation of any potential risk will involve consultation with local authorities and stakeholders.</p>
---	--------------------	------------------------	--	--

<p>Risk 15 There is a risk that the marginalized and vulnerable groups/ farmers cannot access agricultural extension services strengthened by the project's activities and/or are excluded from benefiting from access to technical knowledge</p> <p><i>SES Principle 2 Human Rights, P3</i></p> <p><i>SES Principle 2 Human Rights P5</i></p> <p><i>SESP Principle 2 Human Rights, P6</i></p> <p><i>SES Principle 3, Gender, P10</i></p> <p><i>Principle 5, Accountability, P14</i></p>	<p>I=3</p> <p>L=3</p>	<p>Moderate</p>	<p>The project beneficiaries are small and medium size private farmers and farming enterprises. One of the project's activity is aimed at making agricultural extension services and resilience advice more accessible to farmers (Act 3.2.1). There is a risk that marginalized and vulnerable groups cannot access extension services or are excluded from the direct project support through Outputs 3.2 and 3.3. This risk is preventatively assessed moderate as access to knowledge within the framework of this project that promotes new innovative practices is deemed essential to achieving the intended outcomes and there is a risk that the vulnerable communities representatives, may not even hear about or be informed about the existence of these services and/or not be able to access due to remoteness of their location.</p>	<p>The risk management and mitigation measures are included in the project design.</p> <p>(i) For example the project includes partnerships with other initiatives (e.g. Adaptation Fund Project) and cooperation with the Union of Industrialists and Entrepreneurs, in order to strengthen extension service providers (Act 3.1.2). The AF Project builds on the process of vulnerability screening for better targeting the agricultural extension service providers while using technology such as mobile extension services, and as such, expanding the network of accessible demonstration plots for climate resilient technologies and on-farm consultations.</p> <p>(ii) In addition, this GEF project will implement ample awareness raising activities (Act 3.1.2) in order to reach out to all farmers and especially those located in remote areas and will strengthen the government's extension services in the targeted regions.</p> <p>(iii) The project's support envisages targeted radio programmes for farmers, including a dedicated segment for women farmers. These tailored radio programmes will test the opportunity and feasibility of setting up radio extension services to reach out to remote locations, and will include targeted programmes, designed based on farmers' needs. The project will work with a PR media company in order to implement these activities. The TORs for this assignment will include specific tasks to mitigate these risks i.e. carry out research and consultations with the representatives of vulnerable groups or remote communities in order to reflect their needs in the design of the awareness campaign and bespoke radio extension services.</p>
---	-----------------------	------------------------	--	--

QUESTION 4: What is the overall project risk categorization?

	Low Risk	?		
	Moderate Risk	x		
	Substantial Risk	?		
	High Risk	?		
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are triggered? (check all that apply)				
Question only required for Moderate, Substantial and High Risk projects				
	<u>Is assessment required?</u> <u>(check if ?yes?)</u>	x		Status? (completed, planned)
	if yes, indicate overall type and status		X	Targeted assessment(s) Completed during PPG: gender analysis, stakeholder analysis Planned during implementation : as needed per screening procedures in ESMF
			?	ESIA (Environmental and Social Impact Assessment)
			x	SESA (Strategic Environmental and Social Assessment) Planned during implementation
	Are management plans required? (check if ?yes)	X		

If yes, indicate overall type		X	Targeted management plans (e.g. Gender Action Plan, Emergency Response Plan, Waste Management Plan, others)	Completed during PPG: Gender Action Plan, Stakeholder Engagement Plan Planned during implementation : Process Framework, Livelihood Action Plan (if needed) and others based on further screening
		?	ESMP (Environmental and Social Management Plan which may include range of targeted plans)	
		x	ESMF (Environmental and Social Management Framework)	Completed during PPG An ESMF will follow the SESA (during implementation) as needed.
Based on identified <u>risks</u> , which Principles/Project-level Standards triggered?		Comments (not required)		
Overarching Principle: Leave No One Behind				
Human Rights	X			
Gender Equality and Women's Empowerment	X			

Accountability	X	
1. Biodiversity Conservation and Sustainable Natural Resource Management	X	
2. Climate Change and Disaster Risks	X	
3. Community Health, Safety and Security	X	
4. Cultural Heritage	X	
5. Displacement and Resettlement	X	
6. Indigenous Peoples	?	
7. Labour and Working Conditions	X	
8. Pollution Prevention and Resource Efficiency	X	

[1] The aspects of inequality in access to socio-economic benefits and services identified in the framework of the gender analysis are addressed in the Gender Action Plan through a set of measures to increase the employment of the local population, including women, and develop alternative sources of income; through the opportunity to participate in grant programs and implement their business and social/environmental projects on their basis.

[2] <https://www.undp.org/accountability/audit/secu-srm>

[3] <https://www.solidaritycenter.org/children-forced-labor-turkmenistan-cotton-fields/>

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Part B of the Annex 5_ UNDP SESP	CEO Endorsement ESS	
Annex 30 _ESMF Environmental and Social Management Framework	CEO Endorsement ESS	
Annex 5_ UNDP Social and Environmental Screening Procedure_ SESP_ Turkmenistan	CEO Endorsement ESS	

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

Project Results Framework

<p>This project will contribute to the following Sustainable Development Goal (s): Goal 1 ? End poverty in all its forms everywhere; Goal 5 ? Achieve gender equality and empower all women and girls; Goal 6 ? Ensure access to water and sanitation for all; Goal 8 ? Decent work and economic growth; and Goal 15 ? Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.</p>					
<p>This project will contribute to the following national programmes: (i) National Programme for Socio-economic Development of Turkmenistan (2011-2030); (ii) Programme of the President of Turkmenistan for the Socio-economic Development of Turkmenistan 2019-2025; (iii) Programme for the development of the Agricultural Complex of Turkmenistan 2019-2025</p>					
<p>This project will contribute to UNDP Global Strategic Plan Outcome 1: Growth is inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded</p>					
<p>This project will be linked to the UN Sustainable Development Cooperation Framework 2021-2025 (signed on 14 March 2020) Priority 2: Inclusive, green and sustainable economic growth, Outcome 3: ?By 2025, there is effective design and implementation of disaster risk reduction and climate adaptation and mitigation measures, enabling a more rational use of resources, increased resilience and a green economy transition?</p>					
	Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verifications Assumptions

<p>Project Objective:</p> <p>To promote land degradation neutrality, restore and improve the use of land and water resources in Turkmenistan's Amu Darya watershed to enhance the sustainability and resilience of livelihoods and globally significant ecosystems.</p>	<p>Indicator 1 (GEF 7 Core Indicator 1)</p> <p>Terrestrial protected areas created or under improved management for conservation and sustainable use (ha) (sum of Indicator 19 and Indicator 20 below)</p>	<p>0 ha</p>	<p>Flora and fauna Inventories and habitat mapping necessary for the preparatory work completed</p>	<p>1,137,554 ha[1]</p>	<p>Means for verification:</p> <p>Project technical reports, METT scorecards validated by the project final evaluation. Ministry of Agriculture and Environmental Protection (MAEP) official data. GIS analysis and data generated by the project.</p> <p>Assumptions:</p> <p>Interest from the central government, private sectors and farmers in biodiversity conservation; No major negative impacts on the availability of the state budget for the protection and management of new and existing PAs.</p>
--	---	-------------	---	------------------------	--

	<p><u>Indicator 2</u> (GEF 7 Core Indicator 4) Area of landscapes under improved practices (hectares, excluding PAs) (sum of Indicators 11; Indicator 12 and 50% of Indicator 26 below)</p>	0	Baseline methodologies agreed. Expert mapping necessary for the preparatory work completed	746,303 ha[2]	<p>Means of verification: Project midterm and final evaluation report; MAEP official data; GIS supported analysis and expert mapping; Local level official statistics (district and province data). Project reports and documentation, e.g. annual reporting in PIR; Written agreements with Daikhan associations/daikhan farms and local authorities, including monitoring scheme; Successful completion of project activities for relevant project components, as verified by the MTR and TE.</p> <p>Assumptions: Environmental/climate variability within normal range. Uptake of SLM practices and integrated land use planning. Existing interest from local communities to participate in project activities.</p>
--	--	---	--	---------------	---

	<p>Indicator 3 (GEF 7 Core Indicator 11) Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment (#):</p> <p># of <u>public sector employees</u> with improved capacity for LDN, SLM, integrated land use</p> <p># of <u>local resource users and agricultural producers</u> with improved awareness and technical knowledge on LDN, SLM and sustainable water use, alternative livelihoods, benefiting from the project activities</p> <p># of <u>Grants Micro-scheme beneficiaries</u></p> <p># of <u>PAs staff/environment officials</u> with enhanced individual capacity in biodiversity conservation and sustainable management, legal enforcement and patrolling.</p>	<p>N/A (zero beneficiaries)</p>	<p>Midterm target Total:</p> <p>Total: 4,150 (1,245 women and 2,905 men)</p> <p><u>Public sector employee:</u> 50 public sector staff at national and local level of which at least 30% women (15 women and 35 men)</p> <p><u>Local resource users and agricultural producers:</u> Total 4,000 (1,200 women and 2,800 men)</p> <p><u>Grants Micro-scheme beneficiaries:</u></p> <p>N/A (too early for accrued benefits)</p> <p><u>PA staff/environment officials:</u></p> <p>100 PA staff with enhanced capacity (30 women and 70 men)</p>	<p>EoP target Total: 10,150 (3,045 women and 7,105 men)</p> <p><u>Public sector employee:</u> 100 public sector staff at national and local level of which at least 30% women (30 women; 70 men)</p> <p><u>Local resource users and agricultural producers:</u> Total 9,750 (2,925 women; 6,825 men)</p> <p><u>Grants Micro-scheme beneficiaries</u></p> <p>100 (30 women; 70 men)</p> <p><u>PA staff/environment officials</u> 200 PA staff with enhanced capacity (60 women and 140 men)</p>	<p>Means of verification: Project reports validated by GEF Midterm and Terminal evaluation.</p> <p>Official records of the public events; Official national and local authorities directly participating in/benefiting from the project activities; Farmer and household surveys; Interviews with key stakeholders; records of radio/TV talk shows publicly available; other KM products publicly available.</p> <p>Assumptions: Local resource users and government officials of key project partners actively involved in project activities.</p>
--	--	----------------------------------	--	---	---

	Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verifications and Assumptions
<p>Component 1:</p> <p>Promoting Land Degradation Neutrality</p> <p>Outcome 1: Land degradation neutrality in Aral basin promoted, as evidenced through: - LDN-compatible land use in 760,000 ha of production landscape. - crop</p>	<p><u>Indicator 4:</u> Existence of baseline values for LDN indicators at national and region/province scale</p>	N/A	LDN working groups set-up (30% women) and LDN baseline collection methodologies elaborated	<p>? Baseline assessment for LDN indicators at national level</p> <p>? Baseline assessment for LDN indicators at province level in Dashoguz and Lebap provinces</p>	<p>Means of verification: Province and national level data on LDN baseline; interviews with stakeholders; GIS analysis of targeted project intervention areas; MTR and final evaluation reports.</p> <p>Assumptions: Partnerships between UNCCD and Gov of Turkmenistan for LDN National Target Setting; Land degradation issues high among local/regional priorities;</p>

<p>resilience to salinization improved in 10,000 ha - 50,000 ha of degraded pasture and forest land restored. - improved livelihoods of 9700 farmers (30% women) directly, with immediate replication potential for 46,800 people.</p>	<p><u>Indicator 5:</u> Prioritized policies and regulations to facilitate LDN implementation</p>	<p>Incomplete framework to enable LDN implementation</p>	<p>Policy and regulatory amendments developed and submitted to the Ministry of Agriculture and Environment Protection for approval</p>	<p>- National Action Plan to Combat Desertification showcasing Dashoguz and Lebap LDN regional target setting, approved and under implementation. -Bylaws (gender sensitive) developed under the Law on Pastures to include regulations for sustainable pasture use and monitoring submitted for approval. - Amendments to the Land Code introducing LDN concept and regulations for the counterbalancing mechanism submitted for approval.</p>	<p>Means of verification: MAEP official data; UNCCD reports</p> <p>Assumptions: Partnerships between UNCCD and Gov of Turkmenistan for LDN National Target Setting; Land degradation high among local/regional priorities;</p>
--	---	--	--	---	--

	<p>Indicator 6: Status of integrated land use planning in Aral Sea Basin landscape</p>	<p>No integrated land use planning</p>	<p>Integrated land use planning working group under the chairmanship of the State Land Management Service under the Ministry of Agriculture and Environment Protection (MAEP) set up</p> <p>Criteria and methodologies defined for : mapping of degraded lands in targeted provinces, identification of priority land and forest restoration zones and identification of buffer areas around PAs, KBAs/IBAs</p>	<p>4</p> <p>Integrated land use plans completed, adopted and under implementation for 4 targeted districts in Dashoguz and Lebap provinces</p>	<p>Means of verification: Existing official information at province level and land use plans under implementation; Interviews with stakeholders and province (region) authorities; MTR and final evaluation reports;</p> <p>Assumptions: Land degradation high among local/regional priorities; existing awareness and acknowledgment on the importance of LDN compliant integrated land use planning; existing interest from the national and province level authorities (kyakimlik) to implement integrated land use planning.</p>
--	---	--	---	--	--

	<p>Indicator 7: # of landscapes or jurisdictions with LDN regional voluntary targets, action plans and monitoring systems in place</p>	<p>0</p>	<p>Criteria and methodologies established for regional LDN target setting in the targeted provinces</p>	<p>2 (LDN regional targets set in Lebap and Dashoguz provinces</p>	<p>Means of verification: UNCCD reports; LDN National Monitoring and Action Plan reports on LDN regional target in Dashoguz and Lebap provinces; National Project reports and results validated by final evaluation; Assumptions: Interest from the national and regional government, private sectors and farmers in achieving land degradation neutrality through a combination of Sustainable Land Management (SLM) measures</p>
--	--	----------	---	---	--

	<p><u>Indicator 8 (GEF Core indicator 3.Sub-indicator 3.1)</u> Area (ha) of degraded arable land restored for improved ecosystem services</p>	<p>0 ha</p> <p>Baseline to be determined at inception.</p>	<p>Baseline and methodologies developed.</p>	<p>4,700 ha</p>	<p>Means of verification: Field/plot surveys and verification of field monitoring fiches, validated by project terminal evaluations. Project reports; GIS analysis of targeted project intervention areas.</p> <p>Assumptions: There is interest among farmers (dekhans farms), forestry enterprises and pasture associations and local authorities to apply SLM measures and forest regeneration in the production zones</p>
--	---	--	--	-----------------	---

	<p><u>Indicator 9 (GEF Core indicator 3/Sub-indicator 3.2)</u> : Area (ha) of forest restored for improved ecosystem services.</p>	<p>0 ha</p> <p>Baseline to be determined at inception.</p>	<p>Baseline and methodologies developed.</p>	<p>5,300 ha</p> <p>(5,000 ha under management planning to restore degraded saxaul ecosystem</p> <p>300 ha of tugai forest restored)</p>	<p>Means of verification: Field reports/field verification reports validated by Project terminal evaluation report; Approved forest management plans included in the local forestry enterprises/ local authorities plans. Assumptions: Environmental/climate variability within normal range. Increased uptake of SLM practices and integrated land use planning; Existing interest from local communities to participate in project activities.</p>
--	---	--	--	---	--

	<p><u>Indicator 10 (GEF Core indicator 3/Sub-indicator 3.3):</u> Area (ha) of land where degradation is reduced and pasture habitats restored as a result of phyto-reclamation evidenced by:</p> <p>? Shrub and semi-shrub vegetation cover</p> <p>? Success of pasture establishment</p> <p>? Use of distant pasture</p> <p>-</p>	<p>0 ha</p> <p>Baseline:</p> <p>? Clay deserts without shrub vegetation</p> <p>? Sandy pastures subject to deflation</p> <p>? Distant pastures not in use</p> <p>(Baseline to be established/refined at the inception stage)</p>	<p>Baseline and methodologies developed.</p>	<p>50,000 ha</p> <p>? 50% vegetation cover increase observed on clay desert pastures (stable plant communities of black saxaul <i>Haloxylon aphyllum</i> and chogon <i>Aellenia subaphylla</i> formed on formerly bare takyr soil)</p> <p>? 50% increase of vegetation cover observed on sandy pastures (proportion: 30% shrubs-60% semi shrubs-10% herbaceous vegetation)</p> <p>? At least 30% of sown plants in generative growth stage by end project</p> <p>? 50% increase of distant pastures in use</p>	<p>Means of verification:</p> <p>Field reports/field verification of pasture monitoring schemes validated by project terminal evaluation; Pasture management plans for the restoration of degraded pasture areas (under implementation).</p> <p>Assumptions:</p> <p>There is interest among farmers (daikhan association), private enterprises, farmers associations and local authorities to apply SLM measures and sustainable pasture management and use of distant pastures; there is available co-financing for the rehabilitation of water infrastructure (pasture water wells).</p>
--	--	--	--	--	--

	<p><u>Indicator 11 (GEF Core Indicator 4 Sub-indicator 4.1):</u> Area (ha) of sustainable pastureland regimes in production zones and buffer areas</p>	<p>0 ha</p> <p>Baseline to be determined at inception.</p>	<p>Baseline and methodologies developed.</p>	<p>500,000 ha under sustainable use, linked to government investment plans</p>	<p>Means of verification: Official data from the province authorities; Field reports/field verification of pasture management plans and monitoring; expert mapping and georeferenced data validated by project GEF terminal evaluation;</p> <p>Assumptions: There is increased awareness and interest among farmers (daikhan association), private enterprises, farmers associations and local authorities to apply SLM measures</p>
--	--	--	--	--	--

	<p><u>Indicator 12 (GEF Indicator 4 Sub-indicator 4.3):</u> Area (ha) of irrigated arable land under efficient water management</p>	<p>0 ha</p> <p>Baseline to be determined at inception.</p>	<p>Detailed methodology and approaches for updating water management information in support of an improved water and crops management</p>	<p>100,000 ha under sustainable management, linked to government investment plans</p> <p><i>(Efficient water management plans on 100,000 ha of irrigated areas in 4 targeted districts; It covers sustainable water management planning on 90,000 ha irrigated areas and crop resilience plans demonstrated for 10,000 ha, linked to government investment plans)</i></p>	<p>Means of verification: Project technical field monitoring reports. Ministry of Agriculture and Environmental Protection ameliorative expeditions data. Field monitoring. Midterm and Final GEF evaluation project reports.</p> <p>Assumptions: Government has a keen interest to rationalize water use among different economic sectors. There is sufficient awareness of the local water users (and farmers associations) on the water saving needs</p>
	<p><u>Indicator 13.</u> Number of Water Users Groups in the 4 pilot districts capacitated to apply water saving irrigation technologies</p>	<p>0</p>	<p>2</p>	<p>4 Water Users Groups</p>	<p>Means of verification: Records of the local water production departments in targeted districts. Midterm and Final GEF evaluation project reports.</p> <p>Assumptions: Local water users are willing and interested to participate in project activities.</p>

	<p><u>Indicator 14.</u> Area (ha) of irrigated crops with increased resilience to salinization, as evidenced by:</p> <p>? Percentage of soil salinity reduction</p> <p>? Percentage of water wastage at farm level</p> <p>? Soil productivity measured by humus content</p>	<p>0 ha</p> <p>Salinity baseline:</p> <p>? 0.03- 0.10 (low salinity) on 5,000 ha</p> <p>? 0.10-0.30 (moderate salinity) 3,000 ha</p> <p>? 0.3-0.6 (strong salinity) on 2,000 ha</p> <p>Water wastage baseline:</p> <p>? m3 water losses/baseline to be set at project inception</p> <p>Soil productivity baseline:</p> <p>? Humus content <= 0.8 (Baseline to be refined/validated at inception stage)</p>	<p>Detailed methodology and approaches for updating water management information in support of an improved water and crops management</p>	<p>10,000 ha</p> <p><i>(Efficient water and crops resilience to salinity demonstrated at 10% of the targeted 100,000 ha irrigated areas through, promotion of modern irrigation technologies, diversification of agricultural crops including: crop rotation, use of salt tolerant crops, agroforestry)</i></p> <p>? 15% reduction in soil salinity compared to baseline levels</p> <p>? 15% reduction of water wastage compared to baseline</p> <p>? Humus content > 1.8 (by end of project)</p>	<p>Means of verification: Project technical reports. Ministry of Agriculture and Environmental Protection ameliorative expeditions data. Field monitoring. Midterm and Final GEF evaluation project reports.</p> <p>Assumptions: There is sufficient awareness of the local water users (and farmers associations) on the water saving needs and technical knowledge and financial means (co-financing) to implement efficient water management in irrigated areas.</p>
--	---	---	---	--	---

	<p><u>Indicator 15 (GEF 7 Core indicators 6 Sub-indicator 6.1): GHG emissions mitigated (tCO2-eq)</u></p>	<p>N/A (project activities not under implementation)</p>	<p>No change (project outcomes and impacts not yet at stage where GHGs avoided/sequestered)</p>	<p>2,028,250^[3]</p>	<p>Means of verification: Field/plot surveys. Project reports. Updated GEF7 Core Indicator 6; validated by the final evaluation and integrated in government UNFCCC reporting.</p> <p>Assumptions:</p> <ul style="list-style-type: none"> -Per assumptions in EX-ACT tool - Project activities are implemented in the manner foreseen in the areas planned
--	---	--	---	--------------------------------	--

	<p><u>Indicator 16 (KM):</u> Level of information necessary for improved irrigation water management at farm level considering the climate change impacts and knowledge regarding the necessary water requirements of the lakes and wetlands ;</p>	<p>Insufficient knowledge of Water users sharing the same irrigation canals and collector drainage on efficient water management approaches; Limited knowledge of and access to water saving technologies.</p> <p>Poor technical knowledge on efficient water distribution and crop resilience to salinity measures</p> <p>Lack of information available on the required water volumes and minimum ecological flows by the lakes and wetlands, necessary to maintain ecological integrity, especially under climate change predicted deficits.</p>	<p>Detailed methodology and approaches for</p> <p>1.updating water management information at district/etrap level and farm levels in support of an improved water use at farm/inter-farm level,</p> <p>2.equitable share of the water resources among multiple water users and considering the required ecological flow necessary to maintain lakes, wetlands and riparian zones in Amudarya Basin.</p>	<p>Increased level of information on efficient and sustainable water use in agriculture and for natural ecosystems as evidenced by:</p> <p>? Comprehensive inventory of water use patterns, water losses and the realistic water requirements in agriculture sector in the targeted areas (for 100,000 ha of irrigated areas) available to water managers and water users.</p> <p>? Hydroclimatic scenarios and water economic models-informed Sustainable Water Management</p> <p>? Recommendations for optimization of water allocation among multiple water users, approved by decision makers</p> <p>? Water Management Plans covering 100,000 ha approved and under implementation.</p> <p>? Researched water requirements (minimum ecological flow) for lakes, wetlands and riparian zones in Amudarya Basin (within Turkmenistan side), is completed and accessible to end users and water managers.</p>	<p>Means of verification: Strengthened data base of the Ministry of Agriculture and Environment Protection and State Committee on Water Resource, and project data validated by the GEF MTR and TE.</p> <p>Assumptions: Project does not encounter critical risk that will derail activities; Relevant water management related data can be achieved cost-effectively at etrap/district level and farm level.</p> <p>There is a stated and clear interest of the Government to improve water efficiency, facilitate consensus among multiple water users and reform water management sector.</p>
--	--	--	---	---	--

	<p>Indicator 17 (KM): Existence of formal guidelines and methodology on LDN and integrated land use planning, on SLM measures applicable for practical improvements of land management, use of mineralized drainage water and restoration of saline lands</p>	N/A	<p>Environmental data collected, methodologies elaborated and first drafts of different knowledge products are discussed with local and national authorities and other key project partners.</p> <p>Available UNCCD-promoted innovative LDN compliant land use planning module (Act 1.1.5) based on the results of the GEO-LDN Technology Innovation Competition.</p>	<p>? Methodology for setting up regional LDN targets approved by the MAEP, showcasing Lebap and Dashoguz experience</p> <p>? Methodology for LDN compliant/compatible Integrated Land Use Planning at etraps/district level approved by the MAEP, showcasing Dashoguz and Lebap experience</p> <p>? Available innovative land use planning module centered on LDN principles (Act.1.1.5)</p> <p>? Guidelines on the development of sustainable pastures and forest management plans, to achieve LDN, for local natural resources users approved by MAEP</p> <p>? LDN compatible Integrated Land Use Planning GIS based Concept available to land use decision makers</p> <p>? Integrated Biosaline Agricultural Model for Sustainable and Integrated Use of Mineralized Water Resources and salt-affected soils</p> <p>? LDN Regional Workshop Proceedings Report entails an analysis of</p>	<p>Means of verification Official correspondence with MAEP validating the formal approval of project's deliverables; Interviews with stakeholders; project reports validated through MTR and final evaluations.</p> <p>Assumption: There is interest towards adopting KM tools generated by the project and implementing a real positive change in land use planning practices</p>
--	--	-----	---	--	--

	<p><u>Indicator 18:</u> Existence of capacity building events (attended by 30% women participants) on EO datasets interpretation , LDN, SLM and integrated land use planning for LDN working groups, decision makers and farmer groups</p>	<p>N/A</p>	<p>EO datasets interpretation guide; methodology for integrating different datasets (national metrics, global default datasets, other LD index) developed</p> <p>Gender sensitive Training materials developed</p> <p>Invitees lists developed (30% women)</p> <p>5 Capacity building events for LDN working groups</p> <p>5 Capacity building events on SLM and land use planning</p> <p>2Farmers Field Schools</p>	<p>? 10 capacity building events on EO datasets interpretation, LDN target setting and monitoring- to inform land degradation assessments, designed for decision makers at national and local levels</p> <p>? 8 capacity building events on SLM measures and sustainable agricultural practices and rural entrepreneurship</p> <p>? 8 training workshops for the Water user Groups (WUGs) on sustainable irrigation and water management</p> <p>? 4 training workshops on land-water legislation</p> <p>? 5 Farmers Field Schools</p> <p>? LDN Regional Workshop to share experience, generated knowledge, challenges, and opportunities in LDN regional target setting.</p>	<p>Official workshop reports shared with participants and workshop evaluation forms.</p> <p>Project reports validated through MTR and final evaluations. Assumption: Continuous government commitment towards LDN and SDG 15.3; There is interest among land use decision makers and local natural resource users towards building their capacities for improved land management and participating in the project's activities.</p>
--	--	------------	--	--	--

Output 1.1 Integrated landscape plans for priority areas of Dashoguz and Lebap provinces (incl. mapping; long-term land restoration plans for priority areas in and around KBAs and associated agricultural landscapes; regional Land Degradation Neutrality (LDN) targets established and action plans and monitoring systems agreed for attaining them).

Output 1.2 Investment in community-based restoration of degraded arable and forest lands in 2 provinces, including saxaul and/or sea buckthorn planting in degraded areas; introduction of salt-tolerant crop varieties, and facilitating natural regeneration of tugai forest, with high potential for income for local communities.

Output 1.3 Efficient water management of irrigated land in 4 priority districts, incl: maintenance of water management infrastructure; operationalization of multi-stakeholder Water User Groups (involving local communities); introduction of best practice irrigation technologies.

Output 1.4 Sustainable pasture management regimes in 4 priority districts introduced raising productivity of livestock management for local communities, incl: sustainable pasture management plans focusing on rotational grazing and efficient and sustainable livestock watering infrastructure

	Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verifications and Assumptions
<p>Component 2: Securing Critical Ecosystems for Biodiversity and Ecosystem Services</p> <p>Outcome 2: Secured biodiversity status in >0.5 mln ha of KBAs in the Amu Darya basin, as evidenced by:</p>	<p><u>Indicator 19 (GEF Core Indicator 1/Sub-indicator 1.1.):</u> Terrestrial protected areas created for Conservation and sustainable use (ha)</p>	<p>0</p>	<p>Flora and fauna Inventories and habitat mapping necessary for the preparatory work completed</p>	<p>60,000 ha^[4]</p>	<p>Means of verification: Updated government (MAEP) reports/ National communications to CBD Project evaluation reports; Field mission reports validated by final evaluation</p> <p>Assumptions: No major negative impact on the availability of the state budget for the protection and management of new and existing PAs.</p>

<p>- non-deterioration of globally threatened species, including Egyptian Vulture, Saker Falcon, Dalmatian Pelican, Houbara Bustard, Cinereous Vulture, Ferruginous Duck.</p> <p>- Management effectiveness increased for targeted protected</p>	<p><u>Indicator 20</u> (GEF Core Indicator 1/Sub-indicator 1.2): Terrestrial protected areas under improved management for conservation and sustainable use (ha)</p>	<p>0 ha</p>	<p>Flora and fauna Inventories and habitat mapping necessary for the preparatory work completed)</p>	<p>1,077,554 ha [5]⁵</p>	<p>Means of verification: Updated government reports/ National communications to UNCBD Project evaluation reports; Field mission reports; METT scorecards validated by the final evaluation; Assumptions: No major negative impact on the availability of the state budget for the protection and management of new and existing PAs.</p>
--	--	-------------	--	-------------------------------------	---

<p>areas from ~20% to ~40%. - New protection mechanisms established covering additional 50,000 of currently unprotected KBAs, increasing PA coverage of KBA area in the target landscape by ~5%, to roughly 50%</p>	<p><u>Indicator 21:</u> Change in the capacity of the management of key Protected Areas to implement effective biodiversity conservation and sustainable management measures</p>	<p>Gaplangyr State Nature Reserve (METT Score: 53)</p> <p>Amudarya State Nature Reserve (METT Score: 56)</p>	<p>Gaplangyr State Nature Reserve (METT Score: 58)</p> <p>Amudarya State Nature Reserve (METT Score: 61)</p>	<p>Gaplangyr State Nature Reserve (METT Score: 64)</p> <p>Amudarya State Nature Reserve (METT Score: 67)</p>	<p>Means of verification: Project technical reports GEF terminal evaluation report; Field mission reports; METT Scorecards validated by mid-term and final evaluation; Assumptions: At least baseline funding is maintained; Continued political will to strengthen governance of biodiversity and ecosystem services through effective management PA System</p>
---	--	--	--	--	--

	<p><u>Indicator 22:</u> Stable status/ positive change in the population of globally significant biodiversity at the new designated PA.</p> <p>? Great grebe (<i>Podiceps cristatus</i>)</p> <p>? Great pelican (<i>Pelecanus onocrotalus</i>)</p> <p>? Red crested pochard (<i>Netta rufina</i>)</p> <p>? Great cormorant (<i>Phalacrocor ax carbo</i>)</p> <p>? Little cormorant (<i>Phalacrocor ax pigmaeus</i>)</p> <p>? White egret (<i>Egretta alba</i>)</p> <p>? Grey heron (<i>Ardea cynerea</i>)</p> <p>? Red heron (<i>Ardea purpurea</i>)</p> <p>-</p>	<p>Baseline to be established during inventories</p> <p>-</p> <p><u>Pytniak Sanctuary</u> (<u>proposed IUCN IV</u> <u>category- Sanctuary</u> <u>40,000 ha</u>)</p> <p>? Great grebe (<i>Podiceps cristatus</i>)</p> <p>? Great pelican (<i>Pelecanus onocrotalus</i>)</p> <p>? Red crested pochard (<i>Netta rufina</i>)</p> <p>? Great cormorant (<i>Phalacrocorax carbo</i>)</p> <p>? Little cormorant (<i>Phalacrocorax pigmaeus</i>)</p> <p>? White egret (<i>Egretta alba</i>)</p> <p>? Grey heron (<i>Ardea cynerea</i>)</p> <p>? Red heron (<i>Ardea purpurea</i>)</p> <p><u>Zengibaba-</u> <u>Goyugirlan</u> <u>Sanctuary</u> <u>((proposed IUCN</u> <u>IV category-</u> <u>Sanctuary 20,000 ha)</u></p> <p>? Great pelican (<i>Pelecanus onocrotalus</i>)</p> <p>? Saker falcon (<i>Falco cherrug</i>)</p> <p>? Golden eagle (<i>Aquila chrysaetos</i>)</p> <p>? Black Vulture (<i>Aegypius monachus</i>)</p>	<p>Non-deterioration of baseline status</p>	<p>Increase relative to baseline</p>	<p>Means of verification: Field inventories; MAEP database; project reports validated by GEF MTR and GEF Terminal Evaluation</p> <p>Assumptions: Project lifetime is sufficient to allow impacts to be generated and monitored; New threats do not emerge</p>
--	---	---	---	--	---

	<p><u>Indicator 23</u> : Stable status /positive change in the population of globally significant biodiversity indicator species in the existent targeted PAs</p> <p>? Argali (<i>Ovis vignei</i>)</p> <p>? Kulan (<i>Equus hemionus kulan</i>)</p> <p>? Goiterred gazelle (<i>Gazella subgutturosa</i>)</p> <p>? Bukhara deer (<i>Cervus elaphus bactrianus</i>)</p> <p>? Houbara bustard (<i>Chlamydotis undulata</i>)</p> <p>? Dalmatian pelican (<i>Pelecanus crispus</i>)</p> <p>? Great white pelican (<i>Pelecanus onocrotalus</i>)</p> <p>? Saker falcon (<i>Falco cherrug</i>)</p> <p>? Golden eagle (<i>Aquila chrysaetos</i>)</p> <p>? Yellow eyed pigeon (<i>Columba eversmanni</i>)</p> <p>? Otter (<i>lutra lutra</i>)</p>	<p>Baseline: as indicated in the METT scorecards</p>	<p>Midterm target: As indicated in the METT scorecards</p>	<p>End project target: As indicated in the METT scorecards</p>	<p>Means of verification: METT scorecards monitoring validated by GEF MTR and GEF Terminal Evaluation</p> <p>Assumptions: Project lifetime is sufficient to allow impacts to be generated and monitored; New threats do not emerge.</p>
--	--	--	--	--	---

	<p><u>Indicator 24 : (KM):</u></p> <p>Updated and accessible environmental data and analysis on IBAs/KBAs and PAs.</p>	<p>Insufficiently developed data base in the PAs and environmental information on critical key species and habitats.</p> <p>Poor integration of existing data sets on biodiversity requirements in different sectors.</p>	<p>Environmental data collected and methodologies elaborated.</p> <p>Assessments of ecological and cultural values; economic assessment of ecotourism potential in new and existing PAs.</p>	<p>-Gap Analysis Report on the IBAs/KBAs Ecological Integrity, Analysis of Anthropogenic Threats and Recommendations to Decision Makers</p> <p>-Data base on key species and habitats in the existing PAs and KBAs/IBAs under the project scope strengthened and accessible; PAS managers have a better access to environmental information and improved based for research and knowledge management</p> <p>-Study on the Potential for ecotourism and ecosystem services assessments and potential PES mechanisms in the buffer and production zones around PAs, KBAs/IBAs in Amudarya Basin - available to decision makers and local communities</p> <p>-Experience generated during the development and implementation of two PES mechanisms established under the Management and Business Plans of targeted PAs.</p>	<p>Means of verification: MAEP official data; forma correspondence; KM sharing platform; existing database at MAEP and PAs management unit; Validation of these indicators at MTR and final project evaluation; Assumptions: No major risk to project activities emerge. PAs inventories implemented as planned. Co-financing stable.</p>
--	--	---	--	--	---

	<p><u>Indicator 25:</u> Existence of capacity building events and information sharing, for environmental inspectors and border officials, PAs staff in Biodiversity management trainings and local community training on eco-tourism and arts and crafts;</p>	0	<p>8 trainings delivered to environmental officials and PAs staff</p> <p>3 trainings delivered to local communities</p>	<p>15 trainings and outreach events (30 % female participants)</p> <p>2 cross border study visits for joint environmental programming and work on wild ungulates migration corridors (Turkmenistan-Uzbekistan)</p>	<p>Means of verification: Formal MAEP correspondence; Workshop evaluation forms; Monitoring via annual project reporting (PIRs) verification at MTR and final project evaluation; project reports; workshop proceedings;</p> <p>Assumptions: No major risk to project activities emerge; local communities are interested to participate in project activities</p>
--	---	---	---	--	--

	<p><u>Indicator 26 (GEF Core Indicator 4, Sub-indicator 4.1):</u> Area under Improved agricultural practices benefiting biodiversity, on the basis of agreements with local communities, on PAs buffer zones and ecological corridors (ha).</p>	0	<p>Community outreach and participation approaches agreed with the Ministry of Agriculture and Environmental Protection</p> <p>Round table meetings and preliminary agreements secured with representatives of local authorities, daikhan associations, farmers and private entrepreneurs</p>	<p>A total area of 292,607 ha secured by agreements with local communities/authorities at around PA buffer zones and endangered IBAs/KBAs as follows:</p> <p>? Total area of approx.79,906 ha^[6] supported by 3 local community endorsed ecological corridors around Amudarya State Nature Reserve</p> <p>? Total area of approx.167,701 ha community based sustainable pasture management agreement and biodiversity conservation at Tallymerjen IBA/KBA</p> <p>? Total area of approx. 45,000 ha of community based sustainable pasture management agreements and biodiversity conservation around Goyungirlan IBA connected to Zengibaba and Tarymgaya biodiversity hotspots</p>	<p>Means of verification: Local authorities official data; Official MAEP records; Monitoring via annual project reporting (PIRs) verification at MTR and final project evaluation</p> <p>Assumptions: Local communities are interested to support biodiversity friendly agricultural practices in buffer zones Local communities are informed and aware of the importance of biodiversity and critical habitats and support and are open to improve agricultural practices around KBAs/IBAs.</p>
--	---	---	---	--	--

	<p>Indicator 27: Farmers /producers? net income (differentiated by gender) from sustainable products (livestock, hay, seeds, dried fruits, medicinal plants, handicrafts) resulted from biodiversity friendly agricultural practices in PA buffer and production zones</p>	<p>Baseline to be determined in the first year of project implementation.</p> <p>Net Income men: \$ X</p> <p>Net income women: \$ X</p> <p>Net income of at least 80% of participating farmers (male/ female) documented at project inception (year 1)</p>	<p>Net Income men: \$X + 10%</p> <p>Net income women: \$X + 10%</p> <p>Participating farmers show at least 10% increase based on year 1 estimate.</p>	<p>Net Income men: \$X + 20%</p> <p>Net income women: \$X + 20%</p> <p>Participating farmers show 20% increase based on year 1 estimate.</p>	<p>Means of verification: Monitoring via existing extension services, including Union of Industrialists and Entrepreneurs; signed agreements with grantees; households survey; verification at MTR and final project evaluation; UNCCD/WOCA T knowledge platform project contribution</p> <p>Assumptions: No major risk to project activities emerge; proposed practices are cost effective, have low barrier for uptake especially among female farmers.</p>
<p>Output 2.1 Management effectiveness supported for 8 existing PAs, including: (1) improved management, and targeted investments (based on PPG findings); (2) support to local tourism infrastructure to facilitate additional income generation at for local communities at targeted PAs; (3) control over illegal activities.</p> <p>Output 2.2 New conservation areas operationalized through new and innovative approaches covering 50,000 hectares of unprotected high priority ecosystems, supported by: (i) Gap analysis; (ii) Feasibility studies and technical documentation for PA establishment; (iii) Analysis of ecological flow water requirements for maintenance and conservation of KBAs at new sites (iv) Mapping, management, and financial plan preparation, with clear guidance for core and buffer zones, community-based conservation activities and monitoring.</p> <p>Output 2.3 Implementation of biodiversity-friendly sustainable use regimes in PA buffer zones and corridors covering 600,000 ha aiming to provide alternative income to local communities</p>					
-	Indicators	Baseline	Mid-term Target	End of Project Target	Means of Verifications and Assumptions

<p>Component 3: International knowledge sharing and cooperation for the Aral Sea Basin</p> <p>Outcome 3: Strengthened and better-informed engagement of Turkmenistan in implementation of regional cooperation under the International Fund for Saving the Aral Sea (IFAS) for improved management and restoration of Aral basin land and water resources, as evidenced by: - Turkmenistan is</p>	<p><u>Indicator 28 (KM):</u> Number of events strengthening national capacity to participate into regional cooperation programmes in the Aral Sea Basin</p>	<p>There are no events strengthening the national capacities to engage in regional negotiations</p>	<p>2 Water Diplomacy Seminars</p> <p>1 IFAS meeting attended</p>	<p>? 5 Water Diplomacy Seminars supported by IFAS and the UN Regional Centre for Preventive Diplomacy for Central Asia (UNRCCA)</p> <p>? 3 IFAS meetings attended by Turkmenistan delegation contributing to IFAs decisions</p>	<p>Means of verification: Monitoring via PIRs (Annual project reports) validated by MTR and midterms and final evaluations; project reports; workshop proceedings; various questionnaires and interviews with stakeholders; Assumptions: No major obstacles to project implementation</p>
	<p><u>Indicator 29 (KM)</u> Number of national priorities embedded in IFAS led programmes and initiatives, supported by the project.</p>	<p>National priorities that are identified in the regional IFAS facilitated programmes are not implemented.</p>	<p>2 national priorities embedded in regional initiatives put forward by Turkmenistan are supported by the project</p>	<p>5 national priorities embedded in International and regional initiatives put forward by Turkmenistan to address problems of the Aral Sea Basin are supported by the project.</p>	<p>Means of verification: IFAS official working documents; interviews with national stakeholders; Project working sessions proceedings and reports validated by MTR and midterms and final evaluations; Assumptions: No major obstacles to project implementation.</p>

<p>represented at key regional fora and events supporting the restoration of the Aral Sea - Support provided to international dialog and cooperation on IFAS</p>	<p><u>Indicator 30 (KM).</u> Number of awareness raising events and targeted KM products on water, LD and BD issues in the Aral Sea Basin</p>	<p>Limited awareness raising on biodiversity, land and water management in Aral Sea Basin</p>	<p>? Communication Plan finalized, communications needs of the key stakeholders identifies and Communication Plan refined and under implementation</p> <p>? 10 Awareness raising events</p> <p>? Radio Talk Shows</p> <p>? Available LDN/SLM/biodiversity training/information materials</p>	<p>? 20 awareness raising events</p> <p>? 20 Radio Talk Shows for farmers with a segment for women farmers</p> <p>? Available LDN/SLM/biodiversity training/information materials and country-specific knowledge shared on UNCCD/WOCAT platform; CACILM II platform; CAREC platform; Adaptation Fund project platform</p> <p>? Project-video Documentary</p> <p>? Analytical technical reports on integrated water-land resources to inform regional programming under IFAs</p> <p>? Project Sustainability Strategy presented and endorsed by project Board and MAEP</p>	<p>Means of verification: Project reports; news clipping; recorded talk shows; documents; interviews with national stakeholders; Project working sessions proceedings and reports validated by MTR and midterms and final evaluations;</p> <p>Assumptions: No major obstacles to project implementation. Stakeholders are interested and willing to participate in the project activities.</p>
--	---	---	--	---	--

Output 3.1 Higher capacity for government and scientific institutions for participating in IFAS. IFAS sanctioned activities for the implementation of global and regional initiatives put forward by Turkmenistan to save the Aral Sea, (e.g. Special Programme for Saving the Aral Sea)

- At least 3 IFAS meetings attended by Turkmenistan delegation where Turkmenistan contributes to decisions at IFAS,
- Targeted knowledge management and exchange products (web-based, TV programs, trainings for communities and decision makers) on LD and BD issues in the Aral Sea
- Outreach and awareness raising on the problems of the Aral Sea basin, supporting Turkmenistan's efforts to address degradation
- Lessons documented and disseminated within project partners and amongst stakeholders

Component 4	<u>Indicator 31</u>	N/A	? Midterm evaluation report	? Reports with monitored and evaluated project results (GEF midterm and final reports)	Means of verification: Project reports.
Monitoring and Evaluation	Monitoring and Evaluation reports		? M&E activities	? Quarterly monitoring activities (UNDP)	Assumptions: No major obstacles to project implementation. Stakeholders are interested and willing to participate in the project activities.
Outcome 4.1	Evaluative knowledge available to project partners				
Project results properly monitored and evaluated					
Output 4.1.1. Set of monitoring and evaluation activities					
- Monitored/evaluated project results, and evaluative knowledge incorporated in the project adaptive management					

[1] Sum of existing PAs under the project scope: (i) Gaplanyr State Nature Reserve 926,203 ha (includes Sarygamish Sanctuary 541,466 ha) and Shasenem Sanctuary (109,002 ha); Amudarya State Nature Reserve 151,351 ha which includes Amudarya Reserve territory (48,351 ha) and its Kelif Sanctuary of 103,000 ha); (ii) Area of the newly proposed PAs/Sanctuaries 60,000 ha (Pitnyak Nature Sanctuary: 40,000 ha and Zengibaba Lake Sanctuary 20,000 ha)

[2] Sum of: 500,000 ha of pastureland (Output 1.4); 100,000 ha irrigated land (Output 1.3); 146,303 ha (Output 2.3) (represents 50% of 292,607 ha under Output 2.3; calculated to avoid double counting)

[3] GHG emissions avoided as a result of improved crop management (at 10,000 ha) and improved pastures (50,000 ha). Calculated using FAO Exact tool.

[4] Comprising: Pitnyak area (40,000 ha) and Zengibaba lake and surroundings (20,000 ha)

[5] Sum of the existing PAs under the project scope: (i) Gaplangyr State Nature Reserve (275,735 ha) and its Sanctuaries: Sarygamish Sanctuary (541,466 ha) and Shasenem Sanctuary (109,002 ha); (ii) Amudarya State Nature Reserve (48,351 ha) and its Kelif Sanctuary (103,000 ha).

? [6] Outside the perimeter of Amudarya State Nature Reserve on 19,988 ha (1-4 km wide) along the Pitnyak-Kabakly-Nargiz route, the area is proposed in order to preserve the migration of Tugai deer (*Cervus elaphus bactrianus*) and the ecological integrity of tugai habitats. Assisted natural regeneration of tugai, at Kabakly site will be supported by the project (within the framework of Output 1.2) to patch up tugai corridors.

? Along Karakum river an ecological corridor of 9,482 ha, 2-2.5 km wide along Amudarya ? Karakum river ? Kelif route and

? Further from Kelif to Yagty-Yol in the vicinity of Mary 50,436 ha to protect the habitat of Amudarya pheasant and other key bird species.

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

Please see GEF-UNDP Project Document Annex 20 Response to Comments from GEF Council and STAP.

Reviewer's comment	Responses	Reference in CEO Endorsement Document/ GEF/UNDP Project Document
GEF Secretariat comments at CEO Endorsement (FSP) Approval (Oct 2019)		
<p><i>Has the project/programme cited alignment with any of the recipient country's national strategic and plans or reports and assessments under relevant conventions?</i></p> <p>As of today, Turkmenistan has not committed to set voluntary targets under the UNCCD Target Setting Program. It is therefore welcomed that the project will support the country to do so. Please note that countries setting voluntary targets, are eligible for support from the Global Mechanism (GM) of the UNCCD and can send a letter of interest via the UNCCD National Focal Point Institution to LDNtargetsetting@unccd.int</p>	<p>Thank you. As suggested, during the PPG phase, the government was supported to access the LDN Voluntary Target Setting Programme. In addition, the project will support the National LDN Target Setting process through a 3-tiered intervention:</p> <ul style="list-style-type: none"> - Targeted capacity development on LDN and connected topics - Setting up an enabling platform for inter-sectorial cooperation for National and Regional LDN target setting - Support to mainstreaming LDN into the policy framework and development of the Action Plan to Combat Desertification 	<p>-GEF-UNDP Project Document/Annex 28 UNCCD support letter for National LDN Target Setting -GEF-UNDP Project Document, Output 1.1. (Activities 1.1.1; 1.1.2;1.1.3)</p>

A brief description of the planned activities. Do these support the project's objectives?

Yes. For component 1, STAP recommends applying UNCCD's "Scientific Framework for Land Degradation Neutrality", and STAP's guidelines on Land Degradation Neutrality. In particular, it would be valuable for the project developers to build-in the response hierarchy that encourages measures to avoid and reduce land degradation combined with actions to reverse degradation to achieve LDN. The science behind the framework is explained in the scientific framework which can be accessed at <https://www.unccd.int/publications/scientific-conceptual-framework-landdegradation-neutrality-report-science-policy> STAP's guidelines, a practical guide to applying the LDN conceptual framework, can be accessed at: <http://www.stagef.org/publications>. The description of the current situation evidences that some areas under irrigation may be so degraded that their restoration may be not economically feasible. STAP recommends that cost-effectiveness of interventions be undertaken considering external factors like climate change, and that attention be given to innovative solutions for degraded landscapes that could provide alternative livelihoods (e.g. carbon farming <https://www.environment.gov.au/climatechange/government/emissions-reduction-fund/publications/cfi-salinity-guidelines> ; or reclamation using novel technologies or phytoremediation).

Thank you. As suggested, the project strategy aligns with the STAP Guidelines for GEF projects and the UNCCD's Scientific Framework for Land Degradation Neutrality, and these guidelines have been carefully considered and applied. The response hierarchy (avoid-reduce-restore land degradation) is embedded throughout the project strategy, informing the LDN target setting processes and the LDN compliant integrated land use management planning.

The project will support planning for restoration of degraded land by using : (i) demonstrated well researched restoration measures; (ii) testing innovative solutions on smaller areas before recommending scaling up methodologies; (iii) and through micro-grants that will incentivize demonstrated cost-effective SLM measures .

A preliminary climate and vulnerability screening has been done at PPG stage for the selected areas within the land management by selected daikhan associations (these areas will be validated upon project inception, due to the process of restructuring of daikhan association land).

During the project implementation, prior to any planned investment, the project will conduct a climate risk assessment (especially under climate risks assessments grouped under GEF-UNDP Project Document Output 1.1./ Act. 1.1.4 and 1.1.5 and 1.3.1) and cost effectiveness of the planned measures. The project promotes the use of lower cost methods and tools to implement Sustainable Land Management (SLM) measures that do not deplete soil condition and that support climate change resilient agroecosystems and livelihoods. The project builds on previous experience of GEF SCCF project ?Supporting climate resilient

GEF-UNDP Project Document Output 1.1. (Act. 1.1.4; Act 1.1.5; Act 1.3.1) Output 1.2 (Act. 1.2.1) Output 2.3 (Act 2.3.2)

<p><i>Are the global environmental benefits/adaptation benefits likely to be generated?</i></p> <p>Yes, if the theory of change is revisited and adjusted as needed to address the adaptive management strategies the project may require, and the consideration of internal and external factors that could affect the effectiveness of outcomes.</p>	<p>Noted. The Theory of Change has been developed based on the results of close coordination with the government representatives, consultations with NGOs and local community representatives at the PPG phase. An assessments of the complex socio-ecological systems and learning from past efforts have informed the consideration of different options, pathways as well as identification of drivers and assumptions and focus on adaptive management. At local level the sustainability and resilience of production systems will be attained by an integrated management of the natural capital (soil, water, biodiversity). At national level, the project will strengthen institutional frameworks and capacities which will combine at scale the project-promoted successful efforts of many smallholders in the project targeted areas. At regional level, the project will support regional dialogue which will provide for engagement of countries in the region, other development partners, international organizations and scientific institutions.</p>	<p>GEF-UNDP Project Document, Section II Strategy: The long term solution (para 18) Key past and ongoing interventions (para 19) Barriers and Theory of Change (para 23)</p>
--	---	--

Is the sum of the outputs likely to contribute to the outcomes?

Yes. However, STAP wishes to note that including of extension services to landholders as part of capacity building at institutional and communal level will strengthen the outputs related to outcome 1. A theory of change that includes needs analysis of stakeholders would also strengthen outputs of outcome 1.

Thank you. As suggested, we have carefully considered ways to strengthen extension services to landholders. The project strategy includes targeted interventions to strengthen extension services and local medium size and smallholders? access to knowledge. The Theory of Change acknowledges Access to Knowledge and Learning as one of the main drivers to shift paths towards sustainability. Therefore the project strategy is based on the analysis of stakeholders? needs, informed partly by a questionnaire conducted at the PPG stage the results of which have been used to identify the main communication needs of the stakeholders, regarding access to specific technical information and knowledge on sustainable agricultural practices; and partly by interviews and round tables conducted by the PPG team. The project document includes therefore actions aimed at supporting climate risk informed agricultural extension services, which are grouped under the KM Component 4 of the Project. The project components are interlinked and the agriculture extension services although grouped under KM component will naturally strengthen the outputs under Outcome 1. For example the project will strengthen the government?s extension services in the targeted regions and will strengthen their local offices; furthermore, in partnership with the Adaptation Fund Project ?Scaling climate resilience for farmers in Turkmenistan? and the Union of Industrialists and Entrepreneurs, the project will support building of technical capacities of 50 agricultural extension service providers serving all the regions in Turkmenistan. In addition, in partnership with the State Committee of Turkmenistan for Television, Radio broadcasting and

GEF-UNDP
Project Document
Output 3.1, Act.
3.1.2

Does the baseline scenario provide a feasible basis for quantifying the project's benefits?

Partly. STAP recommends describing more clearly the methods that will be used to quantify and monitor the global environmental benefits. STAP suggest the team revising some of the metrics around quantification of project benefits. Example II.1.5 mentions Sustainable pasture management in 500,000 ha; when the preceding table establishes a project contribution of 50,000 ha of pasture land.

Thank you, this is noted and metrics have been revised in the final project design. The process of identifying and selecting the land use types (pastures, forests, irrigated areas) and the SLM approaches and measures was conducted at PPG stage through a participatory process in which multiple local authorities, daikhan farms, daikhans associations were consulted about the existing land use practices and needs, coupled with local missions and bilateral consultations with many farmers. The PPG expert team has preliminarily selected several daikhan associations however as the daikhan associations are in the process of re-structuring since August 2020 in the project targeted provinces, a validation or re-confirmation of interest and further identification of other daikhan farms is envisaged during the project inception. The PPG expert team has identified all the proposed areas for the project interventions based on field missions observations, local interviews with local authorities and other farmers and based on the maps and previous climate vulnerability assessments done during the implementation of other GEF and AF projects in the regions. Furthermore, key climate risks have been preliminarily assessed through consultation with farmers in selected Daikhan Associations (Ak Altyn and Ashyk Aidyn in Dashoguz region and Kabakly, Tyaze Yurt and Lebap in Lebap region) and these risks include drought, increased temperatures and salinisation, compounded by weak investment in infrastructure and maintenance and poor management of water resources. Key resilience requirements prioritised by the community include the rehabilitation of water management systems, the shift to more efficient irrigation, the sustainable management of

GEF-UNDP
Project Document
Annex 6: Targeted
Landscape Profile.
GEF-UNDP
Project Document
Annex 8
Monitoring Plan.

2) *Baseline scenario and any associated baseline projects*

Are the lessons learned from similar or related past GEF and non GEF interventions described? How did these lessons inform the design of the project.

Partly. STAP recommends a more robust description of past, or on-going, initiatives in the project document. The baseline scenario identifies relevant projects that could become nexus for learning and dissemination of knowledge within and beyond the project area

Thank you, we take note of this recommendation. As suggested, the project baseline scenario has been carefully described, including the current government's transition towards market based approach with impressive investments in the agriculture sector foreseen under the Programme for Development of the Agricultural Complex 2019-2025. Where the GEF can be incrementally valuable is to address the remaining barriers and complement the Government baseline with initiatives that focus on the important other elements within the landscape, land-water NEXUS which are ? integrated water management, sustainable pasture and forest management and retention of valuable ecosystems ? all of which ultimately are indispensable to support and increase the effectiveness of the transition to a market based economy in Turkmenistan. The GEF incremental value will consist in promoting land degradation neutrality (LDN), prioritising policies and investments towards areas most affected by degradation; in demonstrating and increasing local knowledge on LDN compatible integrated land use management and SLM measure to achieve LDN, in a participatory manner, consulting all the affected stakeholders and incentivising farmers away from agricultural practices that negatively impact soil productivity; and in strengthening PAs management efficiency and KBAs/IBAs integration into the wider landscape, through improved zoning and promotion of SLM in production zones and ecological corridors supported by local communities. A comprehensive description of the baseline projects is presented under Annex 24 (GEF UNDP Project

GEF-UNDP Project Section III Results and Partnerships(esp. Output 1.1.) GEF-UNDP Annex 24 List of Baseline Programmes and Projects GEF-UNDP Annex 19. Knowledge Management Plan

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

What is the sequence of events (required or expected) that will lead to the desired outcomes?

What is the set of linked activities, outputs, outcomes to address project objective; Are the mechanism of change plausible and is there a well-informed identification of the underlying assumptions? Is there a recognition of what adaptations may be required

during project implementation to respond to changing

conditions in pursuit of the targeted outcomes?

The PIF did not detail these steps. STAP suggests sequencing the intervention options, the alternative pathways and decision triggers for switching paths. Tied with this activity is stakeholder mapping - who should be responsible. STAP's primer on the theory of change can be useful in developing a theory of change:

<http://www.stagef.org/publications> as well as RAPTA2:

<https://research.csiro.au/eap/rapta/> Of note is that STAP guidance on behavioural change and sustainability of outcomes will be further reviewed during the PPG phase, with additional specific aspects of the project designed to ensure sustainability (pg. 22)

Assumptions have not been identified. STAP's primer on the theory of change can assist project developers identify assumptions. STAP recommended several resources in section 5 and 8 the project developers can use to implement adaptive management. In addition, developing a theory of change and embedding adaptive governance throughout this process, would enable project developers to respond to the project's changing conditions

Thank you. We carefully considered RAPTA approach and the project team familiarized itself with it as well as the STAP Primer on the Theory of Change. The project has been developed in line with these resources.

Several elements of RAPTA have been reflected in the project design as follows: (i) Stakeholders engagement has been done effectively and consistently during the project identification and project

development stages, leading to the identification of the stakeholders? needs and ways to address these needs through the project design, and clarifying the roles and responsibilities that stakeholders will have during the project implementation;

(ii) The Theory of Change is consistently embedding resilience and transformational change, reflecting the focus on diverse agroecosystems, using development pathways that include adaptive management strategies encompassing integrated and participative approaches, innovative and also well tested land restoration and pasture management techniques, learning and awareness as well as several triggers that could support the switch to transformational pathways;

(iii) System description and assessment has been done based on the results and analysis of different stakeholders? views and the review of previous projects and programmes, leading to a better understanding of complex agroecological and social and economic systems, how these are inter-related and the identification of interventions options ; (iv)

M&E and Learning that inform adaptive management and testing of the Theory of Change, are described in the KM Plan of the GEF-UNDP Project Document and discusses ways in which monitoring and evaluative knowledge and learning are

6. Global environmental benefits (GEF Trust Fund) and/or adaptation benefits
Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?

Partly. Identifying assumptions in the theory of change, and clearly identifying what to do, who is to do it and who is to be engaged, would provide a better indication to what extent the benefits are likely to be achieved. A good theory of change and the Boards proposed to coordinate the project would enable identifying and adapting project management to ensure the range of benefits argued in the project are achieved.

Thank you. The project team had prioritized the identification of stakeholders? needs and responsibilities in the project design and project implementation in support of achieving the outputs and outcomes and intended Global Environmental Benefits.

Throughout the project development, close contact was maintained with stakeholders at national and local levels and most frequently through Zoom calls, bilateral interactions, and small round table meetings to discuss different aspects of the project design and level of involvement of key partners at national and local levels during the project implementation. The engagement with the main stakeholders during the PPG stage had re-confirmed their interest and commitment towards the project's objective, outcomes and outputs. Based on these consultations, the Theory of Change discusses several assumptions that have been considered. Most notably, it is expected that political will exists to implement the integrated water-land management planning needed to advance towards LDN and efficient water use on irrigated farm areas that do not deplete soil productivity. It is expected that the national institutions will have the capacity for effective planning, implementation, monitoring and enforcements (Outputs 1.1 and 1.3). Another assumption is that there will be sufficient interests and commitment from local farmers and producers to take up biodiversity friendly agricultural practices in production landscapes (Outputs 1.2, 1.4 and 2.3) and that the national institutions will have the capacity for effective biodiversity management within PAs and will secure local communities engagement in biodiversity

UNDP GEF
Project Document
Annex 16.
Stakeholders
Engagement Plan

Are the global environmental benefits explicitly defined?

Partly. Some of the global environmental benefits require re-wording. For example, LDN is not a global environmental benefit. Increased soil organic carbon is a benefit that can result from LDN. Similarly, management effectiveness of PA is not a global benefit, but maintain and improving the status of PA safeguards biodiversity.

Thank you. We take note of the suggested rewording and the description of global environmental benefits has been revisited in the final project design . The global environmental benefits have been carefully considered during the project development, and the final project design includes a discussion of the intended GEF under UNDP GEF Project Document Section 3.4 Incremental Cost Analysis and Global Environmental Benefit. For example, under GEF LD focal area, the project has been designed to generate multiple GEB from sustainable land management and from land restoration measures compliant with LDN principles, expected to result in an increase of the soil organic carbon over the long term. The project will improve water management on 100,000 ha of irrigated land in the four targeted districts which will lead to reduced water logging, improved water resources use and reduced soil salinization and therefore improved soil condition. The benefits of the agroforestry and resilient crop farming measures will lead to reduced soil erosion and increased soil productivity. The implementation of recommendations on the observance of minimum ecological flows of lakes will secure ecological integrity of the lakes in Amudarya basin. Approximately 500,000 ha of pastureland will be under sustainable management regimes that will result in the avoidance or reduction of pasture degradation over longer term. Demonstrated cost-effective restoration interventions and further action plans for restoring approximately 50,000 ha of degraded pastures, 5,300 ha of tugai and saxaul forests and 4,700 ha of degraded agricultural land will remove the risk of land loss and in the long term will lead to soil carbon increase and gradual

UNDP GEF Project Document Section 3.4 Incremental Cost Analysis and Global Environmental Benefits.

Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?

Partly. As noted above, the methods need to be described further; and metrics for indicators need to be developed.

The final project design includes carefully considered indicators and means to monitor them, discussed with the stakeholders involved. The Project Document's Results Framework and the Monitoring Plan includes relevant metrics and an explanation of the targets and means of verifications. The mean of verifications includes a range of information from official local and national statistics of the Implementing Partner and district and province authorities, to annual reporting in PIR , written agreements with Daikhan farms/Daikhan associations including monitor schemes, project's own monitoring fiches, GIS analysis of targeted intervention sites, and monitoring of the successful completion of the project activities supported by the M&E GEF and UNDP tools validated by midterm and final evaluations. In addition, carefully designed KM indicators (embedded in the overall Results Framework) have been selected including methodologies, guidelines, manuals and the knowledge generated during various assessments, that are considered essential in achieving the respective outcomes. Some of the proposed knowledge outputs to be produced and considered to be critical to achieving the GEB under different outcomes are the following :

For improved condition of land resources and progress towards land degradation neutrality (i) KM Indicator 16: Level of information necessary for improved irrigation water management at farm level considering the climate change impacts and knowledge regarding the necessary water requirements of the lakes and wetlands ; (ii) KM Indicator 17: Existence of formal guidelines and methodology on LDN and

GEF-UNDP
Project Document
Section IV Project
Results
Framework
GEF-UNDP
Project Document
Annex 8
Monitoring Plan

What activities will be implemented to increase the project's resilience to climate change?

Currently, the PIF does not describe how the project's resilience to climate change will be strengthened. STAP provides recommendations in sections 5 and 8 below on how to embed climate risks in the project, and apply systems analysis (a critical backbone of LDN approach), to increase the project's resilience.

Thank you for suggesting recommendations on how to embed climate risk in the GEF interventions and these have been considered in the final project design. We took note of these recommendations and the PPG expert team has familiarized with the methodology and we have carefully considered system analysis and the LDN principles in the project development. The project consistently applies resilient and adaptive management and aligns with the LDN principles through a system thinking and detailed assessments of land degradation of different land use types, supporting climate risk informed agricultural extension services, LDN compatible SLM measures and biodiversity conservation, including building resilient terrestrial and freshwater ecosystems and climate-smart agricultural practices that are expected to contribute to reducing this risk.

The project design include activities that demonstrate and put in place irrigated and non-irrigated arable land measures that are grounded by scientific principles and participatory methods mechanisms that will enable stakeholders to adapt the management of natural resources to any given context and threats. Attention to the current and potential impacts of climate change has been built-in to all aspects of the project.

For example, the project design employs several multi-disciplinary land and water resources assessments including climate risk assessments, the results of which will inform LDN compliant integrated land use plans and rationalised water management practices in the targeted districts. The climate risks and vulnerability assessments for the water

GEF UNDP Project Document under Activity 1.1.5.
GEF UNDP Project Document under Activity 1.3.1
GEF UNDP Project Document under Annex 5
UNDP Social and Environmental Screening procedures (SESP)
GEF UNDP Project Document under Annex 7
UNDP Risk Register (Risk 8)
LDN Checklist (Annex 26)

Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?

Partly; there is innovation in the application of LDN and remote sensing for land use planning and for a baseline assessment that will be used in prioritisation of interventions.

It would be valuable to provide further details on both of these methods, how they will address ecosystem and land degradation, contribute to scaling, and deliver global environmental benefits. Furthermore, it is highly desirable the project appraises the feasibility of innovative business and financial models (e.g. public-private partnerships, the use of market-based instruments), and approaches for rehabilitation of degraded agricultural areas (e.g. phyto-remediation, etc). Papers that can be used to that end are: Baumber, A., Berry, E. and Metternicht, G., 2019. Synergies between Land Degradation Neutrality goals and existing market-based instruments. *Environmental science & policy*, 94, pp.174-181. Chasek, P., Akhtar-Schuster, M., Orr, B.J., Luise, A., Ratsimba, H.R. and Safriel, U., 2019. Land degradation neutrality: The science-policy interface from the UNCCD to national implementation. *Environmental science & policy*, 92, pp.182-190. Kust, G., Andreeva, O., Lobkovskiy, V. and Telnova, N., 2018. Uncertainties and policy challenges in implementing Land Degradation Neutrality in Russia. *Environmental science & policy*, 89, pp.348-356. Liniger, H., Harari, N., van Lynden, G., Fleiner, R., de Leeuw, J., Bai, Z. and Critchley, W., 2019. Achieving land degradation neutrality: The role of SLM knowledge in evidencebased decision-making. *Environmental science & policy*, 94, pp.123-134

Thank you for the suggested approaches and resources for the GEF project. We have carefully considered these recommendations and the PPG team got familiarised with the recommended resources and we have introduced several elements of innovative approaches in the final project design.

a)Integrated LDN compliant integrated land use management: The project is turning the LDN concept into practice for the first time in Turkmenistan and will generate new and innovative approaches to multi-sector land use planning based on remote sensing data in mapping and geospatial analysis, testing and implementation of LDN compatible land use planning in four priority districts in Dashoguz and Lebap provinces. The project will explore the possibility of using the software tool for the implementation of 'neutrality mechanism' which is expected to be selected by the UNCCD in 2021, part of the GEO-LDN Competition- an international technology innovation competition to design and build software analytics solutions to support more transparent and well informed land use decisions at the local and national levels[1].

The resulting 'Neutrality Maps' from using such an innovative tool would be extremely useful, as it will allow visualisation and quantification of gains (where interventions are planned to reverse past land degradation), stable areas (where land based natural capital can be maintained through good management) and anticipated losses (where realistically it is determined that land degradation may not be avoidable).

Furthermore, the project supports National LDN target

GEF-UNDP
Project Document
Output 1.1; Output
1.2; Output 1.3;
Output 1.4; Output
2.3; Output 3.1.

<p>Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?</p> <p>Partly. The types of innovation are described (LDN and remote sensing), but not how they will encourage scaling.</p>	<p>The project final design includes specific actions that will encourage a broader uptake of the LDN compliant SLM measures and approaches promoted by the project. The project document aligns with the STAP guidance (GEF/STAP/C.56/Inf.04) on achieving sustainable outcomes, including the following approaches: (i) Designing multi-stakeholder processes to engage key stakeholders, build stakeholder trust and motivation, and incentivize core actors for sustainable wetlands, lakes and riparian zones management (ii) Outlining a theory of change that recognizes the need for policy and financing frameworks? coherence and participatory approaches and emphasizes diversity and adaptive learning. Institutional sustainability will be ensured by promoting interagency cooperation.</p>	<p>GEF UNDP Project Document Section III Results and Partnership; Sub-section 3.11 Sustainability and scaling up.</p>
<p><i>Project Map and Coordinates. Please provide georeferenced information and map where the project interventions will take place.</i></p> <p>Different types of maps land use change, land degradation, and key biodiversity areas, are provided in the annex. STAP recommends providing the geo-referencing information where the project interventions will take place. Currently, the coordinates only for the key biodiversity areas are listed on page 52-55.</p>	<p>The targeted project interventions areas are described in the annexed document targeted Landscape Profile and georeferenced maps are provided in the Annex 1.</p>	<p>GEF-UNDP Project Document Annex 1 Project map and geospatial coordinates of project sites GEF UNDP Project Document Annex 6 Targeted Landscape Profile</p>

Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?

In the project document, STAP recommends defining the roles and responsibilities of each stakeholder in relation to the global environmental outcomes. The project developers can keep in mind the following questions as the project is designed: What are the stakeholders? roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge? Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?

Thank you for the recommended actions. The project design has considered meaningful stakeholders engagement tools and approaches that align with the recommended actions. The project design has been based on LDN Checklist which is aligned with the multiple benefits philosophy and participatory approaches including all the stakeholder and particularly focusing on the vulnerable groups including women.

The project design has further used UNDP Stakeholders engagement tools and incorporates several features to ensure ongoing and effective stakeholder participation in the project's implementation. UNDP is committed to ensuring meaningful, effective, and informed participation of stakeholders in the formulation and implementation of UNDP Programmes and Projects.

Principally UNDP requires that its projects are designed with meaningful and effective participation of all stakeholders. This foundation for sustainable development assures that local people and other stakeholders play a key role in advancing achievement of the sustainable development goals (SDGs). UNDP's commitment to stakeholder engagement arises from internal policies, procedures, and strategy documents as well as key international human rights instruments, principles and numerous decisions of international bodies, particularly as they relate to the protection of citizens' rights related to freedom of expression and participation.

The Project's Stakeholders Engagement Plan has captured the roles and responsibilities of the key stakeholders in achieving the intended GEB and removing the identified

GEF UNDP
Project Document
Annex 16
Stakeholder
Engagement
Plan's
GEF UNDP
project Document
Annex 17
Knowledge
Management Plan

<p><i>Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences.</i></p> <p>Partly. Gender differentiated risks and opportunities will be considered in the project design. STAP is encouraged by the project's plan to apply gender sensitive data, identify appropriate indicators, and build on gender mainstreaming lessons from other projects. STAP would like for the gender methodology, and plan to be described further in the project document. In addition, STAP suggests considering whether gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed in the project.</p>	<p>Thank you for the recommendations, the PPG expert team has carefully considered the issues raised and with the support of a gender expert the project design includes a Gender Action Plan and gender sensitive activities and indicators mainstreamed throughout the project's final strategy.</p> <p>Furthermore, the project design has considered UNDP and GEF gender policies and the gender analysis has been highlighting key gaps that are prioritized by the GEF for project and programme planning namely: unequal access to and control over natural resources; unbalanced participation in decision-making in environmental planning and management at all levels; unequal access to social and economic benefits and services.</p>	<p>GEF UNDP Project Document Annex 18 Gender Action Plan</p>
---	--	--

<p><i>Are the identified risks valid and comprehensive? Are the risks specifically, for things outside the project's control?</i></p> <p>Partly. The social risks and mitigation strategies are described in the PIF. It is clear that stakeholder engagement and deliberation processes will be implemented to address social differences, or risks, that may hamper the project. However, less clear is how the project intends to address climate risk.</p> <p>For climate risk, and climate resilience measures:</p> <p>STAP suggests adding climate projection data for Turkmenistan in section 1 - to strength the context of the problem situation. If climate data is available for the project site, STAP recommends adding this data. The World Bank's climate knowledge portal is one source for climate data that the project developers may wish to use: https://climateknowledgeportal.worldbank.org/ Furthermore, STAP recommends developing the interventions bearing in mind the effects of climate change on temperature and precipitation. Key questions the project developers should ask during the project design are listed to the right. Both temperature and precipitation will be affected by climate change. STAP also recommends for the project developers to consider: 1) the period of time the intervention is expected to contribute to global environmental benefits, and how the activities may be affected by climate change; 2) how each intervention will be impacted by climate variability, or weather-related disasters (e.g. droughts); and, 3) how might climate, and non-climate stressors (e.g. social changes mentioned in the PIF), interact to exacerbate climate risks? The project developers may wish to refer to U.S. AID's Climate Risk and Management tool: https://www.climatelinks.org/resources/climate-risk-screening-management-tool; and STAP's guidance on climate risk assessment: http://www.stapgef.org/stap-guidanceclimate-risk-screening . STAP also recommends the team to access recent research on the interconnections between climate change, water resources and food in Turkmenistan. Water availability is central to this project. Duan, Weili, Yaning Chen, Shan Zou, and Daniel Nover. "Managing the water-climate-food nexus for sustainable development in Turkmenistan." <i>Journal of Cleaner Production</i> 220 (2019): 212-224.</p>	<p>Thank you. We carefully considered climate risks throughout the project and the project employed SESP and Risk Log Matrix that would help address these risks in an adaptive way. The project team has carefully reviewed the recommended actions and resources and we have included the relevant elements in the project's final strategy in order to address climate risk.</p> <p>Climate projection information has been added to the description of problem situation. Furthermore, the project team has reviewed the (scarce) available climate information for the targeted regions. The project strategy and final design has been built on the available climate vulnerability assessments for the targeted regions done under GEF SCCF project ? Supporting resilient livelihoods in agricultural communities in drought prone areas of Turkmenistan? and the available multi-cluster maps for the validation of selected intervention areas.</p> <p>The project design include activities that demonstrate and put in place irrigated and non-irrigated arable land measures that are grounded by scientific principles. Furthermore, the envisaged hydroclimatic models based on climate change scenarios and climate risk assessment for water sector and land capital that will be implemented under Output 1.1. will identify and prioritize SLM measures to address climate risk. In addition, participatory approaches and the results of these assessments will enable stakeholders to adapt the management of natural resources to any given context and threats. Attention to the</p>	<p>GEF-UNDP Project Document Section I Development Challenge, sub Section 1.1</p> <p>GEF-UNDP Project Document Output 1.1; Output 1.2; Output 1.3; Output 1.4; Output 2.3;</p> <p>GEF-UND Project Document Annex 7 UNDP Risk register (Risk 8)</p>
--	---	--

How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately.

Has the sensitivity to climate change, and its impacts, been assessed?

Have resilience practices and measures to address

projected climate risks and impacts been considered? How will these be dealt with.

What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?

See above.

The project team has carefully considered these aspects and (as explained in the above section) the available climate change information and projected scenario 2020-2050 and had conducted preliminary climate risk assessment during the PPG stage through information review and local consultations with farmers, local authorities and different science institutes.

Climate change and changing of precipitation patterns, water scarcity and poor pasture watering infrastructure accentuates the desertification process, the productivity of pastures and grazing sites being severely affected (during dry years, a reduction of the volume of forage by 3-5 times is observed). Predicted climate change impacts include: (i) an increase in average annual temperature of between 4.2 and 6.1 degree Celsius by 2050[2] (ii) a reduction in annual average of rainfall between 15-56% by 2050[3] (iii) an increase in average regional evaporation rates of 47% by 2050 (iv) an increase in the frequency and intensity of drought and flood occurrence (v) a 15% reduction in Amudarya River flow rates (vi) a 39% reduction in the flow rates of other river systems.

The project design include activities that demonstrate and put in place irrigated and non-irrigated arable land measures that are grounded by scientific principles and participatory methods mechanisms that will enable stakeholders to adapt the management of natural resources to any given context and threats. Attention to the current and potential impacts of climate change has been built-in to all aspects of the project.

GEF-UNDP
Project Document
Section I
Development
Challenge , sub
Section 1.3

GEF-UNDP
Project Document
Output 1.1; Output
1.3;

Is there adequate recognition of previous projects and the learning derived from them?

Yes. However, STAP suggests describing further the lessons from previous, or on-going, initiatives should be detailed in the project document. Also, the project's theory of change and component 3 should describe how lessons from previous projects are being used to inform the design of the project, and scale-up learning on sustainable land and water management in the Aral Sea Basin.

Thank you for the suggested approach. The project team has carefully considered the previous programmes and projects? generated knowledge and experience and captured the lessons learned in the Knowledge Management Plan. The project has reviewed several approaches and promising good practices in sustainable land management and biodiversity conservation, that have been implemented during the past years together with the local communities and stakeholders. Barriers persist, represented mainly by a lack of an enabling environment, including prioritized policies and investments that would drive transformational results in tackling desertification, land degradation, water scarcity and biodiversity decline in Turkmenistan. The project will build on the tested methods and practices within previous donor funded projects, by working with the local stakeholders to further strengthening their capacities for SLM measures and incentivizing a larger up taking of the tested good practices.

GEF-UNDP
Knowledge
Management Plan
Annex 19

What overall approach will be taken, and what knowledge management indicators and metrics will be used?

What plans are proposed for sharing, disseminating and scaling up results, lessons and experience?

STAP suggests building adaptive management, learning and knowledge into the project design, which should rely on LDN's systems thinking principles. Implementing adaptive governance has an important role to play in this regard. Adaptive governance is defined as "Adaptive Governance helps you to deal with complexity, uncertainty and rapid change in legitimate, equitable and effective ways. It involves creating governance structures and processes that enable adaptability, trusted collaboration and Active Learning. This is achieved through establishing key roles, responsibilities, decision-making processes and accountabilities in the governance of intervention design, implementation and assessment." The project developers may wish to consider the Resilience, Adaptation Pathways and Transformation Approach, version 2 as a guide on how to embed adaptive governance in the project:
<https://research.csiro.au/eap/rapta/>

Thank you for the suggested approaches. The team has carefully considered the recommended resources and the Knowledge Management approach includes elements of the RAPTA and focuses on learning as a mean to achieve adaptive management. Furthermore, the Knowledge Management Plan approach is geared towards addressing capacity gaps and barriers and includes a range of practices to identify, capture, store, create, update, represent and distribute knowledge for use, awareness and learning.

The project's proposed KM approach includes seven elements aligned with the GEF requirements to foster learning and sharing from relevant projects and programmes, initiatives and evaluations that will contribute to the project's overall impact and sustainability : (i) The first element includes a comprehensive overview of existing lessons learned and good practices that informs the project concept, and shows how it will build on the tested methods and practices within previous donor funded projects, by working with the local stakeholders to further strengthening their capacities for SLM measures and incentivizing a larger up taking of the tested good practices; (ii) the KM plan then analyses and plans ways to learn from relevant projects, programmes and initiatives and evaluations, and lists several key initiatives that has on one hand informed the project's design and on the other hand will further support learning and adaptive approaches. (iii) the KM Plan further analyses a series of processes that are suggested to capture, assess and document information, lessons learned, best practices and expertise generated during project implementation; (iv) the fourth element of the KM Plan is proposing tools and methods

GEF Council comments at the GEF December 2019 Work Programme (Germany)

<p>Germany strongly encourages knowledge exchange with related regional and bilateral projects, especially with the following:</p> <ul style="list-style-type: none"> ●?Cross-border water management - Strengthening regional cooperation in the field of cross-border water management 2010-2020? (financed by German Foreign Office), which has cooperated with IFAS since 2009; ●?Climate smart agriculture in Central Asia (financed by the German Federal Ministry for Economic Cooperation and Development (BMZ)), which is still active until 2020 ●?Sustainable and climate-sensitive land use for economic development in Central Asia? (financed by BMZ), which is active in the forestry sector in Tajikistan, ●?Technology-based adaptation to climate change in rural Tajikistan and Kyrgyzstan? (financed by the German Climate and Technology Initiative (DKTI)) 	<p>Thank you for the recommendations. The project team has carefully analyzed the suggested initiatives and the final design is reflecting on the lessons learned from previous GIZ supported initiatives and further cooperation opportunities , and these have been described under the Knowledge Management Plan. For example, the knowledge generated by the GIZ supported Integrated Land Use Management Approaches (ILUMA) in the Central Asian region in particular under the ? Sustainable and Climate Sensitive Land Use for Economic development in Central Asia? (2008-2015) has been considered in the project design especially elements of the multi-stakeholders participative land use planning.</p> <p>The new GIZ Programme ?Integrative and Climate sensitive land Use in Central Asia? 2021-2024 will further promote the ILUMA (Integrated Land Use Management Approaches) and will focus particularly on ensuring that integrative land use approaches are better anchored at national and regional levels. Therefore, the GEF project will coordinate with the new GIZ programme and will explore the possibility of the organization of joint capacity building events targeting Integrated LDN compliant Land Use Management Planning.</p>	<p>GEF-UNDP Project Document Knowledge Management Plan GEF-UNDP Project Document Baseline Programmes and Projects</p>
--	---	---

Germany would also recommend making the documented lessons (output 3.2) publicly available (e.g. through a project website) instead of only sharing it with key stakeholders. There is high interest in the international community on using LDN principles for land use planning. UNCCD's Science Policy Interface (SPI) will work on this in its current work plan (cf. decisions of UNCCD COP 14).

Thank you. The project has included these recommendations and envisaged a variety of means for sharing the lessons learned and knowledge making them publicly available. The lessons learned and best practices will be compiled, collated, and packaged into several formats (e.g., project web site, brochures and flyers, electronic forms, short videos, and impact documentaries) that are geared towards specifically targeted groups and audiences but also to general public, using community groups and/or NGOs to assist in capturing lessons learned and best practices. The project will also support the participation of government, private, and community stakeholders in conferences to share experiences, best practices, and lessons learned about biodiversity conservation and SLM/water management in production landscapes, and in global/ regional forums with for information exchange. Knowledge exchange at regional level will engage the national representatives in IFAS and the project's support to the set-up of a Special Platform for Multilateral Cooperation and Information Sharing on environment and water issues.

Knowledge sharing at regional level will be aligned with the national priorities within the framework of the Joint Communique of the Council of the Heads of the State-Founders of the International Fund for Saving the Aral Sea (2018), under the Regional Environmental Protection programme for Sustainable Development of Central Asia (REP4SD CA) adopted by the Ministers of Environment of Central Asia States in Nukus, Uzbekistan (2019) and under the Aral Sea Basin Assistance Programme 4 (ASBP-4). Sharing data and planning, harmonizing programmatic

Based on lessons learned regarding the integration of LDN in integrated land use planning process, Germany kindly asks the agency to review whether the project is aligned to the timeframe of current land use planning processes and to define concrete entry points into these processes.

Thank you for the recommendation. As suggested, the PPG expert team has been in constant dialogue with the national counterparts during the project development to ascertain the timeliness of the proposed interventions options. The project's planned interventions at policy level, consulted with the national counterparts are the following:

1) The project will support the *Action Plan to Combat Desertification* (led by the government). The project will provide technical expertise and technical inputs into the development/update of the Action Plan to Combat Desertification, to include the project's results on the *regional LDN target setting* process;

2) The project will develop gender-sensitive bylaws to the *Law on Pastures* in order to include pasture use regulations and institutional arrangements for mandatory pasture use monitoring responsibilities at local level (this activity will build on the previous GIZ supported pasture law amendments under the ? Sustainable and Climate Sensitive Land Use for Economic development in Central Asia? (2008-2015).

3) The project will further support amendments to the *Land Code* in order to introduce the definition of the LDN concept and means to implement it through mandatory integrated land use planning, that will provide for the neutrality mechanisms and ?counterbalancing? of newly degraded areas by restoring land that is already degraded, which is what distinguishes LDN from existing strategies to combat land degradation.

France

Interesting project considering the importance of integrated land and water resource management for the region, the Aral Sea Basin being strongly affected. The project is also contributing to preservation/restoration of ecosystems and biodiversity. The project does plan to adapt integrated management practices to the nature of the land (irrigated agriculture, pasture, critical ecosystems).

However, France has some reservations on the management of irrigated land: the project description suggests that the preferred approach for improving water use is more efficient irrigation techniques. It seems essential to integrate at least an assessment of agricultural water needs and the possibilities of adapting crops and other practices to limit the need of water.

Thank you for these comments and positive review of the project. Indeed, as suggested the project includes a comprehensive problem assessment including a climate risk assessment on water resources in the targeted districts in Dashoguz and Lebap provinces, aiming at planning the scarce water resources and promoting irrigation and crop farming practices that will reduce the water consumption and soil salinity.

The project approach is based on Integrated Water Management resources (IWRM) and include extensive consultations with counterparts in Uzbekistan.

The problem assessment will cover both supply and drainage canals, irrigation and other on-farm management practices such as irrigation scheduling. Working with the State Committee on Water Resources and with the land-melioration expeditions, the project will collect and analyze data on the current water supply patterns and water use among different sectors, current needs of agriculture sector and volumes and timing of water releases, actual condition of collector-drainage network and soil salinization on irrigated lands in the targeted districts and on the targeted areas (100,000 ha). Then, the project will ensure the completion of Baseline analysis and dissemination of the results to different stakeholders as widely as possible, including Uzbekistan water managers and the representatives of the Amudarya Water

Organization[4] to ensure a critical feedback to the registered problems. The Baseline assessment will include: analysis of the growing demand of irrigation water; water use patterns and water wastage; water needs among different sectors and reconciliation; gender

GEF-UNDP
Project Document
Output 1.3

[1] <https://www.unccd.int/news-events/competition-design-land-use-planning-software-land-degradation-neutrality>

[2] These estimates are based on the findings of five general atmosphere and ocean circulation models (GCM) reported in Turkmenistan's Initial Communication on Climate Change (1998). The GCM with the most plausible results on temperature predictions was the UK89 model (equilibrium model of the United Kingdom Meteorological Agency). According to this scenario, temperature is predicted to increase by 5.5°C by 2050.

[3] The GDFL model scenario (equilibrium model of Geophysical Fluid Dynamics Laboratory, University of Princeton, USA), however, predicted no change in rainfall (Turkmenistan's Initial National Communication on Climate Change, 1998).

[4] <http://www.icwc-aral.uz/bwoamu.htm>

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

Project preparation activities implemented	GEF Amount US \$		
	Budgeted Amount	Amount spent to date	Amount committed
Preparatory Technical Studies & Reviews	62,840.00	50,205.05	-
Formulation of the UNDP-GEF Project Document, CEO Endorsement Request, and Mandatory and Project Specific Annexes	47,160.00	24,281.10	27,433.05
Validation Workshop and Report	10,000.00	6,313.62	5,900.55
Total	120,000.00	80,799.77	33,333.60

*Budget balance USD 5,866.63 (status at 12 April 2021)

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 up to one year of CEO

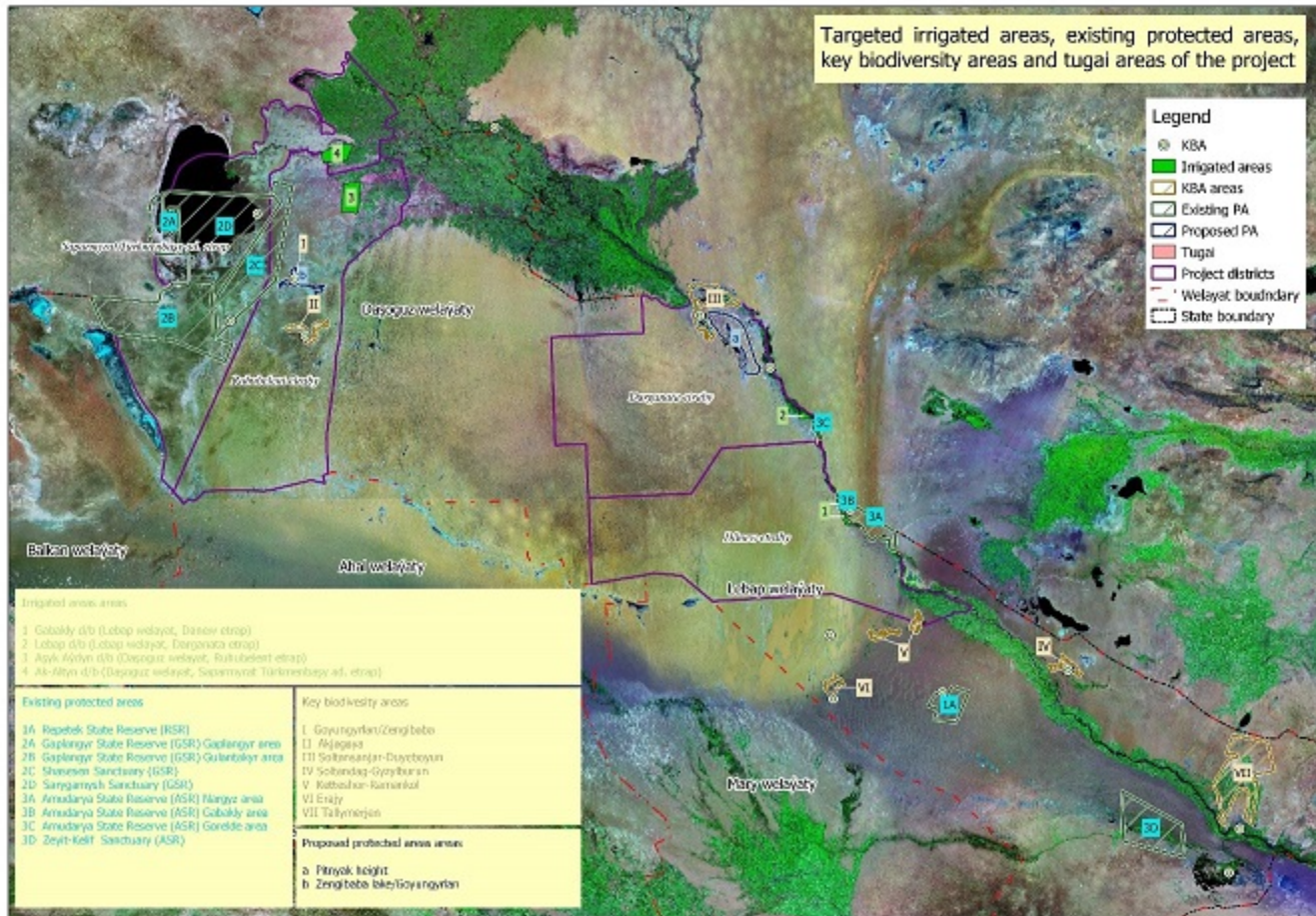
Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

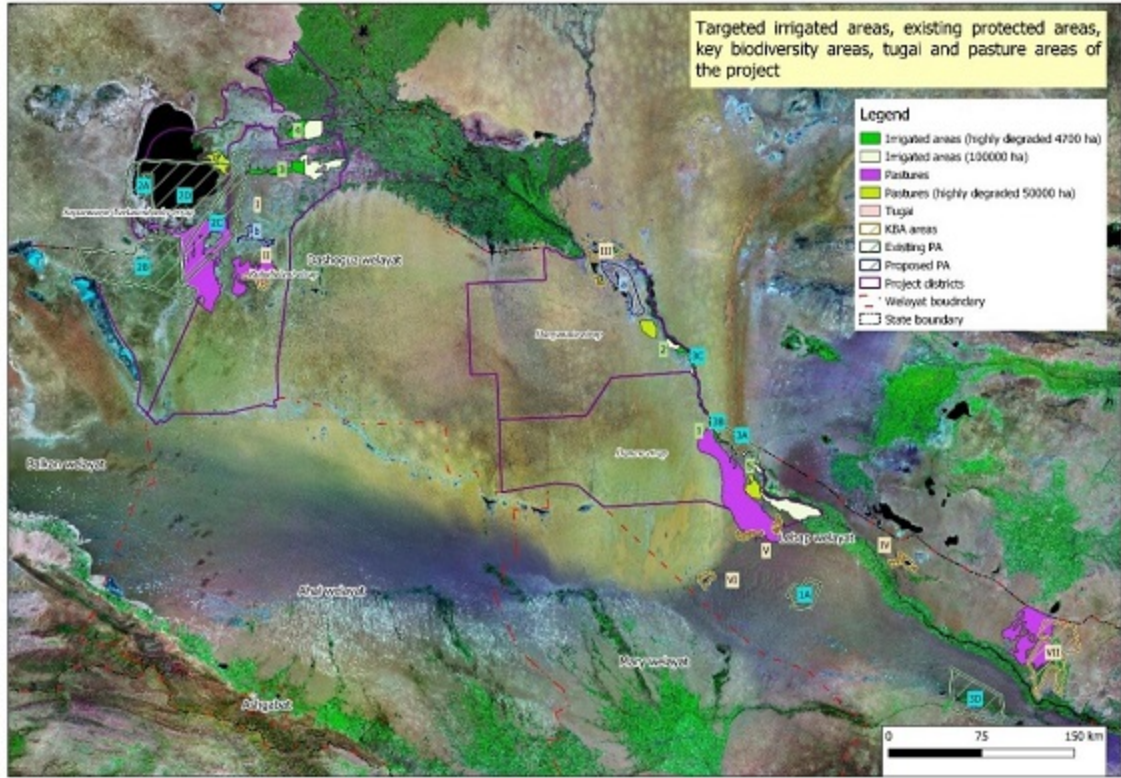
The unused PPG funds will be returned to the GEF.

ANNEX D: Project Map(s) and Coordinates

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

Project map and geospatial coordinates





Project sites	Centroid		Extent minimum		Extent maximum	
	X	Y	X	Y	X	Y
Danew district	39° 42' 41.25"	61° 49' 59.78"	39° 6' 26.93"	60° 29' 55.13"	40° 16' 47.14"	63° 29' 49.09"
Darganata district	40° 36' 16.95"	61° 12' 11.09"	40° 0' 1.08"	60° 14' 59.38"	41° 17' 29.54"	62° 23' 36.01"
Saparmurat Turkmenbashi district	41° 34' 13.38"	57° 37' 59.82"	40° 5' 30.72"	56° 29' 47.97"	42° 47' 43.98"	59° 2' 44.19"
Ruhubelent district	41° 5' 19.02"	58° 9' 23.44"	40° 1' 4.06"	57° 10' 14.83"	42° 11' 41.31"	59° 7' 29.52"
Lebap region	38° 53' 58.44"	63° 11' 54.92"	36° 51' 23.04"	60° 14' 59.38"	41° 17' 29.54"	66° 41' 3.49"
Dashoguz region	41° 9' 25.38"	58° 42' 43.79"	39° 27' 56.10"	56° 29' 47.97"	42° 47' 43.98"	61° 0' 39.24"

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity
		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		(Executing Entity receiving funds from the GEF Agency)[1]
		Sub-component 1.1	Sub-component 2.1	Sub-component 3.1					
Furniture / Equipment	Video conference cameras (2) for Zoom meetings and trainings: loudspeakers, projectors and projector screens, AV cables and other accessories.	34,200			34,200			34,200	Ministry of Agriculture and Environment Protection
Furniture / Equipment	Procurement of portable computers (6), monitor (6), printers (3), software and networking requirements for Component 1	12,950			12,950			12,950	Ministry of Agriculture and Environment Protection

Furniture / Equipment	Includes costs of procurement of materials and goods such as: (i) Grass seed stock, fencing materials; fertilizers, fodder ; gabions etc to support the rehabilitation/restoration of degraded pastures (Output 1.4). Total cost:\$ 25,000; (ii) Materials and goods for tree nurseries (seeds, fencing materials, fertilizers, pruning shears, root stock etc (Output 1.2) . Total cost: \$20,000 (iii) First aid kit. Total cost \$600.	45,600		45,600			45,600	Ministry of Agriculture and Environment Protection
Furniture / Equipment	Costs of projector (2) and laminator (2).	6,100		6,100			6,100	Ministry of Agriculture and Environment Protection
Furniture / Equipment	Procurement of software, database and networking requirements for Component 2 (2 PCs and monitors; 2 laptops; 3 tablets; 1 printer , software and external storage device).	8,430		8,430			8,430	Ministry of Agriculture and Environment Protection

Furniture / Equipment	The costs of procurement of IT equipment (15 portable computers; monitor and printer/scanner) in support of training activities and various presentations, work with NGOs and volunteers.			32,467	32,467		32,467	Ministry of Agriculture and Environment Protection
Furniture / Equipment	Video conference camera;loudspeaker, projector and projector screen to support Zoom meetings.			6,000	6,000		6,000	Ministry of Agriculture and Environment Protection
Furniture / Equipment-Vehicle	Costs related to the procurement of equipment and furniture in support of Component 1: (i) Laboratory set for rapid soil analysis. Total cost (\$8,000); (ii) Field meteo-station. Total cost: \$10,000; (iii) Water pump and generator. Total cost \$5,200; (iv) Camera, bag, tripod. Total cost: \$4,000; (v) On-farm desalination plant. Total costs\$ 8,500; (vi) Equipment to support field works (tent, sleeping bags; polyethylene film; ropes for transects; bags for soil and plant samples; flashlights; water tank (40L); field kitchen utensils). Total cost \$48,850	84,550			84,550		84,550	Ministry of Agriculture and Environment Protection

Furniture / Equipment-Vehicle	<p>Includes costs of purchasing basic field, monitoring and inspection equipment for the PAs (Output 2.1) (binoculars, camera traps, mobile communication devices; GPS navigators, power sources, generators, satellite collars, field uniforms and gear) Total cost: \$188,230; b) Costs of procurement of two off road vehicles to enable monitoring and inspection of sanctuaries including new PA/sanctuary. Total cost:\$60,000. c) Costs of furniture and equipment to strengthen the training centres in each targeted PAs (2x\$2000). Total cost: \$ 4,000</p>		252,230		252,230		252,230	Ministry of Agriculture and Environment Protection
--------------------------------------	--	--	---------	--	---------	--	---------	--

<p>Contractual Services ? Individual</p>	<p>Cost of contractual appointments to provide support of the Outputs under Component 1 : a)Project Water specialist (Coordinator of Output 1.3, Output 1.2 (Act. 1.2.1); Output 1.4/Act, 1.4.3). Total Cost \$101,844 (54 months/\$1886/month) during years 1-5; b) Pasture/Forest Specialist (Coordinator of Outputs 1.2; Output 1.4 and Output 2.3). Total cost: \$101,844 (54 months / \$1886/month) years 1-5; c) Local field coordinator. Total cost \$56,214 (54 months/\$1041/month);d) pro-rata cost of PM (1/3rd of 60% of the total cost i.e. \$2843/month for years 1-5) Total cost: \$34,116. e) Innovation Challenge (Output 1.2/Act. 1.2.4) consist of a contest of innovative ideas to promote innovative business solutions, technologies, policies, regulations and financial instruments in support of achievement of LDN. Total costs: \$100,000 (up to \$10,000/each award).</p>	<p>394,018</p>			<p>394,018</p>		<p>394,018</p>	<p>Ministry of Agriculture and Environment Protection</p>
---	--	----------------	--	--	----------------	--	----------------	---

<p>Contractual Services ? Individual</p>	<p>Contractual appointment of a project team of experts in support of Component 2:a) PAs Project Specialist (Output 2.1 Output 2.2 Output 2.3). Total cost: \$113,160 (60 months/1886/month) during years 1-5; b) Local field coordinator Total cost \$56,214 (54 months/\$1041/month);d) pro-rata cost of PM (1/3rd of 60% of the total cost i.e. \$2843/month for years 1-5) Total cost: \$34,116</p>		<p>203,490</p>		<p>203,490</p>		<p>203,490</p>	<p>Ministry of Agriculture and Environment Protection</p>
<p>Contractual Services ? Individual</p>	<p>Contractual appointments to provide technical support and coordination of all outputs/activities under Component 3 and implementation of the KM Plan: a) KM Specialist (Component 3 Coordinator). Total cost:\$113,160 (60 months/\$1886/month) b) pro-rata cost of PM (1/3rd of 60% of the total cost i.e. \$2843/month for years 1-5) Total cost: \$34,116</p>		<p>147,276</p>	<p>147,276</p>			<p>147,276</p>	<p>Ministry of Agriculture and Environment Protection</p>

Contractual Services ? Individual	Includes (i) 40% of the costs of Project Manager salary for 5 years (\$2843/month). Total cost of 40% portion : \$68,232; (ii) Full cost of a Project Financial and Administrative Assistant (\$1232/month) during years 1-5. Total cost: \$73,920; (iii) Full cost of driver (part time) (\$ 630/month). Total cost: \$30,263					172,415	172,415	UNDP
--	--	--	--	--	--	---------	---------	------

<p>Contractual Services ? Company</p>	<p>Contractual appointment of companies to deliver: (i) Construction of small water-regulating structure on on-farm canals (flow rate up to 1,3) Total cost \$25,000 (Act 1.3.3) ; (ii) Construction (including design) of drip irrigation systems on selected demonstration plots Total costs \$ 45,000 (Act. 1.3.3) (iii) Restoration and cleaning of on farm irrigation canals (on 10km). Total costs \$ 15,000 (Act. 1.3.3) ; (iv) Restoration and cleaning of on-farm collector drainage canals (10km).Total cost \$15,000 (Act. 1.3.3); (v) Implementation of anti-filtration measures on small section canals on approx.. 100 ha (flow rate of up to 0,75 m3).Total cost \$7,250 (Act. 1.3.3); (vi) Preparation of irrigated fields with laser equipment on approx.100ha.Total cost \$35,000 (Act. 1.3.3); (vii) Restoration of demonstration plot of 20 ha marginal degraded saline land. Total cost \$40,000 (Act. 1.2.1); (viii) Construction of 4 water wells on highly degraded pastures and refurbishment of 6 wells. Total cost \$86 480 (Act</p>	<p>736,230</p>			<p>736,230</p>		<p>736,230</p>	<p>Ministry of Agriculture and Environment Protection</p>
--	---	----------------	--	--	----------------	--	----------------	---

<p>Contractual Services ? Company</p>	<p>Includes: a) Helicopter rental costs to support large scale aerial survey of wild ungulates during inception phase and at end project (\$20,000); b) Costs of construction of 10 observation/monitoring towers in both PAs and respective sanctuaries (\$15,000); c) Costs with the construction of two new cordons in both targeted PAs and sanctuaries (\$40,000); d) Building costs of two new enclosures for wild ungulates (gazelles, kulans, deers) (\$10,000); e) Surveying company or institution to survey the cadastral boundaries of the buffer areas of the two targeted PAs and their sanctuaries under the project scope, physically locate and demarcate boundary corner beacons and prepare survey diagrams for the state land cadastre and land use register (Output 2.1 and Output 2.3) (\$20,000); f) Building costs of 5 new water wells for wildlife (3 in Gaplangyr reserve/sanctuaries and 2 in Amudarya reserve/sanctuaries) (\$60,000); g) Costs related to</p>	<p>175,000</p>		<p>175,000</p>		<p>175,000</p>	<p>Ministry of Agriculture and Environment Protection</p>
--	---	----------------	--	----------------	--	----------------	---

<p>Contractual Services ? Company</p>	<p>Includes costs: a) contractual costs of a Media PR company to support the implementation of the Communication Plan. Main indicators (KM Indicators 26,27): (i) organization and delivery of 20 awareness and education events on LDN, Sustainable Water Management, Sustainable Biodiversity management and ecosystem services importance to livelihoods (ii) Design and delivery of 20 radio talk shows for farmers including specific segments dedicated to women farmers (iii) Organization of 10 Exhibition Fairs with Arts & Crafts and natural local products (medicinal herbs, dried fruits, vegetables) from the project areas in cities like Turkmenabat, Dashoguz, Chadzou and in Ashgabat (prioritizing the support to the participation of women and youth trainees under Act 3.1.2 facilitating marketing of their products) (iv) Design and maintenance of the project web site and social media presence (v) Awareness questionnaire at the end of the</p>		77,570	77,570		77,570	<p>Ministry of Agriculture and Environment Protection</p>
--	--	--	--------	--------	--	--------	---

<p>Grants</p>	<p>Micro-grant scheme implemented based on UNDP Low Value Grants Policy (Output 2.3) to promote biodiversity friendly agricultural practices in production zones. Total cost:\$400,000</p>		<p>400,000</p>		<p>400,000</p>		<p>400,000</p>	<p>Ministry of Agriculture and Environment Protection</p>
<p>International Consultants</p>	<p>Contractual appointment of international specialists in support of Component 1: a) Full cost of an International LDN Expert (Output 1.1.). Total cost \$ 75,000 (100 days/\$750/day) during years 1-3; b) Full cost of an International Satellite Image Analyst (Output 1.1 and 1.2). Total cost \$30,000 (40 days/\$750/day) Years 1-3; c) Hydroclimatic modelling expert (Output 1.3). Total cost \$30,000 (40 days/\$750/day) during years 1-3. d) International Integrated Land use Planning Expert (Output 1.1 Output 2.2). Total cost \$75,000 (100 days/\$750/day) during years 1-3. e)Pro-rata (1/3) cost (\$37,500) of the International Technical Advisor (ITA); Total cost 112.5k (150 days/\$750/day).</p>	<p>247,500</p>		<p>247,500</p>		<p>247,500</p>	<p>247,500</p>	<p>Ministry of Agriculture and Environment Protection</p>

<p>International Consultants</p>	<p>Contractual appointment of international specialists in support of Component 2 :a) Pro-rata (1/3) cost (\$37,500) of the International Technical Advisor (ITA); Total cost 112.5k (150 days/\$750/day); b) International Economist (agro-biodiversity). Total cost \$15,000 (20 days/\$750/day).</p>		52,500		52,500		52,500	<p>Ministry of Agriculture and Environment Protection</p>
<p>International Consultants</p>	<p>Contractual appointment of international specialists in support of results under Component 3: a) Pro-rata (1/3) cost(\$37,500) of the International Technical Advisor (ITA); Total cost 112.5k (150 days/\$750/day); b) Costs of international key note speakers to deliver presentations to various events organized within the framework of Component 3. Total costs: \$14,500</p>		52,000		52,000		52,000	<p>Ministry of Agriculture and Environment Protection</p>

International Consultants	<p>a) Costs of GEF Mid Term Evaluation international consultant (Output 3.2. Total cost:\$14,000 (20 days/\$750/day);b) Costs of GEF Terminal Evaluation international consultant (Output 2.3). Total cost: \$21,000 (30 days/\$750/day);</p>				-	35,000	35,000	Ministry of Agriculture and Environment Protection
----------------------------------	--	--	--	--	---	--------	--------	--

<p>Local Consultants</p>	<p>Contractual appointment of a team of local experts to provide professional, technical and scientific support to activities under Component 1 and coordination with some activities under Component 2, as follows: a) 2x Pasture agronomist (Output 1.1; Output 1.2; Output 1.4; Output 2.3). Total cost \$19,200 (120 days/\$80/day) during years 1-5. b) GIS expert (Output 1.1) Total cost \$22,000 (220 days/\$100/day) during years 1-5; c) Local technical support expert (Output 1.2-1.4; Output 2.3) Total cost \$48,000 (480 days/\$100/day) during years 2-5; d) Landscape specialist (Output 1.1) Total cost \$3,200 (40 days/\$80/day) during year ; e) 2x Soil specialist Total cost \$12,800 (80 days/\$80/day) during years 1-2; f) 2x Land-use experts Total cost \$16,000 (100 days/\$80/day) during years 2-3; g) Irrigation and Crop Water requirement expert (Output 1.3) Total cost \$19,200 (240 days/\$80/day) during years 1-5; h) Agriculture/agroforestry Expert (Output 1.2; 1.4) Total cost \$8,000 (100 days/\$80/day) during years 1-5;</p>	<p>229,000</p>			<p>229,000</p>		<p>229,000</p>	<p>Ministry of Agriculture and Environment Protection</p>
---------------------------------	---	----------------	--	--	----------------	--	----------------	---

<p>Local Consultants</p>	<p>Contractual appointment of a team of local experts to provide professional, technical and scientific support to activities under Component 2, including consultation, KBAs/IBAs and PAs zonation planning, zonation mapping and preparing the PAs management plan, local community outreach, as follows: a) GIS Specialist (Output 2.1; Output 2.3). Total cost \$24,000 (240 days/\$100/day) during years 1-4; b) Local technical assistant (PA Output 2.1, Output 2.2, Output 2.3). Total cost:\$48,000 (480 days/\$100/day) during years 1-5; c) 2x Local Biodiversity/PAs experts (Output 2/Output 2.2 Output 2.3). Total cost: \$48,000 (2x 240 days/\$100/day) during years 1-5; d) Legal PAs expert (Output 2.1; Output 2.3). Total cost: \$3,000 (30days/\$100/day) during year 3; d) 2x PAs inspection/patrolling expert (Output 2.2; Output 2.3). Total cost: \$20,000 (2x100 days/\$100/day) during years 2-5; e) Ecotourism technical expert (Output 2.1). Total cost:\$10,000 (100 days/\$100/day) during years 2-4;</p>	<p>269,000</p>	<p>269,000</p>	<p>0</p>	<p>269,000</p>	<p>0</p>	<p>Ministry of Agriculture and Environment Protection</p>
---------------------------------	--	----------------	----------------	----------	----------------	----------	---

<p>Local Consultants</p>	<p>Contractual appointment of a team of local experts to provide professional, technical and scientific support to activities/ outputs under Component 3: a)KM Consultant to systematize project experience (Output 3.2). Total costs:\$12,000 (120 days x 100/day) during years 3-5; b) Communication specialist (Output 3.1, 3.2). Total cost: \$36,500 (365 days x \$100/day) during years 1-5; c) Institutional coordination/Regional water management issues Specialist (Output 3.1). Total cost: \$12,000 (120 days/ \$100/day) during years 2-5; d) 2xLocal extension officers (in Dashoguz and Lebap) . Total cost \$24,000 (120 days/ \$100/day) during years 2-5;</p>			84,500	84,500				<p>Ministry of Agriculture and Environment Protection</p>
---------------------------------	---	--	--	--------	--------	--	--	--	---

<p>Local Consultants</p>	<p>a) National M&E (GEF midterm evaluations). Total cost: \$1,600 (20 days/80/day); b) National M&E (GEF Terminal evaluation). Total cost:\$2,400 (30 days/\$80/day);c) M&E Programme Monitoring Expert (Global Environmental Benefits) (Output 3.2) Total cost: \$6,000 (\$60 days/100/day).</p>				-	10,000	10,000	<p>Ministry of Agriculture and Environment Protection</p>
---------------------------------	---	--	--	--	---	--------	--------	---

<p>Trainings, Workshops, Meetings</p>	<p>Costs with the organization of the training workshops and roundtable meetings in support of Component 1: (i) 3 training workshops on LDN in the context of MEAs/SDGs (in Ashgabat). Total costs \$6,000; (ii) 6 training workshops on LDN integration into land use planning for local and national stakeholders. Total cost \$18,000; (iii) Training on EO datasets and LDN metrics supported by satellite imagery; processing satellite imagery for monitoring soil condition (3day seminar in Ashgabat). Total cost \$5,000; (iv) International LDN workshop on challenges and opportunities of LDN target setting at sub-national levels. Total cost:\$50,000; (v) 4 Training workshops on land and water legislation (one in each district) in support of land leasing processes and bank applications. Total cost \$12,000; (vi) 8 Training on SLM and Sustainable Pasture and Forest Management. Total cost: \$ 24,000; (vii) 8 training of WUAs on sustainable water</p>	<p>144,000</p>			<p>144,000</p>		<p>144,000</p>	<p>Ministry of Agriculture and Environment Protection</p>
--	---	----------------	--	--	----------------	--	----------------	---

Trainings , Workshops, Meetings	Includes costs with the delivery of training workshops to PAs staff, environmental inspectors, border officials, ministry counterparts: a) 12 trainings for PAs staff and environment inspectors and border police. Total cost: \$19,000; b) 3 trainings for central and local authorities in Ashgabat. Total cost:\$10,500.		29,500		29,500			29,500	Ministry of Agriculture and Environment Protection
Trainings , Workshops, Meetings	Includes a) Regional trainings on LDN/SLM of 50 extension service providers (jointly with AF Project); (\$40,000); b) Costs of 10 training seminars on alternative livelihoods and 5 workshops on eco-tourism, handicrafts and product marketing (\$17,500); c) Costs with the organization of 5 Diplomacy Conferences in Ashgabat (\$25,000).			82,500	82,500				Ministry of Agriculture and Environment Protection
Trainings , Workshops, Meetings	Includes Inception and Final project conferences (\$10,000)				-	10,000		10,000	Ministry of Agriculture and Environment Protection

<p>Travel</p>	<p>Includes: a) Includes travel expenses related to the implementation of all the activities under Outputs 1.1, Output 1.2, Output 1.3 and Output 1.4, including for water use assessments (Act 1.3.1) pastures survey (Act 1.4.1), LDN baseline identification and land use planning assessment (Act. 1.1.5) LDN metrics ground-truthing (Act. 1.1.4); at demonstration plots (Act.1.2.2) . Total costs \$37,570; b) Travel costs (including accommodation and incidental expenses) of national and international experts and government field staff in support of Component 1 (Output 1.1 and Output 1.2) as follows: travel expenses for 5 international experts (\$33,750); local consultants travel expenses to project sites (\$ 24,000); monitoring missions of Project Water Specialists and Project Pastures/Forests specialists (\$ 9,000); Field coordinator travel cost in support of Outcome 1 (\$ 14,400) c) Travel costs related to training workshops, roundtables and Farmers Field</p>	<p>196,220</p>			<p>196,220</p>		<p>196,220</p>	<p>Ministry of Agriculture and Environment Protection</p>
----------------------	---	----------------	--	--	----------------	--	----------------	---

<p>Travel</p>	<p>Includes: a) Travel expenses for PAs zoning; mapping and inventory of the KBAs/IBAs under project scope; species inventory (Output 2.1 and 2.3). Total cost: \$37,570; b) Travel costs (DSA) for inventory of species and mapping of key habitats in the two targeted PAs and their sanctuaries (\$17,080); c) Travel costs related to field missions/mammals inventory (\$15,060) ;d) Travel costs related to the preparation of Amudarya Reserve Management Plan (\$6,720); e) Travel costs related to community outreach in the PAs and KBAs/IBAs (\$3,600);f) Travel costs related to training workshops (\$4,200);g) Travel costs of the project staff in support to the activities under Output 2.1 and 2.3 (\$14,400); h) Field missions to Uzbekistan and Kazakhstan in support of cross-border wild ungulates conservation measures. Total cost: \$27,840 (2x 8 people /\$1740/person).</p>		<p>126,470</p>		<p>126,470</p>		<p>126,470</p>	<p>Ministry of Agriculture and Environment Protection</p>
----------------------	--	--	----------------	--	----------------	--	----------------	---

<p>Travel</p>	<p>Includes: a) Travel costs (flight, accommodation, meals) of 5 members of Turkmenistan delegation to IFAS high-level meeting in Tajikistan. Total cost \$ 6,500;b) Travel costs (flight, accommodation, meals) of 5 members of Turkmenistan delegation to IFAS high-level meeting in Kazakhstan; Total cost \$ 6,500; c) Travel costs (flight, accommodation, meals) of 5 members of Turkmenistan delegation to IFAS high-level meeting in Uzbekistan. Total cost \$6,500; d) Local travel costs related to round table meetings and farmer to farmer experience sharing, of the "Sustainable Land Management Champions" (Act. 3.1.2). Total cost: \$3,600 ; e) Local travel expenses of the Field coordinator and Communication Specialist in support of activities under Component 3. Total cost:\$16,800.</p>			<p>39,900</p>	<p>39,900</p>			<p>Ministry of Agriculture and Environment Protection</p>
----------------------	--	--	--	---------------	---------------	--	--	---

Travel	d) Travel costs related to GEF evaluations. Total cost: \$7,500				-	7,500		7,500	Ministry of Agriculture and Environment Protection
Sub-contract to executing partner	Direct project costs- Services to the Project (UNDP/GOE) funded by GEF				-		45,832	45,832	UNDP
Office Supplies	Office supplies for the implementation of activities under Component 1	37,500			37,500			37,500	Ministry of Agriculture and Environment Protection
Office Supplies	Costs of office supplies related to trainings and presentations under Component 3.			20,000	20,000			20,000	Ministry of Agriculture and Environment Protection

<p>Other Operating Costs</p>	<p>Includes: (i) Costs of procurement of georeferenced digital aerial photography and satellite imagery. Total cost: \$10,000; (ii) Design, layout and/or printing costs of Manuals, Guidelines, Technical methodologies, Brochures for farmers, newsletters (KM Indicators 16; 17; 18, 24) (1) Compilation of best practices in irrigation technologies applicable to Turkmenistan (2) Report on the results and knowledge shared during the Farmers Field Schools (3) Water use among multiple users and assessments of the minimum ecological flow needed to maintain lakes and wetlands in Amudarya Basin (4) Methodologies for setting up LDN regional targets (showcasing Dashoguz and Lebap experience) (5) Methodology for Integrating LDN in land use planning, with experience from Dashoguz and Lebap (6) Brochures on sustainable pasture and forests management planning, aligned with LDN (7) Integrated Bio-Saline Agricultural Model for Sustainable and</p>	<p>40,000</p>			<p>40,000</p>		<p>40,000</p>	<p>Ministry of Agriculture and Environment Protection</p>
-------------------------------------	---	---------------	--	--	---------------	--	---------------	---

Other Operating Costs	Miscellaneous expenses including bank charges	22,500			22,500			22,500	Ministry of Agriculture and Environment Protection
------------------------------	---	--------	--	--	--------	--	--	--------	--

<p>Other Operating Costs</p>	<p>Cost of design and publication of the following KM products (KM Indicators 24, 25) : (i) Study on the Economic Potential for Ecotourism in Dashoguz and Lebap PAs/KBAs/IBAs (ii) Gap Analysis Report on the Protection of IBAs/KBAs of Turkmenistan (iii) Report on the Analysis of the Ecological Flow Requirements of the lakes and wetlands (IBAs/KBAs) in Amudarya Basin (developed under Component 1) (iv) Information materials on joint cross-border cooperation on measures promoted by the project under the Bonn Convention (Convention on the Conservation of the Migratory Species of Wild Animals) (v) Brochures on local community supported sustainable biodiversity management in the targeted KBAs/IBAs, showcasing project experience (vi) Information materials on KBAs/IBAs in the Amudarya Basin and on Gaplangyr and Amudarya Reserves.</p>		<p>13,500</p>		<p>13,500</p>		<p>13,500</p>	<p>Ministry of Agriculture and Environment Protection</p>
-------------------------------------	--	--	---------------	--	---------------	--	---------------	---

<p>Other Operating Costs</p>	<p>Includes the costs of a) Design and production costs of Communication and KM materials in support of Component 3: (i) Technical Recommendations on National and Regional Water Programming for IFAS meetings (ii) Proceedings of Regional Water Diplomacy Seminars (iii) Analytical reports on integrated water-land management codifying the project's approaches (iv) Compilation of technical information and training modules for extension officers on LDN/SLM measures (v) Compilation of training modules. Total cost: \$12,248 b) Production of a video documentary comprising good SLM practices in the surrounding geographies of the targeted PAs, KBAs/IBAs showcasing the project's experience. Total costs: \$10,000;</p>			<p>22,248</p>	<p>22,248</p>		<p>22,248</p>	<p>Ministry of Agriculture and Environment Protection</p>
-------------------------------------	--	--	--	---------------	---------------	--	---------------	---

Other Operating Costs	Miscellaneous expenses including bank charges.			10,000	10,000			10,000	Ministry of Agriculture and Environment Protection
Grand Total		2,201,768	1,536,220	564,461	4,302,449	62,500	218,247	4,583,196	

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

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

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

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