Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia

Part I: Project Information

Name of Parent Program

Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes

GEF ID

10249

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

☐ CBIT

☐ NGI

Project Title

Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia

Countries

Mongolia

Agency(ies)
FAO, WWF-US

Other Executing Partner(s):
Ministry of Environment and Tourism of Mongolia

Executing Partner Type
Government

GEF Focal Area
Multi Focal Area

Taxonomy
Agriculture and agrobiodiversity, Mainstreaming, Biodiversity, Focal Areas, Productive Landscapes, Protected Areas and Landscapes, Temperate Forests, Biomes, Grasslands, Sustainable Land Management, Land Degradation, Community-Based Natural Resource Management, Forest, Drylands

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 1

Climate Change Adaptation
Climate Change Adaptation 1

Submission Date
6/18/2019

Expected Implementation Start
10/1/2020

Expected Completion Date

9/30/2025

Duration

60In Months

Agency Fee($)

481,914.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
IP SFM Drylands	Dryland Landscapes Sustainably managed	GET	5,354,586.00	50,945,000.00
		Total Project Cost($)	**5,354,586.00**	**50,945,000.00**

B. Project description summary

Project Objective

To reverse and prevent dryland ecosystem degradation and biodiversity loss through an inclusive, integrated landscape and value chain approach securing multiple environment benefits and sustainable, resilient livelihoods in the Eastern Steppe of Mongolia.

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

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)
1. Strengthening the enabling environment for the sustainable management of drylands in Mongolia	Technical Assistance	Outcome 1.1: Strengthened policies and planning mechanisms for the sustainable management of drylands at national, aimag and soum[1] levels. Outcome indicators: · *Number of aimag and soum land management plans incorporating sustainable land use, landscape management and biodiversity conservation strategies and targets.* · *Number of improved monitoring systems and processes in place.* · *Number of revised policies, laws or resolutions drafted and submitted to Cabinet/local Khural.* *Capacity development scores.*	1.1.1 Cross-sectoral, multi-stakeholder working groups established at national and local levels to facilitate participatory, adaptive landscape planning and management in the existing land-use planning process. 1.1.2 Guidelines for science-based, integrated land management planning, assessment and monitoring developed and stakeholders trained. 1.1.3 Aimag- and soum-level land management plans developed incorporating ecologically sensitive, participatory landscape management (grazing, forest and other natural resources), through local consultations. 1.1.4 Regular monitoring of land use, land degradation and biodiversity in target soums conducted by local government officers and/or local volunteers. 1.1.5 National and/or aimag-level policies/laws and resolutions developed (or strengthened) to support sustainable land use and biodiversity conservation.	GET	954,220.00

[1] Province and county.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)
2. Scaling up sustainable dryland management in the Eastern Steppe of Mongolia	Investment	Outcome 2.1: Farmers/crop producers in target areas are applying more sustainable crop and fodder production practices through the introduction of improved/climate-smart technologies. Outcome indicators: · *Area of cropland under improved practices. Contributing to Core Indicator 4.* · *Quantity of crop and fodder produced from sustainable and climate-smart practices.* Outcome 2.2: Local communities are applying sustainable management and restoration of rangelands, forest patches and riparian forests in the target area. Outcome indicators: · *Number of bagh-level pasture management plans and/or pasture use agreements adopted by local stakeholders.* · *Area of pastureland and patch forest under restoration. Contributing to Core Indicator 3.* · *Area of pastureland and patch forest under improved practices. Contributing to Core Indicator 4.* · *Carbon sequestered. Contributing to Core Indicator 6.*	2.1.1 Farmers (women and men), private companies and local government officers in target areas are trained in environmentally friendly, climate-smart crop and fodder production techniques. 2.1.2 Support provided to farmers (women and men) in target areas to apply environmentally friendly, climate-smart crop and fodder production practices within overall landscape management. 2.2.1 Guidelines and training program for local decision makers and stakeholders (herders, private sector, CBOs[1]) on sustainable pasture management and the conservation/restoration of critical ecosystems developed and implemented. 2.2.2 Local pasture management and restoration plans and/or agreements established by local herder groups/institutions and implementation started as a part of landscape management. 2.2.3 Support mechanisms for climate resilient pasture and livestock management that secures sustainable livelihoods implemented as a part of landscape management. 2.2.4 Conservation and sustainable management of forest patches and riparian forests implemented as a part of landscape management.	GET	2,056,779.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)
3. Strengthening biodiversity conservation and landscape connectivity	Investment	Outcome 3.1: Management capacity of Nature Reserves (NRs)[1] and Local Protected Areas (LPAs) in connectivity areas is increased to support survival of Mongolian gazelle and other iconic migratory species. Outcome indicators: · *Area of terrestrial PAs**[2]** under improved management effectiveness. Contributing to Core Indicator 1.* · *Area of LPAs in connectivity areas under improved management to benefit biodiversity. Contributing to Core Indicator 4.* *BD/species indicators (see Annex A1 of ProDoc/Annex A of CEO ER)*	3.1.1 Assessment to enhance landscape connectivity and management of globally important biodiversity in the target landscape conducted and incorporated into local plans. 3.1.2 Management plans for NRs developed or updated in a participatory process involving local governments and stakeholders ensuring landscape level management. 3.1.3 Priority interventions implemented in target NRs in line with management plans. 3.1.4 Community-centred conservation interventions implemented in LPAs in connectivity areas and other critical patch ecosystems to secure connectivity of ecosystems and key migratory species. 3.1.5 Sustainable financing mechanisms for the implementation of the management plans developed and implemented.	GET	1,403,212.00

[1] This includes 'Toson Khulstai', 'Khar Yamaat' and 'Bayantsagaani tal' Nature Reserves, as well as 'Ulziin ekh', 'Jaran togoony tal A&B' and 'Menengiin tsagaan khooloi' which were established as a new Nature Reserves in 2019.

[2] Protected Areas.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)
4. Project coordination, knowledge management and monitoring and evaluation	Technical Assistance	Outcome 4.1: Project coordination, knowledge management and monitoring and evaluation for the sustainable management of drylands in Mongolia	4.1.1 Effective project coordination and monitoring and evaluation. 4.1.2 Systematic creation, documentation and sharing of knowledge on sustainable dryland management and biodiversity conservation through national and global IP platforms. 4.1.3 LDN target monitoring and reporting mechanism strengthened and relevant information shared through national and global IP platforms.	GET	685,450.00
				Sub Total ($)	**5,099,661.00**

Project Management Cost (PMC)

	GET	254,925.00	1,700,000.00
	Sub Total($)	**254,925.00**	**1,700,000.00**
	Total Project Cost($)	**5,354,586.00**	**50,945,000.00**

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 Environment and Tourism (MET)	In-kind	Recurrent expenditures	10,000,000.00
Recipient Country Government	Ministry of Food, Agriculture and Light Industry (MOFALI), including USD 6 million in World Bank / IFAD financing	In-kind	Recurrent expenditures	13,000,000.00
Recipient Country Government	Agency for Land Administration and Management, Geodesy and Cartography (ALAMGAC)	In-kind	Recurrent expenditures	3,000,000.00
Recipient Country Government	Three Provincial Governments (nine target counties)	In-kind	Recurrent expenditures	15,000,000.00
Civil Society Organization	WWF Mongolia	In-kind	Recurrent expenditures	1,300,000.00
Civil Society Organization	TNC Mongolia (for Toson Khulstai Nature Reserve)	In-kind	Recurrent expenditures	300,000.00
GEF Agency	Food and Agriculture Organization (FAO)	In-kind	Recurrent expenditures	1,600,000.00
GEF Agency	World Wildlife Fund, Inc. (WWF)	In-kind	Recurrent expenditures	345,000.00
Private Sector	Crop production company (Ider Onon LLC)	Grant	Investment mobilized	500,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Private Sector	Sustainable Fibre Alliance (SFA)	Grant	Investment mobilized	5,400,000.00
Private Sector	Crop production company (Munkhiin Duurlig LLC)	Grant	Investment mobilized	500,000.00
			Total Co-Financing($)	**50,945,000.00**

Describe how any "Investment Mobilized" was identified

The “Investment mobilized” was identified during the project preparation phases (September 2019 – March 2020) through bilateral meetings with partners and stakeholder workshops. It totals USD 6.4 million in private sector (crop companies) and industry-led organization (SFA) investments in sustainable crop production and cashmere value chains.

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($)	Fee($)
FAO	GET	Mongolia	Land Degradation	LD STAR Allocation	1,784,862	160,638
WWF-US	GET	Mongolia	Biodiversity	BD STAR Allocation	1,784,862	160,638
FAO	GET	Mongolia	Multi Focal Area	IP SFM Drylands Set-Aside	892,431	80,319
WWF-US	GET	Mongolia	Multi Focal Area	IP SFM Drylands Set-Aside	892,431	80,319
				Total Grant Resources($)	**5,354,586.00**	**481,914.00**

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

☐

PPG Amount ($)

150,000

PPG Agency Fee ($)

13,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)
FAO	GET	Mongolia	Land Degradation	LD STAR Allocation	50,000	4,500
WWF-US	GET	Mongolia	Biodiversity	BD STAR Allocation	50,000	4,500
FAO	GET	Mongolia	Multi Focal Area	IP SFM Drylands Set-Aside	25,000	2,250
WWF-US	GET	Mongolia	Multi Focal Area	IP SFM Drylands Set-Aside	25,000	2,250
				Total Project Costs($)	**150,000.00**	**13,500.00**

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	1,189,866.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

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

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

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	1,189,866.11	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)

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 Bayatsagaany tal	**125689** 555576555	**Select**Habitat/Species Management Area		332,362.25			17.00			
Akula National Park Jaran togoony tal A&B	**125689**	**Select**Habitat/Species Management Area		188,609.43			15.00			
Akula National Park Khar Yamaat	**125689** 166795	**Select**Habitat/Species Management Area		50,691.00			61.00			
Akula National Park Menen tsagaan khooloi	**125689**	**Select**Habitat/Species Management Area		45,748.45			13.00			
Akula National Park Toson Khulstai	**125689** 166794	**Select**Habitat/Species Management Area		469,928.00			54.00			
Akula National Park Ulz gol	**125689**	**Select**Habitat/Species Management Area		102,526.98			19.00			

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	249027.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

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

Indicator 3.2 Area of Forest and Forest Land restored

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

Indicator 3.3 Area of natural grass and shrublands restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	248,827.00		

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)
0.00	5640117.00	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)

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)
	5,640,117.00		

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

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

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

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	0	8052215	0	0
Expected metric tons of CO_2e (indirect)	0	2250000	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)		8,052,215		
Expected metric tons of CO_2e (indirect)		2,250,000		
Anticipated start year of accounting		2020		
Duration of accounting		20		

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

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

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

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

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

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

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

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

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		11,776		
Male		13,465		
Total	0	25241	0	0

Part II. Project Justification

1a. Project Description

1.a Project Description

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

The project "Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia" ("Eastern Steppe project") is part of a global program, the GEF-7 Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes (SFM/Drylands IP). The program is led at the global level by FAO and implemented in collaboration with World Bank, IUCN, and WWF-US. The objective of the SFM Drylands IP is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management. Mongolia is one of the two countries of Central Asia that are part of the Impact Program, along with Kazakhstan (the other nine countries being located in Southern and West Africa). The two countries in Central Asia represent the biome "rangelands and steppe forests of Central Asia", which includes a large number of ecoregions, such as the Eastern European forest steppe, the Pontic steppe, the Kazakh forest steppe, the Kazakh steppe, the Daurian Forest Steppe and the Mongolian-Manchurian grasslands; to the north, steppes generally give way to forest ecoregions (boreal forests, conifer forests, mixed forests and taiga) and to the south to deserts and semi-deserts.

The project is closely embedded in the Impact Program and contributes to its overall goals, outcomes and outputs. Through exchange with and alignment to the IP, best practices and knowledge will be systematically documented and shared, and regional and global collaboration will be leveraged to have a greater impact at biome and ecoregion levels.

Project Scope and Environmental Significance

The Eastern Mongolian Steppe, covering 27.3 million hectares, is one of the world's largest remaining grassland ecosystems and hosts critical ecosystems of global environment importance. Within the Eurasian Steppe[1][1], the Eastern Steppe is exceptional for its intactness, diverse micro-ecosystems, and living human and environment heritage. This dynamic ecosystem incorporates adjacent Taiga Forest and the Gobi Desert ecosystem flows, vast grasslands, four rivers forming headwaters of the Amur[2][2], and natural reserves. Flora and fauna of Central Asia are found here, alongside those of Manchuria. The Eastern Steppe includes three Ramsar sites, 15 Important Birds Areas (IBAs), and

critical breeding habitat for East Asian-Australasian and Central Asian Flyways.[3][3] The Steppe, dominated by perennial short-grass and forb species, was shaped over millennia by nomadic pastoralists and migrating wildlife.[4][4] It provides critical habitat and ecosystem services supporting household well-being as well as regional and national economy. The area was identified among the priority areas "needing long-term action to avoid the risk of land degradation" in Mongolia's voluntary LDN target setting process (NCCD, 2018).

The three target provinces, Dornod, Khentii and Sukhbaatar, lie within the Eastern Mongolian Steppe. The target area includes nine counties *(soums*) covering a total **7.08 million ha dryland**[5][5], composed of:

- 6.18 million hectares Mongolia-Manchurian Grassland Ecoregion, and;
- 897,748 hectares Daurian Forest Steppe Ecoregion supporting dryland biodiversity hotspots and LD priority areas.

The target area is composed of 79% semi-arid, 17% dry sub-humid, and 4% humid land.

The Eastern Mongolian Steppes are home to the largest remaining intact temperate grasslands of the Earth. The Eastern Steppes are an exceptional ecoregion within the vast Eurasian Steppes spanning from the European Pannonian Steppe to the Mongolian-Manchurian grasslands due to its intactness, relatively high altitude and northern latitude.[6][6] Mongolia's Eastern Steppe is home to an estimated 1.5 to 2 million Mongolian gazelles – the last large population of migrating ungulates in Asia – and for which it provides a key breeding site.[7][7] The Mongolian Gazelle is endemic to the Daurian Forest Steppe and the Mongolian-Manchurian Grassland ecoregions, and plays a major ecological role in the grasslands.[8][8]

In addition to the Mongolian Gazelle, globally and regionally threatened species occurring at the eastern landscape include mammals such as the Pallas's cat, Grey wolf, Corsac fox, Red fox; and birds such as the White-naped Crane, Great Bustard, Steppe Eagle, Saker Falcon, Cinereous Vulture, Swan Goose, Japanese Quail, Black-tailed Godwit, Asian

Dowitcher and Yellow-breasted Bunting. Approximately 50% of the global population of White-naped Crane has been documented in Mongolia. The area also hosts several endemic plant species.

Forest area in the target soums is found primarily along the Ulz River and in the northern parts of Bayan-Adraga and Norovlin soums, as well as along the Kherlen River in Bayan-Ovoo and Khulunbuir soums (see Figure 1 below). The target soums include 109,872.75 ha (or 1.6%) of forest area, over 95% of which is found in the territories of Norovlin (71,210 ha) and Bayan-Adarga soums (33,061 ha). These forests mostly contain coniferous species such as Siberian larch, Scots pine, and Siberian pine. The broad-leafed trees found there are mainly birch, aspen and poplar. In addition, some patch forest (poplar) and riparian forest are located in Bayan-Ovoo, Tumentsogt and Bulgan soums. Mongolian forests have low productivity and growth, and they are vulnerable to disturbance from drought, fire and pests.

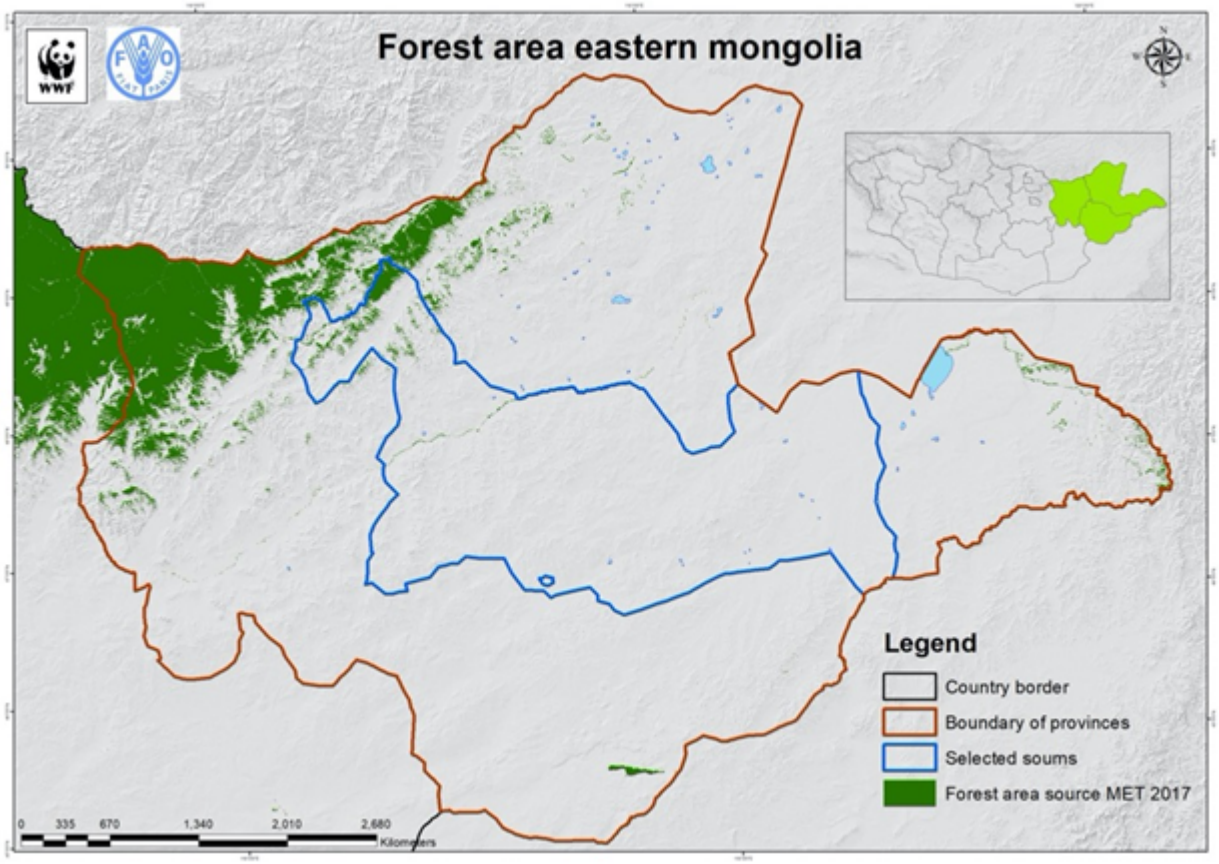

Figure 1: Forest area in target aimags (Data source: MET, 2017)

Mongolian-Manchurian grassland ecoregion (PA0813)

This large ecoregion includes more than a million square kilometres of temperate grasslands on the inland side of Manchuria's coastal mountain ranges and river basins. The Da Hinggan Mountains support dense forest cover in some areas. Lower slopes have deciduous broadleaf forests dominated by Mongolian oak (*Quercus mongolica*), or a mixture of species that include poplar (*Populus davidiana, P. suaveolens*), birch (*Betula platyphylla*), and willow (*Salix rorida*). Shrubs include members of the heath family (*Rhododendron macromulata, R. dahurica,* and *Vaccinium vitis-idaea*) and wild rosemary (*Ledum palustre*).

Dominant taxa include feathergrass (*Stipa baicalensis, S. capillata,* and *S. grandis*), *Festuca ovina*, *Aneurolepidium chinense*, *Filifolium sibiricuman*, and *Cleistogenes sqarrosa*. Areas closer to the Gobi Desert regions support desert steppe that have lower productivity. Dominant species here include drought-resistant grasses (*Stipa gobica, S. breviflora,* and *S. glareosa*), forbs (*Reaumuria soongolica, Hippolytia trifida,* and *Ajania fruticosa*), and small, spiny shrubs that are well-adapted to arid conditions (*Caragana microphylla, Ephedra equisetina*, and *E sinica*). Other plant communities include: *Kalidium gracile* in areas of saline soils and salt marshes dominated by *Scirpus rufus, S. planifolium, Ranunculus cymbalaria,* and *Phragmites communis*.

The brown eared-pheasant (*Crossoptilon mantchuricum*) is the sole endemic bird. Marshes and Phragmites reed beds provide breeding habitat for the great-crested grebe (*Podiceps cristatus*), Oriental white stork (*Ciconia boyciana*), Japanese crane (*Grus japonensis*), and relict gull (*Larus relictus*). Two rare birds that breed on the adjoining plains are the great bustard (*Otis tarda*) and Oriental plover (*Charadrius veredus*).[9][9]

Mongolian-Manchurian grassland ecoregion (source: wikimedia.org/WWF)

About 75% of the project area is under common tenure and highly dependent on the agriculture, forestry, and other land use (AFOLU) sector.[11][11] Given globally important heritage of rural pastoral livelihood systems, Mongolia's Law on Land (2002) places pasture land firmly within public tenure. About 87% of agricultural production in Eastern Mongolia is centred on livestock; the remaining 13% is derived primarily from production of wheat and hay.

Socio-economic information

The three target aimags have a total population of 222,570, of which 34,508 (or 15.5%) are herders. Total population in the nine target soums is 24,841, of which 6,204 (25%) are herders. 42.5% of the population in Dornod aimag live below the poverty line; 30.2% in Sukhbaatar aimag; and 38% in Khentii, compared to a national average of 28.4%.[12][12] The monthly average income per household in the Eastern aimags is the lowest of Mongolia's five regions.[13][13]

The livestock sector accounts for almost 10% of export earnings and approximately 80% of the total agricultural production in Mongolia. About 26% of the work force and about 20% of households, more importantly, over 70% of employments in rural areas are directly engaged in the livestock sector providing food and goods to the remaining 3 million people.[14][14] Livestock related income is highly seasonal, and herders often take out loans and repay their debt when they sell their livestock products such as meat and cashmere. Cashmere income accounts for a significant portion of herder income and is key to their resilient livelihoods.[15][15] For Mongolia, cashmere is the country's third largest exporting industry after copper and gold. The cashmere industry provides income to over 100,000 people, 90% of whom are women, and 80% are people below the age of 35. Mongolia has an estimated total of 27 million goats and an annual cashmere production capacity of 9,400 tons.[16][16]

Land degradation

The Steppe is under an increasing human footprint. A burgeoning mining industry[17][17] and overgrazing by livestock diminish the integrity of this critical dryland biome. The State of the Environment of Mongolia Report (2016) and other scientific sources highlight increasing grazing pressure from a growing national herd combined with climate

change as the leading causes of land degradation. National rangeland can sustainably support 25 million head of livestock; in 2018, this was exceeded 2.7 times.[18][18] As a result, Mongolia is experiencing severe soil and grassland degradation. Changes that reduce ecosystem function and loss of native rangeland plant species are considered as degradation among ecologists, whereas for herders degradation means loss of rangeland's capacity to produce good forage and a decrease in the availability of seasonally appropriate vegetation that would directly affect their livestock and reduce access to essential key resources and plants. Both of these views are valid and important when interpreting degradation in the Eastern Steppe region.

Some sources report that 57% of Mongolia's grasslands are degraded to some degree[19][19] from slightly to fully degraded, and the annual cost of land degradation is estimated at $2.1 billion.[20][20] Land degradation severely influences livelihoods in the steppes, limiting availability of vital functioning ecosystem services and driving local poverty, migration and user conflict. Some Mongolian rangelands may be losing resilience due to interacting climate and grazing pressures. However, scholars found that some observed degradation is reversible, and the steppe and desert-steppe region is less vulnerable than mountain-steppe regions.[21][21] According to the National Rangeland Health Report (2018), 79% of degraded sites have the potential to be recovered within ten years with reduced stocking rates and changes in grazing and herd management. The report also indicates that the control of livestock numbers is a fundamental pre-condition for effective rangeland management.[22][22]

The National Report on Voluntary Target Setting to Achieve LDN in Mongolia (2018) identified three areas "needing long-term action to avoid the risk of land degradation", among which the Eastern Mongolian plain as well as Onon river basin in Eastern Mongolia. Using the three LDN indicators land cover, land productivity and soil organic carbon, the report estimated that a total of 13.29%, or 205,973.4 sq. km of land was considered degraded. The report summarized the land degradation situation in Mongolia as follows, based on the assessment using the three indicators (NCCD, 2018):

• From 2000 to 2015, 27.7 thousand km2 of forest area was converted to grassland, shrubs, sparsely grown vegetation and croplands.

• From the trend analysis over the annual normalized difference vegetation index (NDVI) from 2001 to 2015, land productivity showed a declining trend in 4.0% of forest, 4.7% of cropland, and 1.2% of grassland, and about 20% of shrub lands and other lands showed early signs of decline.

• By 2015, 24 thousand km2 was deforested with a productivity decline of 6.4% since 2000.

• The productivity in 8.1% of total land is under stress.

• The amount of cropland with declining and stressed productivity is 344.71 km2.

• The largest amount of soil organic carbon (SOC) loss was due to the transfer of grassland to other land classes and accounted for 827.4 thousand tons from 2000 to 2015.

• By 2015, total SOC loss due to deforestation and forest degradation was 4413.89 t or 125.4 t/ha.

• About 34.72 t/ha SOC was lost due to wetland degradation since 2000.

Sukhbaatar and Dornod are 'most affected by land degradation,' where 31.1% and 43.5% of these territories are severely impacted. In addition, anecdotal evidence signals increasing seasonal influx and long-term settlements into the area by herders from other parts of the country. According to the 2018 reports of the National Agency for Meteorology and Environmental Monitoring (NAMEM), 20% of Sukhbaatar soum pasture, 20% of Munkhkhaan soum and 34% of Tumentsogt soums forage demand exceeds the carrying capacity several times (500%<). In those *baghs* (villages) with exceeded carrying capacity estimates, there is no possibility for winter grazing. Therefore, the report advised local herders to make preventative measures such as planning for distant *otor* movements, to prepare sufficient hay and supplementary feeds in advance, to improve planned breeding, etc.

Approximately 90% of Mongolia is prone to desertification.[23][23] The top aimags affected by desertification were Govi-sumber aimag (62.8%), Dornod aimag (43.5%), Sukhbaatar aimag (31.1%), Dundgovi aimag (27.9%), and Umnugovi aimag (17.5%).[24][24] In addition to livestock grazing, crop cultivation is one of the main causes of erosion and desertification in arid, sandy ecosystems.[25][25] Transboundary sand and dust storms fuelled by the Eastern Steppe desertification have intensified.[26][26] This represents loss of soil organic matter/resources from Mongolia's dryland ecosystems, and a cost to neighbouring countries (Japan, Korea and China).

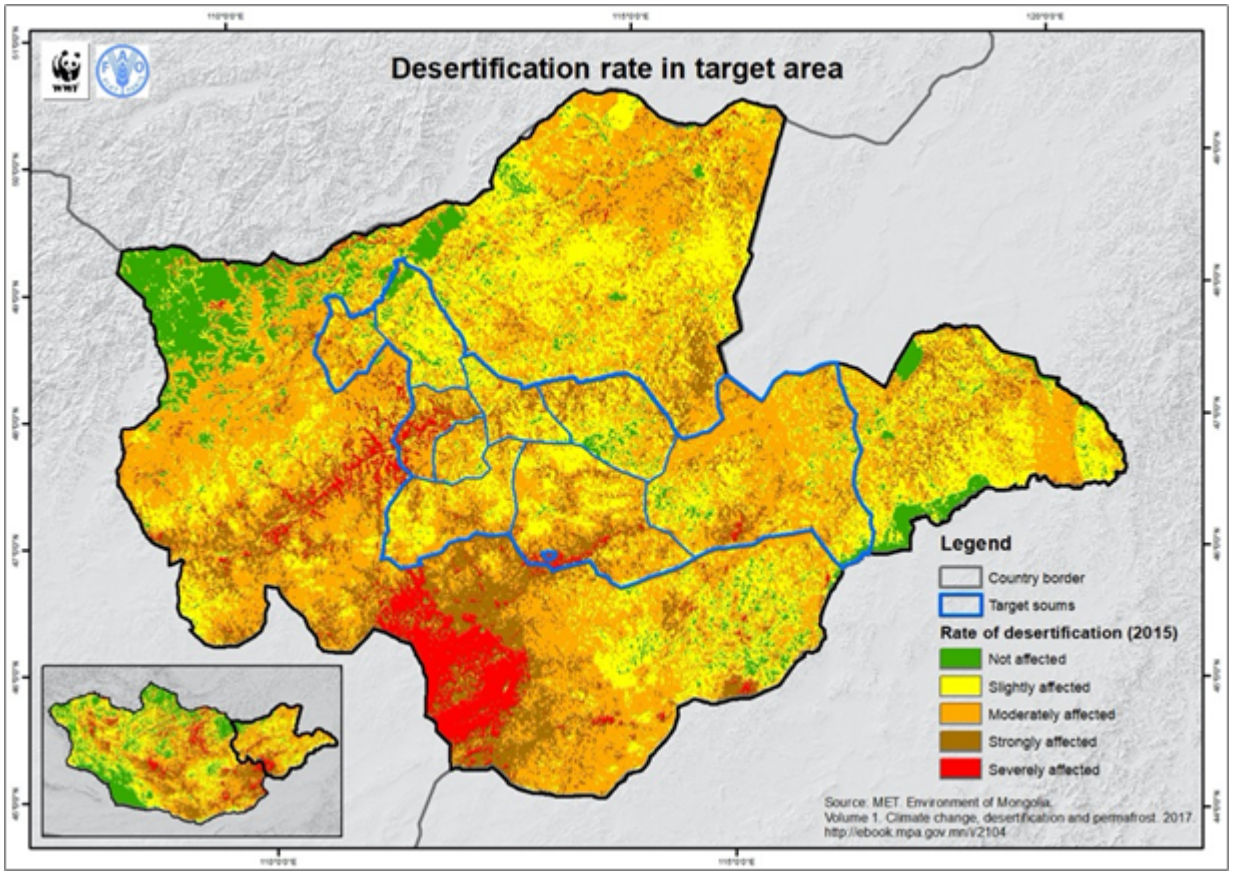

Figure 2: Desertification rate in target area

With regard to cropland, the Soil and Agrochemical Laboratory at the Institute of Plant and Agricultural Sciences of Mongolia identified serious soil erosion uniformly spread over the entire cropland area. 61.4% of cropland is subjected to severe erosion, 34.9% is moderate, and 3.7% is slightly eroded.[27][27] The soil humus content in eastern agricultural soils is medium and/or lower medium at 1.8-2.1%. Similarly, soil nitrogen supply is universally moderate or low, while agricultural soil in most areas is crucially deficient in plant nutrients (Mongolian Crop Production System, 2019). The two-field rotation with fallow-grain, fallow-potato scheme, which is widely used in the Mongolian crop production system, also leads to accelerated loss of soil fertility. Excessive use of chemical fertilizers and pesticides and the degradation of crop fields and decline in fertility

are contributing to converting the cultivated land into disturbed steppes. This has led to fragmented utilization of farmland, soil deterioration, and loss of soil fertility and fallowing of farmlands. As of 2015, about 120,000 hectares of cropland are deemed to be degraded (NRSO 2015).

Climate change impacts

Compounding and exacerbating this drying landscape are highly pronounced climatic trends. Mongolia's climate is increasingly characterized by high extremes in temperature and precipitation. The Mongolia Assessment Report on Climate Change (MARCC) in 2009 highlighted annual mean temperature increasing 2.14 degrees Celsius over the last 70 years; increased seasonal thawing and the reduction of permafrost (by 5%) and glacial areas (by 30%); marked changes in vegetative patterns, typography and water resources; a decrease in precipitation (except in the western part of the country) leading to increased frequency and duration of droughts; and a tripling in the intensity and frequency of other extreme weather events including harsh winters (*dzud*), snow and dust storms.

The drylands in Central and Eastern Asia are especially sensitive to climate change and environmental degradation. Increases in temperature have contributed to increased evapotranspiration in the region, leading to intensified water shortage and aridity. While most global drylands experienced stable or increasing precipitation during the period 1988-2008, the Mongolian steppe and northern China were notable exceptions.[28][28] In the Eastern steppe region, warming trends in annual mean minimum temperature were significant ranging from 0.5 to 0.6 degrees Celsius per decade.[29][29] A vulnerability assessment of the Daurian steppe region conducted by WWF in 2019 shows that the number of extreme hot days are increasing with a rate of 5-8 days/decade and annual precipitation is decreasing in a range of 0.1-2.0 mm/year.[30][30]

Combined with the increasing number of livestock, these trends indicate an increasing risk of further rangeland degradation and impact on biodiversity.[31][31] Climate change is anticipated to negatively impact rangelands, cropland and forests, and livelihoods that depend upon them. The rural population is heavily reliant on the fragile dryland ecosystem, and climate change will likely exacerbate the vulnerability, in particular of the poor.

An Asian Development Bank (ADB) report highlights:

The average weight of livestock has declined. Between 1980 and 2000, the average weight of sheep decreased by 4 kilograms (kg), goats by 2 kg, and cattle by 10 kg. Wool and cashmere yields also decreased. Animals already suffer due to the hotter summer temperatures, and scientists predict that, with the climate warming, livestock will graze for fewer hours per day. This will further reduce the summer weight of animals and will therefore affect growth, fertility, and productivity.[32][32]

In addition, the majority of crop production in the target area is rainfed and thus, highly vulnerable to climate change. The occurrence of droughts in the eastern region has been increasingly reported since the 1960s, and is likely to intensify further into the future (TNC of Mongolia, 2018). Furthermore, the number of consequent hot days (above 26°C) has increased by 13 days and the number of consequent days without precipitation has increased by 22 days in last 50 years, which is having negative impact on crop yield (Mongolian National Agency for Meteorology and Environmental Monitoring 2019).

The habitat area of the Mongolian Gazelle and the White-naped Crane in the Daurian steppe is expected to decrease with climate change. The WWF study also predicts a general shift of habitat area of the Mongolian Gazelle from arid steppe to semi-arid steppe. Environmental vulnerability tends to increase in this region due to social and economic activities. Among the proposed measures, habitat connectivity between protected areas needs to be enhanced.[33][33]

GHG emissions and loss of soil carbon

In 2014, agriculture accounted for 48.5% of Mongolia's total GHG emissions. At the same time, the land use, land use change and forestry (LULUCF) sub-sector accounted for 100% of Mongolia's total reported GHG removals.[34][34] Estimated soil carbon values in the project area are ca. 1.8 million tons.[35][35] Despite providing multiple ecosystem services and benefits, the Eastern Steppe dryland soils are highly prone to wind, soil and water erosion, and vegetative cover change is caused by anthropogenic and climate impacts. Pasture field observations and available data have indicated that pasture biomass has dropped by an estimated 20-30%, and plant diversity has become increasingly impoverished.[36][36]

Overexploitation of surface and groundwater

Mongolia has scarce freshwater resources, and these resources have been in decline in recent years due to climate change, overgrazing, and improper mining.[37][37] When rangeland bare ground increases due to a decrease in vegetation (foliar and basal cover), much of the rainwater has a tendency to run off with little absorption into the soil. In addition, too many wells contributed to the depletion of aquifers and lower the water table.[38][38] The overconcentration of livestock around open water sources such as small river streams, water wells and lakes, especially during the summer, further results in heavy organic loads that are causing eutrophication of these open water sources.

Loss of biodiversity

The degradation and overexploitation of natural resources have led to a decline in plant and animal diversity. The main factors contributing to the loss of flora and fauna in Mongolia are mostly anthropogenic impacts such as mining and infrastructure development, illegal hunting, overgrazing and agriculture, and these are compounded by climate change impacts. The main threats to globally significant biodiversity in the dryland landscape include:

· Increasing human disturbance: The Eastern Mongolian Steppe is an important breeding site for steppe species. In particular, steppe rivers such as Ulz and Kherlen provide breeding, foraging and roosting habitats for these species. The increasing number of livestock pose a threat to the habitat of the key steppe species, leading to a reduction and a fragmentation of habitat.

· Steppe fire: Steppe fire is one of the greatest threats to the above mentioned species and destroys their breeding habitat.

· Illegal hunting of Mongolian gazelle and Great Bustard: Although eastern Mongolia has lower hunting activity than central Mongolia, illegal hunting poses a threat to wildlife here as well.

· Power lines, wind turbines and infrastructure impact both Great Bustards and Steppe Eagles due to collisions. This cause of mortality is observable along transmission lines in Mongolia during migration periods.

· Unfriendly infrastructure/roads: The Mongolian gazelle – sometimes called “steppe ecosystem engineer” – migrates 24/7 throughout the steppe following the rain and fresh grass. This phenomenon is matched only by two other ungulate migrations in the world: the wildebeest and associates in East Africa and the caribou in North America. Today, the gazelles remain only in about 38% of their original habitat due to the severed east-west migrations cut off by the Ulaanbaatar-Beijing railroad that was built in the 1950s. The planned infrastructure development in Eastern Mongolia (see Figure 3 below), motivated by the potentials for delivering minerals and coal to neighbouring China, will further fragment the grassland steppe of Mongolia. Unless proactive measures are taken, the construction of the planned network railroad will divide the Mongolian gazelle population into nine isolated populations separated by railway and border fences, greatly impacting the Mongolian gazelle and its habitat.

· Foot-and-mouth disease (FMD) is a highly contagious, viral disease that affects most ruminant and porcine species, and periodic outbreaks on Mongolia’s Eastern Steppe affect Mongolian gazelle and livestock. FMD directly threatens the long-term persistence of the Mongolian gazelle, a keystone species on the Mongolian Eastern Steppe, directly, through morbidity and mortality, and indirectly, through certain disease management actions aimed at them.[39][39]

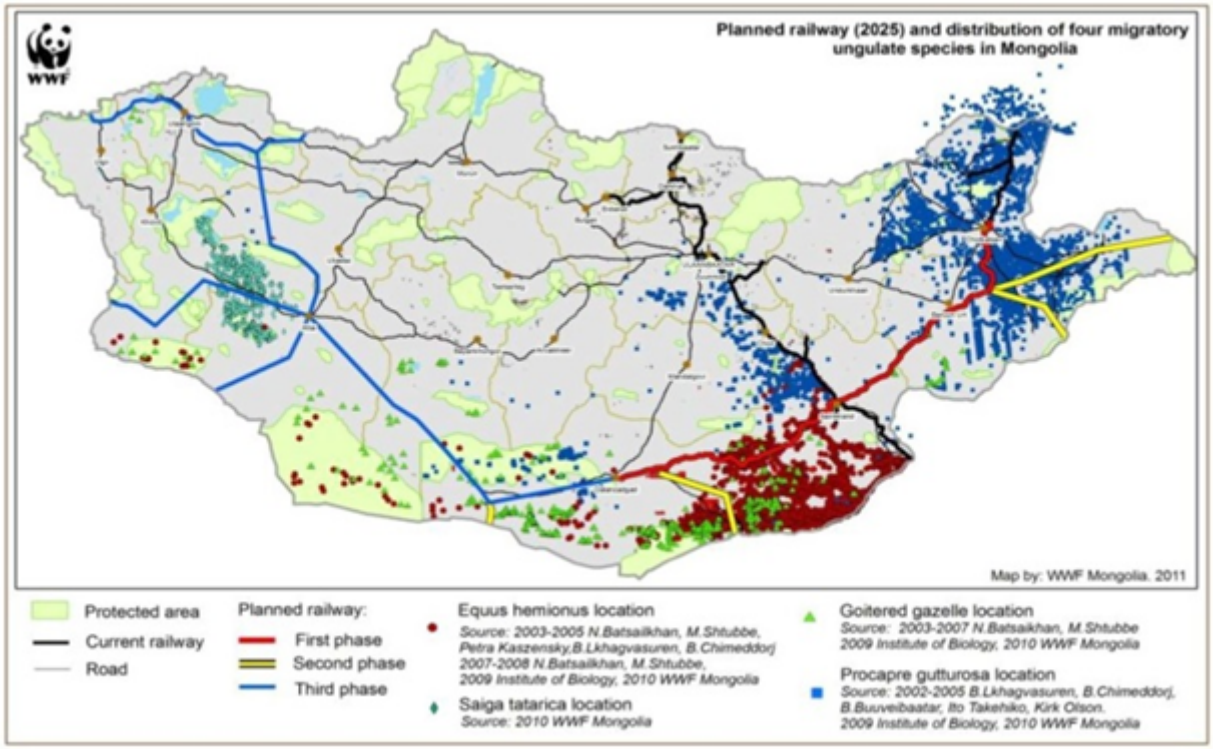

Figure 3: Planned railway (2025) and distribution of four migratory ungulate species in Mongolia[40][40]

In addition, it is reported that the Mongolian flora comprises of 2,823 species of vascular plants belonging to 662 genera and 128 families. However, climatic factors such as drought, aridity, strong wind, flood, and human utilization related demographic pressure including improper, over-, and under-utilization of resources have been leaving a negative footprint on crop biodiversity. Many plant species have recently been classified as vulnerable, endangered and critically endangered. Some agricultural crops and their wild relatives are among them. This list developed by scientists includes 75 species of endangered herbs including 20 species that are already categorized as critically endangered, 11 species of edible plants (6 listed as critically endangered), 16 species of technical plants (4 as critically endangered), 55 species of decorative plants (10 as critically endangered) and 15 plant species (5 as critically endangered) that have roles as restraints effective against advancing sand dunes, pest repellents and/or used for controlling soil erosion.

With regard to Protected Areas (PAs), the main threats to PAs in Eastern Mongolia are associated with land use, unsustainable use of natural resources, along with livestock pressure and climate change. A WWF report notes:

The Mongolian Gazelle is an example of a species where combinations of measures are needed in order to maintain current populations. PA expansion should focus on more productive grasslands used as breeding grounds. Fragmentation of habitats and distribution areas requires action in general land use planning as well as in expanded PAs. The population of the White-naped Crane is an example of a species requiring national and transboundary action plans for improved population management.[41][41]

The protected area network in the target area and the habitat of the Mongolian gazelle and the White-naped Crane are shown in Figure 4 and 5 below.

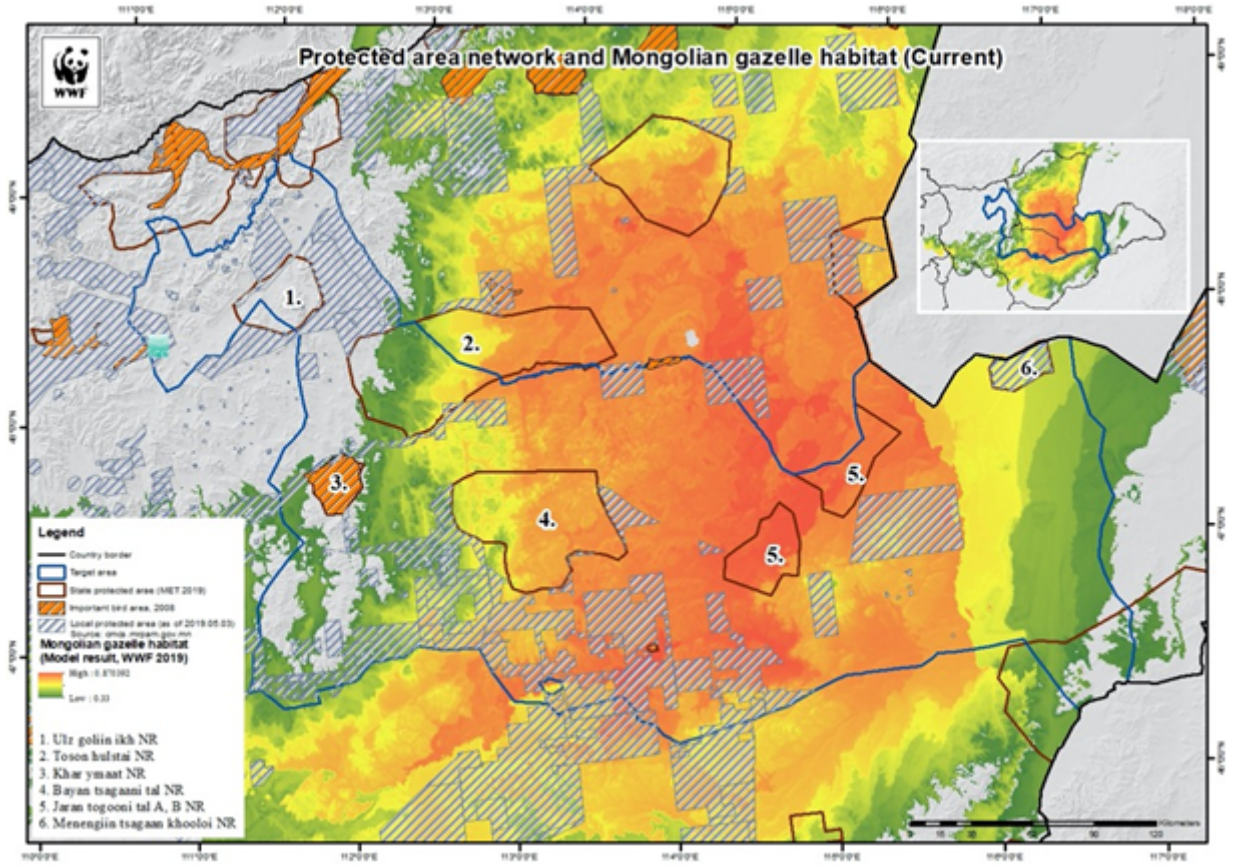

Figure 4. Mongolian gazelle habitat in Eastern Mongolia

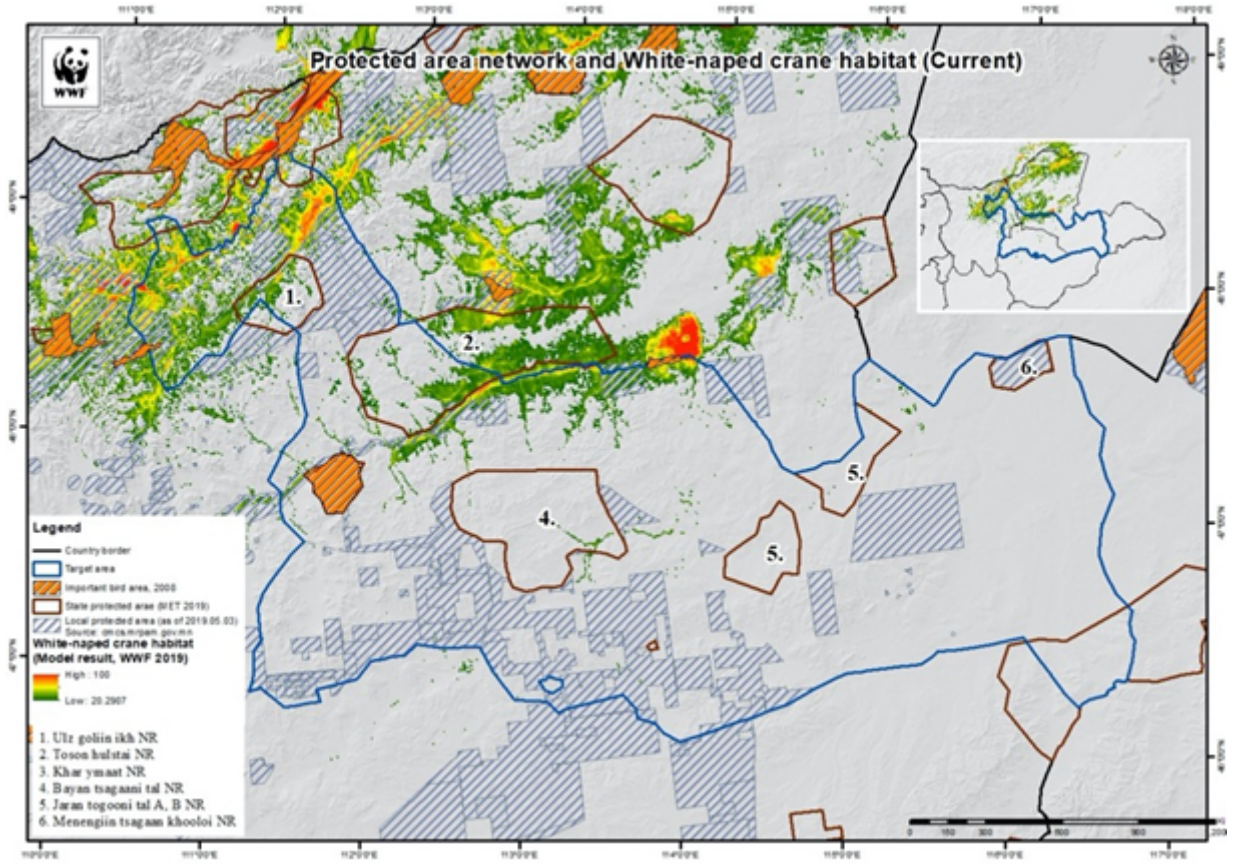

Figure 5. White-naped Crane habitat in Eastern Mongolia

The Ecoregion Assessment conducted by TNC estimated that 9.5% of Mongolia's territory consists of patch ecosystems that are sensitive to climate change. Climate change, which affects the patch ecosystem more drastically, has been identified as a major threat to the conservation targets and values in many of the PA management plans in Mongolia.

However, none of the PA management plans identified specific objectives and/or operational plans on climate change adaptation, mitigation or resilience building for its conservation targets including on-site assessment and monitoring.[42][42]

With regard to the impact of crop production on biodiversity in the Eastern Steppe of Mongolia, a USAID/WCS report notes:

Although reclamation of fallow lands is unlikely to be a major problem for most species, it could be a problem for a few. In particular, species that make wide use of fallow crop areas (e.g., for nesting) and that are naturally rare or already have reduced populations (e.g., the great bustard, certain songbirds) could be severely impacted by implementation of the Atar campaign. Species that use abandoned crop land as "corridors" between quality habitats might also be affected. To avoid such impacts, it will be important to first enumerate which species are of particular concern, and then to either avoid converting the areas where these species occur or find ways to mitigate or minimize (e.g., using specialized farm equipment) any negative impacts.[43][43]

Additionally, the overuse of synthetic fertilizers and agricultural chemicals leads to impacts not only on biodiversity, but also on food safety. The increased use of agricultural chemicals results in pesticide levels in some foods to exceed the maximum residue limit and poses threats to human health.[44][44] Among all food products tested pesticide residues, 55.6% of products (20 products) or 27.6% of collected samples (42 samples) were found with eight different types of pesticide levels exceeding permissible amount and hazardous to human health (www.mofa.gov.mn). Agricultural chemicals, particularly pesticides have deleterious effect on biodiversity by poisoning birds and some insects. The toxic chemicals travel from pesticide applied fields to other plants and crops by pollinators such as bees and wasps. They can further be transmitted to humans and animals via food and fodders, including honey (World Bank, 2012).

Threats to forests

The facing forest degradation and deforestation caused by climate change and over-exploitation has become one of the pressing issues of the Mongolian forestry sector. Average annual temperatures in Mongolia warmed 2.1 degrees Celsius between 1940 and 2014 – around triple the global increase over the same period – and Mongolian tree-ring records indicate that the 20th century was one of the warmest centuries of the last 1,200 years. Warmer winter temperatures can enable pests to expand their range, while drought and water stress make trees more susceptible to insects. Where pest infestations kill large numbers of trees, fires burn more easily and intensely – and release more carbon. The impacts of climate change, fire and pests are cumulative.

Mongolian forests have low productivity and growth, and they are vulnerable to disturbance from drought, fire and pests. Forests can easily lose their ecological balance following disturbance, and they have a relatively low ability for expansion to currently non-forested areas. The main drivers of forest loss and degradation in Mongolia are forest fires, pests, selective logging and clear felling, and grazing. Forest fires affect large areas in Mongolia, generally about 95% of these are regarded as caused by human activities, only 5% are due to natural factors, mainly lightning. Fires mostly occur during the spring and autumn period, when activities such as timber harvesting, use of non-timber forest products, and hunting may cause forest fires. Declining rainfall also means that conditions become less favorable for forests.

The Forest Steppe is a savanna system of open steppe grasslands and meadows with (sometimes widely scattered) patches of coniferous and mixed forest and woodland. Most of it occurs in patches and larger blocks across the Daurian Forest Steppe Ecoregion, with outlier units mapped in the Great Khyangan in eastern Mongolia and in the foothills of the Khangai Nuruu in the west. It takes up over 6% of the region in units averaging 22,000 hectares. While the boundary between forest and steppe in this system has certainly oscillated over the millennia, there is strong ecological and palynological evidence of an increase in steppe vegetation and a decrease in forest vegetation in the last thousand years. The changes may be largely irreversible, and humans are likely the principal agents of change. Wood extraction for household use and intensive grazing of domestic livestock open up the woods and dry them out, and subsequent blowdowns and mixed-severity fires (fire return intervals may be less than 10 years) and insect and pathogen problems further suppress the ability of trees to regenerate.

In the project's target area, in addition to the steppe/patch forest areas in the northern parts of Bayan-Adraga and Norovlin soums, forest areas are found along the Ulz and Kherlen Rivers. In Norovlin, Bayan-Ovoo, Khulunbuir, Bulgan and Bayan-Adraga soums, herders' conventional summer pasture is along the river Ulz and Kherlen. The Ulz and Kherlen river banks nowadays lack significant vegetation cover from being overgrazed and species of vegetation have been changing into more unpalatable and drought-resistant grass species. The Ulz and Kherlen Rivers' riparian floodplain is heavily grazed by local livestock almost throughout the year.

Grazing contributes directly and indirectly to deforestation and forest degradation in Mongolia. Both the southern Saxaul forests and the northern boreal forests are also widely used for grazing (sometimes seasonal), with approximately 35-40% of total livestock population of Mongolia grazing in and near forest areas in Mongolia (Narangerel Z., 2017). In the project target area, the riparian forest is affected by overgrazing due to overgrowth of livestock numbers in the floodplain meadows in dryland. Grazing can interact with other pressures on forests that contribute to forest degradation and deforestation. For example, overgrazing results in damage to young trees and saplings, and can particularly hinder forest regeneration. This is also one of the threats to forests in the NRs such as Khar Yamaat and Ulz goliin ekh NR, where small patches of forests, particularly Birch forest, are very sensitive, especially during the young period.

Root causes and barriers

One of the major root causes of land degradation and biodiversity loss in Eastern Mongolia is the increasing number of livestock, surpassing landscape carrying capacity, leading to overgrazing. Overgrazing is affecting plant cover and palatable/livestock-preferred plant abundance.[45][45] However, the steppe zone vegetation responds not only to grazing, but also to inter-annual rainfall variability.[46][46] Vegetation removal affects the overall characteristics of ecosystem productivity and water and soil nutrient retention capacity.

The end of the centrally administered regime and rapid shift to the market economy in the early 1990s influenced the level of state interference in the pastoral livestock industry, causing unregulated urban-rural migration and ad hoc development planning underpinned by weak regulatory frameworks. The reduced government subsidy scheme, privatization of livestock and emerging household livelihood needs affected traditional herding practices and knowledge and customary user rights. National livestock numbers, at 110.8 million sheep units in 2018 according to the National Statistical Office (NSO), are unprecedented in the historical record.[47][47] Livestock ownership by wealthier, absentee owners is becoming increasingly common. In addition, global demand for cashmere and inadequate policies have led to changing herd compositions, with an increasing number of goats, which disproportionally deteriorate grasslands. Thus, the sustainability of Mongolia's pastoral herding system demands assured actions that address uncertainties of the government regulations, climate change and market deliberations.

Herder households and livestock are increasingly concentrated near settlements (such as soum centres) and water points, threatening productivity of the rangeland and water resources. This is, in part, due to the reduced seasonal mobility and changing perceptions, in particular by young herders, of nomadic lifestyles, with a tendency towards urbanization. In addition, degradation of pastureland in the western areas of Mongolia due to overgrazing and climate change leads to increasing permanent migration of herders from other parts of the country to the Eastern Steppe. Conflicts between herders, and with other land users such as mining companies, are becoming more frequent. Conflicting sectoral interests and policies lead to investment decisions that are sometimes in contradiction to environmental and socio-economic goals. Finally, unsustainable crop production methods, such as unsuitable or outdated dryland tillage technologies, and negligent soil and water conservation, are still widely applied.

The livestock population has been continuously increasing at an average of 15% in all target soums from 2016-2018. The total number of livestock is 1.97 million in all nine soums, as of 2018. The three target soums with the highest number of livestock are Munkhkhaan (457,600), Sukhbaatar (331,200), and Bayan-Ovoo (202,200). In all of these soums, carrying capacity has been exceeded 2-4 times.[48][48] In the absence of adequate regulations or incentives, it seems irrational and risky for livestock owners to reduce herd numbers.

Aimag	Soum	2016 (thousand)	2017 (thousand)	2018 (thousand)
Khentii	Bayan-Adraga	129.8	163.7	182.4
	Norovlin	120.4	145.8	167.4

	Bayan-0voo	147.3	179.9	202.2
Dornod	Khulunbuir	108.2	131.5	152.5
	Bulgan	103.6	135.6	174.3
	Matad	117.5	145.8	164.9
Sukhbaatar	Munkhkhaan	378.7	463	457.6
	Sukhbaatar	236.1	286.2	331.2
	Tumentsogt	107.8	126.4	141.2
Total		**1,449.4**	**1,777.9**	**1,973.7**

According to the National Report on Voluntary Target Setting to Achieve LDN in Mongolia (NCCD, 2018), the direct drivers of land degradation in Mongolia are linked mainly to the biophysical processes, such as drought, soil/wind and water erosion, and human-driven degradation caused by the unsustainable development of extractive industries, and overgrazing. Indirect drivers leading to land degradation are linked mainly to rural-urban migration, grazing land management and land tenure. Demographically, another factor influencing land degradation is population distribution. According to demographic changes, the population in urban areas, towns and soum centers is growing and contributing to population centralization. This trend is clear to continue in the near future. These changes in population settlement may become the causes of land degradation and ecological changes in places near urban areas.

The LDN report also notes that the gap between rich and poor herders started to increase in the years between 1993 and 1995, and since 1995 this gap has increased even more. One of the wealth indicators of herders is the number of livestock, which is related to their income. The statistical data from 2007 shows that the number of herder households owning only a few animals has increased; 46.7% of the herder households have less than 50 head of livestock and own only 11.5% of the total number of animals. A total of 35.1% of herders own more than 200 animals, or 71.6% of the total livestock in the country. Weakened traditional regulatory institutions, the detrimental effects of newer herders who have less skill and knowledge about herding practices, coupled with free and uncontrolled access to resources due to weak and unclear formal regulations, have in practice given herders the freedom to move anywhere. This has increased “trespassing” and out of season grazing of reserved winter and spring pastures, has resulted in more competition and more frequent conflicts, and has converted the herding system from a controlled pasture system to an open access system leading to overgrazing, a classic example of the tragedy of the commons. The open access system introduced with the adoption of a free-market economy combined with the increasing livestock numbers due to missing markets or marketing opportunities has resulted in significant deterioration of pasture land, and the system is no longer sustainable.

In line with this, the following barriers to the implementation and scaling of sustainable land management and biodiversity conservation in the Eastern Mongolian Steppe have been identified during the preparation phase of this project:

Barrier 1: Inadequate conditions of dryland governance, unregulated and overuse of natural resources (addressed by Component 1)

Despite a nascent policy and legal framework securing sustainable natural resource management (forest, pasture, wildlife) by local communities, there is insufficient policy support for inclusive, sustainable dryland governance. In particular, the absence of an appropriate legal framework regulating the use of pastureland, and the absence of a livestock tax (which was abolished in 2009), lead to unregulated use of pastureland. Moreover, Pasture User Groups (PUGs) are not recognized as legal entities by Mongolia's current legal frameworks (although the Land Law does refer to herder groups/institutions). There is also insufficient regulation regarding the use of natural resources at the local level; and a lack of regulations with regard to the herd composition and their management in the landscape.

UNDP's Biodiversity Finance Initiative (BIOFIN) has calculated that a "pasture tax could leverage USD $20-30 million per year. This money [could] be directly channelled back into soum level pasture management such as veterinary and extension services, herder education, disaster and dzud prevention and management, infrastructure management (building wells and irrigation) as well as initiatives to set up and manage locally protected areas."[49][49] Surveys indicate that a majority of herders are supportive of a permitting system such as a grazing fee or animal tax.[50][50]

A recent International Monetary Fund (IMF) report highlighted that policy change is essential to limit the large externalities associated with unregulated pasture use. Designing a progressive pasture tax – combined with a generous exemption for small/medium herders – can help address overgrazing in an equitable way. The report noted that reintroducing a pasture tax that is at least as high as the one proposed in the 2015 draft law would be an appropriate place to start. In addition to the pasture tax, the report also noted two other key macro policies that can help achieve green and inclusive growth, namely incentives to boost the quality of animal products, and promotion of meat exports. When combined with a pasture tax, greater meat exports could feasibly cut livestock numbers in half while boosting value-added of the entire sector. Greater meat exports would also benefit the cashmere industry, as it would incentivize herders to sell their low-quality goats to the meat industry.[51][51]

Furthermore, there is a lack of cross-sectoral coordinated efforts for integrated planning and monitoring at the national and local levels. Despite recent efforts to integrate land management planning under the coordination of the Agency for Land Administration and Management, Geodesy and Cartography (ALAMGAC), there are still limited platforms and capacities for cross-sector land use, natural resource management and planning, as well as integrated monitoring of land management practices and changes in rangeland

condition. There is a need for comprehensive, inclusive land management planning and monitoring that is science-based and gender sensitive. Land and forest monitoring databases of different agencies need to be integrated and harmonized.

In the forestry sector, there is a need to remove the barriers for business development for Private Forest Enterprises, wood processing companies and Forest User Groups (FUGs) who wish to become more actively involved in forestry.[52][52]

Barrier 2: Inadequate capacities and incentives at local level for managing drylands sustainably (addressed by Component 2)

Although policy frameworks for sustainable rangeland/forest management and recovery/restoration have been developed and piloted, there is still limited guidelines and mechanisms on how to implement them at the local level. There is also limited understanding of the critical ecological processes underpinning dryland agro-ecosystems, the complex dynamics of ecosystems, and their values. Practical, easy-to-use guidelines and methodologies on sustainable dryland management, dryland agriculture, and the conservation and restoration of critical ecosystems that can be applied at the local level in Eastern Mongolia have not yet been developed. In terms of crop production, the biggest constraint is low technological capacity, partly due to the fact that Mongolia has only 60 years of experience in growing crops. Interventions remain project-based and capacity and incentives are limited among local government officials and community leaders to support their scaling up. Local soum capacity to manage mobility, facilitate bottom-up planning, and develop and enforce cross-boundary agreements needs to be strengthened.

In particular, there is a lack of financial and market incentives for sustainable practices in land management, grassland stewardship and animal welfare, and limited tailored business support services. Value chains for sustainably produced livestock products are underdeveloped. Products often do not meet standards or documentation procedures that international markets require. Production of meat, cashmere and other value chains is mostly focused on quantity, rather than quality and value added. Local breeds of animals are less productive compared to specific breeds raised primarily for meat, dairy or wool (such as Holstein and Dorper), because they are raised for meat, dairy, and wool simultaneously in the year-round open grazing system. The number of livestock in Mongolia reached 70.9 million (according to the livestock census at the end of 2019), producing about 448 thousand tonnes of meat and potential to milk 866 million litres of milk annually, against a tiny population of 3.2 million people. This means that the domestic market cannot absorb all the agricultural products, and export markets cannot be utilized fully as there are many barriers. The only choice for herders is, then, to increase their livestock. Animal health services, and livestock breeding and feeding practices, are underdeveloped. As highlighted by an ADB report,

Many herder families are still trying to increase their livestock numbers, even though the pasture is degraded and yields are decreasing each year. They generally do this because of (i) the challenges they face in adding value to livestock products through processing, (ii) their dependence on livestock for cash in the absence of bank loans, and (iii) difficulties they face marketing their products. As dzuds and droughts become more frequent, the risk of losing livestock rises. So, with no insurance, a large herd may seem the best strategy to ensure survival.[53][53]

With regard to financial resources, commercial banks operating locally are generally not interested in providing loans based on the agricultural risk calculation. Thus, interest rates are high, and repayment terms are short. This makes it difficult for herders to start new businesses, maintain or expand their existing production.

Finally, there is limited involvement of women and vulnerable groups (such as assistant herders/helpers, poorer households with fewer livestock, and the unemployed)[54][54] in decision-making to support inclusive and sustainable dryland governance.

Barrier 3: Limited experience and knowledge in protected area management and monitoring, and limited understanding of PA interactions/connectivity/benefits to wider landscape management (addressed by Component 3)

Significant progress has been made with regard to protected area (PA) expansion in recent years, and Mongolia has a high PA coverage, with almost 20.1% of the country's total territory under protection. However, the management capacity of these PAs is still low, in particular for Nature Reserves (NRs) and Nature Monuments (NMs). In accordance with the Mongolian Law on Protected Areas, only Strictly Protected Areas and National Parks receive state financing, while the management responsibility of NRs, NMs and Local Protected Areas (LPAs) is delegated to the aimag and soum government, which have neither capacity nor funding dedicated to these areas. Local government can determine suitable management approaches, including co-management for NR management and, in accordance with the law, they can transfer their obligations to other organizations such as non-governmental organizations (NGOs). In practice, however, local governments generally lack the experience and knowledge about PA management tools and approaches. There is limited law enforcement due to a lack of monitoring systems in the environmental sector and lack of institutional capacity of the state and civil society organizations in the ground. Both human and financial resources are insufficient.

LPAs are often established without clear conservation management. There is also limited awareness of the role that NRs and LPAs play in biodiversity conservation, sustainable use and local livelihoods; and the benefits they provide to the wider landscape connectivity, as well as landscape resilience. Importantly also, there is a lack of sustainable financing mechanisms for NRs, NMs and LPAs.

Barrier 4: Lack of systematic sharing of knowledge and best practices in sustainable dryland management and biodiversity conservation (addressed by Component 4)

There are limited platforms and mechanisms at the aimag and national level to share knowledge, lessons learned and best practices in sustainable dryland management and biodiversity conservation. Dryland issues are dealt with separately, without taking into account interactions between plants, animals, humans, and the environment. Interventions are often project based and attempts for upscaling and replication are hindered by limited local ownership and capacities. Opportunities for exchange within and between aimags and soums are often missed. In addition, global platforms and partnerships are not yet used strategically by Mongolia to learn from (and share) international experiences and best practices in dryland management; and there is limited regional cooperation and knowledge exchange for addressing dryland management challenges.

While many of the above-mentioned causes and drivers of dryland degradation and biodiversity loss are specific to the Mongolian social/economic/ecological context, they are in line with the global trend of land degradation, desertification and biodiversity/forest loss in drylands. They are also in line with the four major categories of proximal causal agents highlighted in the SFM/Drylands IP Program Framework Document (PFD), i.e. (1) increased aridity; (2) agricultural impacts, including livestock production and crop production; (3) wood extraction, and other economic plant removal; and (4) infrastructure extension, which could be separated into irrigation, roads, settlements, and extractive industry (e.g., mining, oil, gas). Like elsewhere, in Mongolia desertification/dryland degradation is attributable to a combination of all four causes.

Impacts of COVID-19

On 13 February 2020, the Government of Mongolia declared a state of high alert and implemented measures to restrict the spread of COVID-19, including travel restrictions, social distancing, cancellation of public events and closure of universities and schools. This has impacted national food supply, in particular fruits and vegetables for which the country mostly relies on imports to cover domestic demand. To address this shortage, the Government, with some technical assistance from FAO, has been implementing measures to increase the area planted with vegetables to address the shortages of vegetables. Also, the Government is planning to import 100,000 tonnes of wheat throughout 2020 in order to ensure adequate market supplies. According to a rapid assessment conducted by FAO in May 2020, 58% of surveyed herders and farmers reported that COVID-19 had impacts on their households. Among others, COVID-19 is impacting the sales of animal wool and cashmere, which are critical income sources for herders. Access to loans/cash is a priority for herders. The Government is granting a loan totalling MNT 300 billion (USD 107.7 million) at a 3% interest rate to national cashmere companies for the purchasing of at least 30% of all combed cashmere from herders.

[1] http://www.fao.org/giews/countrybrief/country.jsp?code=MNG
[2] FAO (2020). Rapid Assessment: State of Food and Agriculture among Herders and Farmers in Mongolia during COVID-19, May 2020 (unpublished document).

2) Baseline scenario and any associated baseline projects

National sectoral context

Existing laws and policies provide a strong enabling framework for this project targeting the Eastern region in sustainable land and forest management, biodiversity conservation, and reversal/avoidance of land degradation. In particular, Mongolia's Law on Soil Conservation and Desertification Prevention, the Draft Pasture Law, the Land Law, Law on Environmental Protection, State Policy on Forests, Sustainable Livestock Action Plan, National Agriculture Development Policy, and the Government Resolution on Setting Boundaries of Crop Producing Areas, provide an important baseline upon which the GEF-7 will build. Furthermore, Mongolia's Law on Special Protected Areas and the Law on Buffer Zones incorporate most of the elements required for effective protected area management.[55][55] A working group has been established since 2014 to propose necessary amendments to the Law on Special Protected Areas. However, the draft revision submitted to the Ministry of Justice and Home Affairs in November 2018 has been sent back to the working group for further refining.

In 2017, ALAMGAC has issued a "Guidance on Designating Land for Special Use at Local Level". Nationwide implementation of this Guidance is already having positive results in reducing land related conflicts including the ones related to the designation of LPAs. The resolution on "Capacity building measures for community's co-management capacity for natural resources" issued by the Parliament Standing Committee on Environment, Food and Agriculture in 2015 is an playing important role for 177 community-based organizations (CBOs) that are located within PAs or in its buffer zone. Some of these CBOs have piloted the establishment of formal partnerships for buffer zone management and conservation interventions within the PAs.

Provinces (*aimags*) and counties (*soums*) have immediate and growing roles in natural resource management (NRM), land use, access/tenure, and finance following the decentralized governance practices. However, both government and stakeholders require improved institutional capacities and incentives to exercise their mandate in sustainable socio-economic development and natural resource management. The ongoing land reform process provides key opportunities to further enhance the policy framework.

Mongolia has also formulated significant international commitments, such as the Land Degradation Neutrality (LDN) targets under the UNCCD, the Nationally Determined Contribution (NDC) under UNFCCC, the National Biodiversity Program under the Convention on Biological Diversity (CBD), and the Bonn Challenge in support of the 2014 New York Declaration on Forests. In line with the UNCCD's concept of LDN (ensuring no net loss of healthy and productive land), the Mongolian LDN target setting process identified three geographic areas "needing long-term action to avoid the risk of land degradation." Two of these three areas are located within the Eastern Steppe.[56] The following voluntary LDN targets were established in 2018:

1) Reduce deforestation and forest degradation to maintain the forest area and reach 9% of the total area by 2030 compared to 7.85% in 2015.
2) Promote sustainable grassland management and stop further grassland degradation.
3) Increase agricultural yields by 2.5 t/ha per annum by 2030 compared to 1.6 t/ha per annum in 2015.
4) Ensure no net loss of wetlands by 2030 compared to 2015 (3963.3 sq. km).

[1] National Committee on Combatting Desertification of Mongolia (NCCD) (2018). National Report on Voluntary Target Setting to Achieve LDN in Mongolia. https://knowledge.unccd.int/sites/default/files/ldn_targets/2019-02/Mongolia%20LDN%20TSP%20Country%20Report.pdf

The Law on Soil Conservation and Desertification Control (2012) defines responsibilities and measures for soil conservation and rehabilitation and for preventing desertification. The responsibilities include, among others, (i) using seasonal rotation in grasslands, while matching livestock numbers to the specific pasture's carrying capacity; (ii) establishing special needs areas, including inter-aimag reserve (*otor*) pastures and haymaking fields of state fodder reserves under rotation; and (iii) planting protective barriers at locations prone to erosion.

The availability of an established rangeland monitoring system, and the recent National Forest Inventory conducted under the UN-REDD Program, also provide an important baseline for planning, management and monitoring of rangeland and forest land.

Importantly also, national and local institutions that support sustainable land and forest management have been successfully established, including the Mongolian Federation of Pasture User Groups, Aimag Pasture User Associations, PUGs and Forest User Groups (FUGs). Several initiatives support the development of certification, traceability and indicator systems for sustainable livestock value chains, encouraged by the growing international demand for high-quality, sustainable animal products.

Baseline initiatives

Government initiatives

In the baseline, several agencies and stakeholders support efforts for sustainable development, land use and biodiversity conservation at the national level and in Eastern Mongolia. The proposed project will directly build upon and complement these efforts by facilitating coordination and cooperation among key government departments within and across sectors, such as environmental agency, land coordination, and agriculture policy implementation.

Ministry of Environment and Tourism (MET)

MET sets national and local policy relating to environmental conservation, biodiversity, special protected areas and climate change mitigation. MET supports four Eastern Steppe Protected Area (Strictly Protected Areas and National Parks) and River Basin Administrations. MET also collects environmental data and maintains the Mongolia Environmental Database (https://eic.mn/). In 2019, MET, in partnership with UN Environment and with support from the Green Climate Fund (GCF), launched the National Adaptation Plan (NAP) process. The 3-year NAP process will support medium- to long-term climate change adaptation planning and budgeting for all key sectors, in order to develop resilience in vulnerable sectors, including animal husbandry, arable farming, water resource management and forestry.

Ministry of Food, Agriculture and Light Industry (MOFALI)

MOFALI informs national and local level policy and planning with regard to livestock, agriculture and light industry, and implements national and sub-national development budgets. MOFALI is the key agency responsible for the new Law on Animal Health (2017), which sets the foundations for compliance with international standards and increased exports of livestock products. The law helps improve animal health in Mongolia through improved governance of veterinary services, and reinforces animal identification and traceability. MOFALI is also in charge of implementing Mongolia's National Livestock Program, and its Livestock Development Fund (LDF). With support from the World Bank, MOFALI has introduced nation-wide index-based livestock insurance.[57][56] In 2018, the Government of Mongolia approved the National Cashmere Programme (2018-2025). The main goal of this programme is to increase the volume of processed cashmere to 60% from current 12% through technology innovations, financing, and branding and marketing.[58][57]

National Development Authority (NDA)

The NDA defines economic priorities and strategies that are consistent with the Sustainable Development Concept of Mongolia 2030. It develops and implements investment, financial incentives and public-private partnership policies.

MCUD – ALAMGAC

The Ministry of Construction and Urban Development (MCUD) is the line ministry responsible for national and local land management planning. The Agency for Land Administration and Management, Geodesy and Cartography (ALAMGAC) is leading national efforts to update land management plans. The State Land Management General Plan, which had been approved by the Mongolian Government in 2003, was revised in 2018 and extended to 2025. The revision involved participation of all relevant sectors and includes all land types, including protected areas and important biodiversity areas. This plan lays the foundations for integrated land management planning at the aimag and soum levels. It also lays the foundations for planned expansion of crop production in the eastern agricultural region. An online Land Management Database was developed at national level in 2018. In the future, this database should be integrated and linked with other monitoring systems such as the one developed by NAMEM and Green Gold. With regard to the aimag and soum level management plans, initial guidelines have been developed to guide the land management planning process in aimags and soums. However, resources and capacities are still lacking at the local level to put this process into practice.

The Government of Mongolia has carried out state certification on land characteristics and quality activity since 2000 in order to ensure continuous government control over efficient and rational use of land and protection of land. Based on this, ALAMGAC is currently developing a national land monitoring system.

NAMEM – IRIMHE

The National Agency for Meteorology and Environmental Monitoring (NAMEM), and its Information and Research Institute of Meteorology, Hydrology and Environment (IRIMHE), provide government organizations and the public with information about the weather, and climate and hydrological forecasts and warnings. NAMEM is a government agency affiliated to the Ministry of Environment and Tourism (MET), and has department officers in all 21 *aimags* and hydro-meteorological monitoring stations and posts in all 365 *soums* of Mongolia. NAMEM has an established pasture monitoring network, which assesses the pasture conditions based on the database of vegetation cover, plant species composition, plant biomass, pest distribution and rodent distribution in 1,500 points across the country. Monitoring of pasture phenology has been undertaken at the soum level for the past 40 years. NAMEM has undertaken annual estimates of carrying capacity since 2001, and has monitored grasshopper and rodent infestation since 2002, both at the soum level.

[1] ADB (2014). Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change.

https://www.adb.org/sites/default/files/publication/31145/making-grasslands-sustainable-mongolia.pdf

This pasture monitoring includes pasture capacity, pasture yields, number of livestock, size of pasture area, and pasture use time at spring and summer times for each bagh.

Aimag/soum governments

Aimag and soum government are responsible for local land use planning. Pasture management planning is normally done along with the annual land management plan. Existing legislation under the Land Law authorizes local *soum* and *bagh* government to regulate carrying capacity and seasonal movements within its designated geographical scope. There are some cases observed on successful collective action at the soum level such as in Bayan-Ovoo soum. Local herder group/community set some rules for seasonal pasture use, reinforced by local government. Some *soums* have established soum development funds or community funds, to support implementation of pasture management and other development activities.

Some best practices that were introduced by initiatives of local communities and experiences can be shared such as the “decimal system” initiated by Bayan-Ovoo soum and the “communal monetary fund” being successfully implemented in Bayan-Adarga soum of Khentii aimag. The decimal system introduced in Bayan-Ovoo soum, under which the soum territory is divided into clusters of 10-12 households, is based on households; male bread-winners play the main role, while the communal monetary fund exercised in Bayan-Adarga soum is managed mainly by local women.

Over the period of 2016-2020, Dornod, Khentii and Sukhbaatar aimags have invested in breeding and herd improvement programs for several quality breeds of livestock, including sheep, goats and cattle. Breeding for sheep and goats are focused on meat, milk and fibre production. As part of implementation of the National Livestock Programme, use of local and imported quality purebred animals for selective breeding is being undertaken in Bayan-Ovoo and Khulunbuir soum with some funding from the Local Development Fund (LDF) and State Fund. The LDF is a monetary assistance provided directly to local governments for various projects to improve local infrastructure, pasture conservation, new well construction and old well rehabilitation, etc.

Protected Areas

During the period 2008-2017, with the support of key players, notably TNC and WWF, the Ministry of Environment and Tourism carried out an ecoregion assessment and biodiversity hotspot gap analysis, dividing the country into four major ecoregions. A total of 216 sites covering 43.4 million hectares were identified and prioritized as areas to be included in the country’s PA network by 2030 in three phases. The National Program on Protected Areas aims to cover 30% of the key ecosystems under the PA network. This

commitment was further reiterated in Mongolia's Sustainable Development Vision 2030, and is included as one of the 20 core indicators of this important policy document. As of September 2019, Mongolia had designated an area of 30.27 million hectares, or 20.1% of the country's territory, as State Protected Areas.

There are four categories of State Protected Areas in Mongolia:

i) Strictly Protected Area (IUCN category I ab, II) – Includes three zones: core, conservation and limited zones. Regimes are different in each zone as stated in the Law on PAs.

ii) National Park (IUCN category Ib, II&V) – Includes three zones: core, tourism and limited zones. Regimes are different in each zone as stated in the Law on PAs.

iii) Nature Reserve (IUCN category IV) – Local decision-makers may decide to divide NRs into zones. Regimes for NRs are stated in the Law on PAs.

iv) Natural Monument (IUCN-III) – Local decision-makers may decide to divide natural monuments into zones. Regimes for natural monuments are stated in the Law on PAs.

Six Nature Reserves have been designated in the project target area, three of which were established only recently, in 2019. Their designation is based on the following criteria:

Nature Reserve	Designation criteria
1. Khar Yamaat NR	Roe deer, patch forest, grassland steppe, and riparian forest
2. Toson Khulstai NR	Mongolian Gazelle and grassland steppe
3. Bayatsagaany tal NR	Mongolian Gazelle and grassland steppe
4. Ulz goliin ekh NR	Mongolian Gazelle and White-naped Crane
5. Jaran togoo tal A & B NR	Mongolian Gazelle and grassland steppe
6. Menengiin Tsagaan Khooloi NR	Mongolian Gazelle and grassland steppe

In addition, the Khurkh-Khuiten River Valley LPA (a Ramsar site) is located partially within the project target area in Bayan-Adraga soum of Khentii. This site offers critical habitat for endangered crane species along the East Asian-Australasian Flyway, notably for the White-naped Crane and the Great Bustard. While two of the above NRs, Toson Khulstai and Khar Yamaat, have established Management Boards, the other four lack any management and investment planning or structure.

Khar Yamaat NR has been managed by WWF Mongolia Programme Office since 2013, and a co-management council was established at the beginning of 2020 to integrate participation and decision-making among different actors involved. This is particularly important because the NR covers the territories of two soums in two different aimags (Khentii and Sukhbaatar). In 2019, Sukhbaatar aimag funded a marmot reintroduction activity in Khar Yamaat NR, and it is planned to reintroduce marmots and red deer in Khar Yamaat NR in 2020, with funding from Sukhbaatar and Khentii aimag governments.

Toson Khulstai NR is managed by local government with support from TNC, and a co-management council was established in 2009. The NR covers four soums in two aimags. The NR is funded by TNC, the two aimag governments, as well as through interest income from its trust fund. Funding covers salaries of NR staff and several volunteer rangers, but there is insufficient budget for conservation, communication and patrolling activities.

Generally, stakeholder participation in PA management has been increasing in Mongolia. In part, this is due to the increasing number of mining operations and the decline in pastureland for livestock. PAs (including LPAs) are one of the key tools to address threats from mining. Also, tourism is developing in the country. Thus, decision makers and local people are increasingly interested in engaging in PA management to increase income sources. Additionally, due to the large size of the PAs in Mongolia, involvement of local people is important. However, as mentioned above, local stakeholders do not have enough knowledge and experience in PA management. Grazing by individual livestock owners, as well as non-commercial haymaking, is allowed in the NRs. Enhanced (collaborative) management is required to improve the rangeland and habitat conditions within the NRs and enhance benefits for local communities.

An initial METT[59][58] assessment of the six NRs was conducted by WWF consultants in collaboration with the Mongolian Bird Conservation Centre (MBCC) during the GEF-7 project preparation phase. The assessment followed an established methodology by the Government of Mongolia.[60][59] It indicated relatively low management effectiveness scores (ranging from 13.1% to 19.2%) for the new NRs, while the two established NRs (Khar Yamaat and Toson Khulstai) had relatively higher METT scores of 61.6% and 54.5% (see Annex S).

Three of the six target NRs[61][60] are included in an area proposed to be designated UNESCO World Heritage Site, composed of five PAs. The property, known as the “Eastern Mongolian Steppe”, is currently on the tentative list. A feasibility study is being undertaken by national and international assessment teams.

Mongolia also has an established network of Local Protected Areas (LPAs).[62][61] As of 2016, a total of 2,347 parcels of land covering 57.9 million ha (37.1% of the country’s total territory) in territories of 21 aimags were taken under local protection by the aimag and soum Citizen’s Representative Khural Decisions.[63][62] The current network of PAs and LPAs in the GEF-7 target area is shown in Figure 6 below.

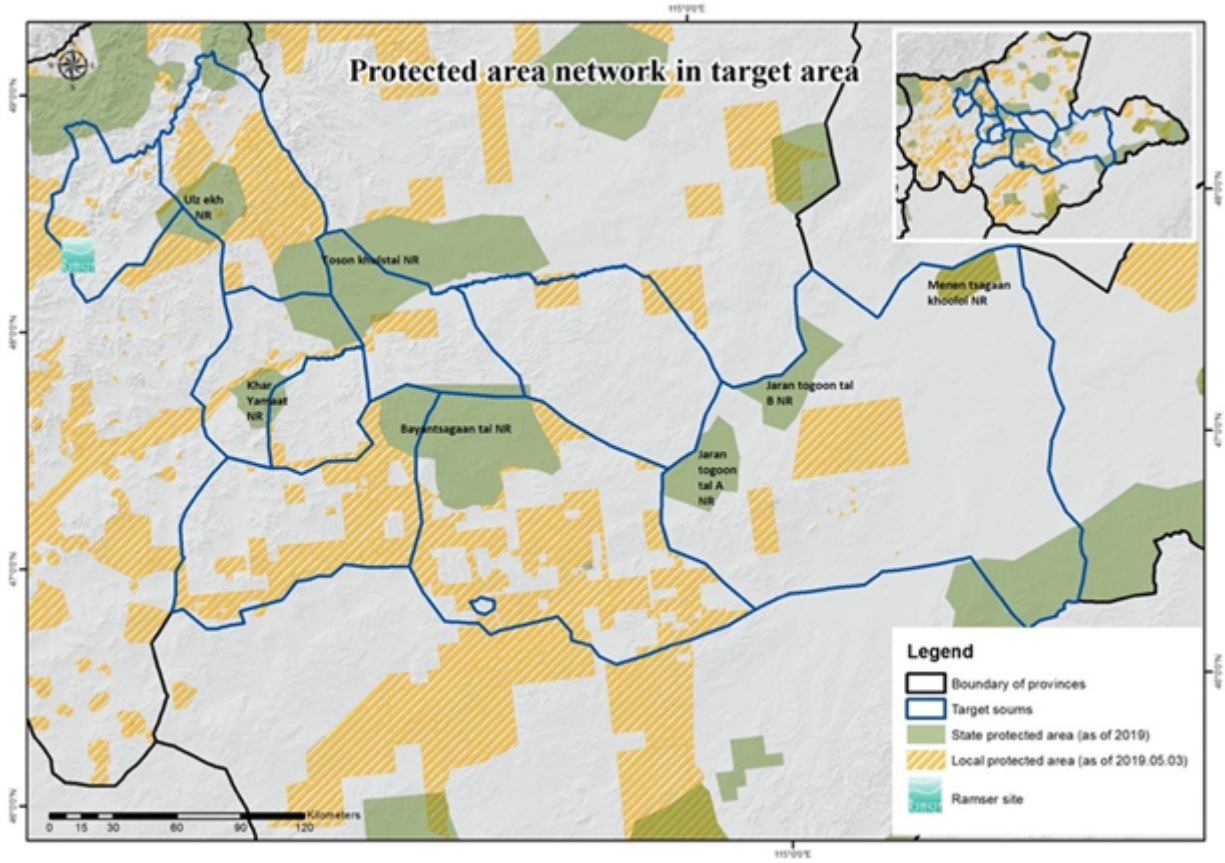

Figure 6: Protected area network in target area

National mandatory infrastructure standards

In order to decrease the infrastructure development impact, the mandatory standard to create passages for wild ungulates along the highways and railways in steppe and Gobi areas (underpass, over pass, level cross) (2015) and the mandatory standard to create passages for wild ungulates along the highways in Mountainous areas (including Forest and High Mountains) (2018) were developed and approved by the Mongolian Agency for Standardization and Metrology with support from WWF. However, they have not yet been

implemented, and major infrastructure work has begun. Thus, WWF Mongolia aims to proactively promote the implementation of the standards to avoid fragmentation of the Mongolian gazelle habitat and steppe ecosystem integrity (Figure 3).

COVID-19 response

As mentioned above, the Government has implemented measures to address shortages of food supply (in particular, vegetables), and is granting soft loans at a 3% interest rate to cashmere companies to support purchase of cashmere from herders. In August 2020, the Parliament approved the "Action Plan of the Government of Mongolia for 2020-2024". The action plan includes policies to overcome the social and economic challenges caused by the COVID-19 pandemic, as well as human development, economic, green development, governance and capital city, regional and local development policies. Under this action plan, the green development policy focuses on the rational use of natural resources, the reduction of environmental pollution and degradation, and the creation of healthy living conditions for citizens. Conditions will be created to be resilient to environmental and climate change, engage environmentally friendly businesses, protect natural resources, prevent depletion, and use wisely and rehabilitate them. The government action plan is based on the fundamental principles of improving economic diversification, supporting development of priority sectors through policies, ensuring export growth, as well as maintaining the value-added industrialization policy sustainably for a long period of time.

[1] https://www.montsame.mn/en/read/233461

Donor-funded initiatives

Green Gold and Animal Health Project

The Swiss Agency for Development and Cooperation (SDC)-funded Green Gold and Animal Health Project (2004-2020, USD 27 million) has promoted the sustainable use of rangeland resources and improved economic opportunities through the establishment of pasture user groups (PUGs) and rangeland use agreements (RUAs) with local government.

A national rangeland health monitoring system (based on photographic monitoring) was developed involving the Agency for Land Administration and Management, Geodesy and Cartography (ALAMGAC) and the National Agency for Meteorology and Environmental Monitoring (NAMEM). A National Federation of Pasture User Groups was also established. In the current consolidation phase of the project, Green Gold is cooperating with ALAMGAC and aimag governments to up scale the PUG and RUA approach to remaining aimags (among which, Dornod, Khentii and Sukhbaatar aimags). In addition, Green Gold supported the creation and development of primary marketing cooperatives at the soum level and secondary cooperatives at the aimag level to collectively market raw materials such as yak and camel wool. During the consolidation phase, Green Gold has also worked to improve livestock health.[64][63]

Furthermore, the project has piloted voluntary grazing fees at the local level. As stated in the National Report on the Rangeland Health of Mongolia, "Most herders indicate the need to reduce and regulate animal numbers, but do not know how to start and what to do with excess animals. Technical support for herders is needed in addition to policies that incentivize stocking rate reductions."[65][64] This project provides the proposed GEF-7 project with important lessons and foundations, not least among them, significant models, capacity and institutions developed at soum and aimag levels.

FAO

FAO is implementing several projects and initiatives of relevance to the GEF-7 project. FAO has supported Mongolia as the first country in Asia to engage in the implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT). The guidelines provide a framework and a set of internationally recognized principles, recommendations and practices for a responsible governance of tenure of land, fisheries and forest. FAO has supported VGGT activities in Mongolia since November 2014, in particular regular meetings of the national platform on governance of tenure and of its relating Working Group, and capacity building of land officials and civil society organizations (CSOs). Two projects supported by the Government of Germany contributed to the development of a new version of a law on pastureland, the assessment of the governance of tenure in the forestry sector, capacity development of the various actors, and dissemination of documents contextualized and translated into Mongolian.

FAO is implementing a regional project on "Building disaster and climate resilience of agriculture sector to achieve the SDGs in Asia" (2019-2020). The project aims to strengthen capacity of the agriculture sector in selected Asian countries for disaster and climate vulnerability and risk assessment (VRA) and use of risk information to plan and implement disaster risk reduction (DRR) and climate change adaptation (CCA) actions. Outcomes of this project will provide guidance for the resilience building activities under Component 2 of the proposed project.

FAO, in collaboration with the United Nations Industrial Development Organization (UNIDO), is implementing the EU-funded "Support to employment creation in Mongolia (SECiM)" project, supporting the development of value chains in meat, milk, vegetable, cashmere/wool and hides/skin. Khulunbuir soum of Dornod aimag is among the target areas of this project. The project is ending in 2021. Under the EU-funded, UNDP-led "SDG-Aligned Budgeting to Transform Employment in Mongolia" project, FAO and UNIDO will implement a component on Employment Promotion, including on agribusiness enterprises (especially for meat, leather and fibre), which will build on the outcomes of the SECiM project. The proposed GEF-7 project will build on the best practices of this project for the value chain and market development activities under Outcome 2.3.

FAO, in collaboration with MOFALI, is also implementing the "Piloting the Climate-Smart approach in livestock production systems" project (2018-2020). The project supports national food security and development goals through adopting climate-smart approaches to increase the productivity of dual-purpose cattle, sheep and goats.[66][65] Among others, the project will promote community-based climate resilient livestock production practices and conduct training on sustainable grassland management and haymaking, improved animal breeding and feeding, and manure management. In addition, the project will use FAO's Global Livestock Environmental Assessment Model (GLEAM) tool to calculate GHG emissions from livestock. The proposed project will build on the experiences of this project and apply some of its approaches under Component 2.

Other FAO projects include the "Piloting an Improved Animal Identification and Registration System in Mongolia" project (2019-2021); as well as the SDC-funded "Inclusive and sustainable vegetable and marketing project (VEGI)" (initial phase 2016-2019; consolidation phase from 2020-2022). Under the VEGI project, a training program is organised for agricultural specialists at local level covering different aspects of sustainable vegetable production such as good agricultural practices (GAP), integrated pest management (IPM), and new policies on organic farming. Another relevant initiative is FAO's global project, funded by IFAD, "Pastoralist-Driven Data Management System (P4D)" under (FAO's Pastoralist Knowledge Hub). This project aims to enhance the capacity of local pastoralist associations to improve knowledge about pastoralism, thereby strengthening their voice and participation in decision-making processes. In Mongolia, the project is implemented by the National Federation of Pasture User Groups. A socio-economic survey of pastoralist households is currently being undertaken. The proposed project will aim to build on and use the outcomes of these initiatives.

With technical assistance from FAO and the International Telecommunication Union (ITU), Mongolia is in the process of developing a national e-agriculture strategy, led by MOFALI, together with the Communications and Information Technology Authority of Mongolia (CITA). This strategy will provide a strategic framework and roadmap for the development of digital agriculture in Mongolia. One of the key expected outcomes of the strategy is to strengthen the livestock sector in Mongolia through a digital livestock identity, husbandry and traceability management system that would help herders, meat processors and exporters to establish traceability, build capacity at the herders and extensionists level for better livestock health and husbandry management, and create better market opportunity and competitiveness both domestically and internationally. Achievements in this area will lay the foundations for enhancing value addition in the livestock value chain.

In 2019, FAO Mongolia organized a training on Gender Analysis in Livestock Management and Interventions in cooperation with MOFALI. Additional capacity on gender mainstreaming will be built by the proposed project.

World Bank

The World Bank, in collaboration with MOFALI, is preparing a USD 30 million loan project, "Animal Health and Livestock Commercialization". The project's goal is to improve livestock productivity and commercialization of specified value chains in selected project locations. The project will be implemented in 6-7 aimags with a strategic focus on meat and dairy value chains (among which, selected soums of Sukhbaatar and Khentii aimags). The project will aim to strengthen animal health services, establish animal disease free zones, and improve productivity of livestock through improved animal breeding services and nutrition. Furthermore, the project will aim to establish productive partnerships between producers and processors/service providers based on the market needs and requirements, for improved commercialization and value chains of livestock products. The GEF-7 project will complement the interventions of the World Bank project by (i) providing capacity building and implementation support for sustainable fodder production and haymaking, as well as sustainable pasture management; (ii) developing partnerships and value chains for sustainably produced livestock products, such as cashmere and meat; and (iii) providing a platform for sharing and replication of good practices, as well as development of relevant policy and planning mechanisms, at the national level.

IFAD

MOFALI has been implementing the IFAD-funded "Project for Market and Pasture Management Development" (2011-2021, USD 11.5 million plus USD 9 million in Additional Financing) aimed at improving the livelihoods of poor herder households. The current Additional Financing phase of the project (2018-2021) is implemented in 24 soums of six aimags[67][66], including the three GEF-7 target aimags. The project's first component on Pasture Management and Climate Change Adaptation builds on previous work co-funded by the GEF Special Climate Change Fund (SCCF). The second and third components are focused on Market Development and Enabling Business Environment. The project works on developing soum strategies for pasture management and climate change adaptation, the formation of Pasture Herder Groups (PHGs), soum-level investments for climate change adaptation[68][67], and improving resilience of pastureland. The project has supported training and capacity building on a large number of topics, such as on pasture management and monitoring, value chains, index-based livestock insurance, and climate change adaptation. The proposed GEF-7 project directly builds on the lessons learned and investments of this project, and will aim to replicate some of its activities on sustainable rangeland management in the target soums.

UNDP/Green Climate Fund

The UNDP/GCF project "Improving Adaptive Capacity and Risk Management of Rural Communities in Mongolia" aims to enhance livelihood, water and land resilience (anticipated start in 2020 for 6 years, USD 25 million). The project will be implemented in Zavkhan, Khovd, Dornod and Sukhbaatar aimags covering steppe, desert steppe,

mountain, mountain steppe and forest steppe zones. The objective of the proposed project is to strengthen climate resilience of resource-dependent rural population through feasible adaptation measures for maintaining ecosystem services and functions. The project has the following three outcomes: 1) enhanced early warning system to strengthen preparedness and planning in the agriculture sector; 2) up-scaled integrated adaptation approaches for maintaining ecosystem services and functions; and 3) application of climate-smart technologies to increase agriculture production and safeguard rural livelihoods. An important focus of the GCF project will be on water resources protection and efficient use, which will complement efforts of the GEF-7 project. The GEF-7 project will closely coordinate the resilience building activities planned under Component 2 with this project and will benefit from its investments, in order to achieve greater impact.

Green Pasture Pilot

The private bank XacBank, a GCF accredited entity, is a pioneer in green finance such as renewable energy projects. In collaboration with Mercy Corps and the Center for Policy Research (CPR), XacBank is implementing a pilot project on pasture restoration and herder livelihoods in Bayan-Ovoo soum, Khentii aimag.

The project, which started in 2019 for an initial phase of one year, aims to address the issues of pasture degradation and livestock overstocking through incentivizing herders to reduce their herd sizes and adopt more sustainable livestock production practices. Through this project, XacBank is deploying a new eco-loan product that provides lower rates for herders who meet their "pasture friendly" criteria. The project also established a soum Livestock Risk Management Fund (LRMF), as independent funding source through public-private partnerships (PPP). The fund is formed from herders' voluntary contributions and project matching fund. The fund builds on earlier projects piloting livestock risk management funds in Mongolia. Lessons learned of this project have been taken into account in the GEF-7 project design, in particular with regard to the holistic set of interventions at various levels and the establishment of pasture management/risk funds.

[1] https://www.cpr.mn/wp-content/uploads/2018/08/Ayirzana-Enkh-Amgalan-presentation_GASL2018.pdf

The GEF-7 project will closely coordinate with the activities implemented by this project in Bayan-Ovoo soum and, once the project results are available, will aim to replicate best practices in other target soums.

WOCAT (World Overview of Conservation Approaches and Technologies) / MONCAT

In 2009, the SDC-funded Coping with Desertification Project (2007-2014) organized a training workshop and follow-up activities on introducing WOCAT's methodology and tools, in particular its mapping tool, in Mongolia. The MONCAT Secretariat was formally established within the Institute of Geography and Geoecology of the Mongolian Academy of Sciences. A database on appropriate knowledge, SLM technologies, approaches and tools to cope with desertification in Mongolia based on the WOCAT methodology and tools was developed. Efforts are currently ongoing to revive the MONCAT database and translate relevant WOCAT tools into Mongolian. The GEF-7 project will aim to build on this database as one of the platforms for knowledge sharing under Component 4, in particular with regard to the national LDN targets.

Civil society and private sector platforms

WWF Mongolia

WWF Mongolia focuses its efforts on critical conservation issues in two of the world's outstanding places for biodiversity conservation, the Altai Sayan Ecoregion in Western Mongolia and the Amur-Heilong Ecoregion Complex in Eastern Mongolia. WWF Mongolia has assisted the Government of Mongolia in designing and improving management capacity of PA networks, implementing community-based natural resource management (CBNRM) and integrated water resource management, and improving the policy and legal environment on biodiversity conservation. The GEF-7 project will build on WWF's ongoing program in the Amur-Heilong Ecoregion Complex to conserve biodiversity and enhance sustainable natural resource management in Eastern Mongolia. In particular, WWF is supporting Khar Yamaat Nature Reserve administration and sustainable livelihoods of communities living in the buffer zone of the NR.

In 2015, WWF Mongolia signed an agreement with the National University of Mongolia (NUM) to conduct biodiversity monitoring survey in Khar Yamaat NR and its buffer zone. Teachers and students conduct animal and plant monitoring surveys in May-August each year. Based on the plant monitoring survey, WWF and NUM jointly make recommendation on winter pasture situation and carrying capacity to Bayan-Ovoo and Tumentsogt soum governors. Moreover, WWF Mongolia has been conducting movement surveys of Mongolian gazelle via satellite collars for the past four years to identify main calving areas, connectivity areas and main factors that dictate the migration for future conservation activities in collaboration of Department of Environment and Tourism of Sukhbaatar aimag and Dornod Mongol Protected Area Administration.

In addition, WWF Mongolia also supports the conservation of the Landscapes of Dauria World Heritage Site, a transboundary site with Russia in northern Dornod. This site is important for threatened migratory birds such as the White-naped crane and the Great Bustard, and a transboundary migration path for the Mongolian gazelle. Although located outside the nine target soums, synergies with the activities in this site will be sought, in particular for sharing of lessons learned across the ecoregion. The proposed GEF-7 project will build upon the experience, knowledge and network of WWF in Eastern Mongolia, in particular for Component 3.

Sustainable Fibre Alliance (SFA)

The Sustainable Fibre Alliance is a non-profit, industry-led organisation, working with the extended cashmere supply chain, from herders to retailers. It brings together brands, retailers and their supply chain partners, herders, research institutions, NGOs and governments. SFA promotes a global sustainability standard for cashmere production in order to

preserve and restore grasslands, ensure animal welfare and secure livelihoods. SFA began certifying herder cooperatives against the best practices in the sustainability standard in 2018. In 2019, SFA completed compliance audit for 35 herder cooperatives. SFA has a goal to certify about 500 herder cooperatives by December 2022. Depending on the number of best practices the cooperative herders have adopted, SFA will certify the cooperative as either bronze, silver, or gold. To maintain certification, herder cooperatives must successfully pass an SFA audit annually.[69][68]

SFA and Khan Bank have started a collaborative programme to scale SFA activities and reward responsible livestock production practices. Preferential loans and other bank services will be made available to SFA herding communities that can demonstrate compliance with the SFA Codes of Practice. Herder cooperatives that received a bronze certificate by SFA can apply for a Khan Bank loan. The proposed project will collaborate with SFA to scale up successful approaches for herder training and certification with regard to sustainable cashmere under Outcome 2.3 on value chains.

Mongolian Noble Fibre

Since 2010, with support from ADB, MOFALI began to develop the concept of Mongolian Noble Fibre based on provenance, and its trademark was registered with the Mongolian Intellectual Property Organization (MIPO) and the World Intellectual Property Organization (WIPO) in 2013. The Mongolian Noble Fibre certification mark certifies that the product is made with 100% high quality wool and cashmere sourced from Mongolia, meets Mongolian and international standards for textiles and woven products, and fully complies with quality standards in environmentally-friendly manufacturing. The certification mark is issued by the Mongolian Wool and Cashmere Association. The project will continue to explore synergies with Mongolian Noble Fibre mark through its partner SFA.

TNC and WCS

The Nature Conservancy (TNC) and Wildlife Conservation Society (WCS) are working with herder cooperatives in several locations across Mongolia on promoting sustainable land management, biodiversity conservation, and sustainable livelihoods. TNC is also implementing a survey project on the Mongolian gazelle population in Eastern Mongolia and working on PA management since 2008. The proposed project will coordinate closely with these two conservation organizations with regard to protected area management and species conservation and monitoring in the target area.

Textile Exchange – Sustainable Cashmere Round Table

Textile Exchange is a global non-profit organization that works closely with its members to drive industry transformation in preferred fibres, integrity and standards and responsible supply networks. It is facilitating the Responsible Cashmere Round Table as a means to bring together the industry in order to better understand the issues and opportunities surrounding cashmere production, as well as to have a common voice in the development of a market-based solution. The Round Table's focus is not on creating a standard, but rather on providing support to organizations already active in the cashmere industry, and on operating as the voice of buyers, to help advance effective solutions for the textile industry. The proposed project will seek to exchange closely with this initiative.

Sustainable Cashmere Platform

UNDP, under its Green Commodities Programme, is leading efforts to establish a national, multi-stakeholder Sustainable Cashmere Platform in Mongolia. In 2019, UNDP conducted a comparative analysis of sustainable cashmere projects in Mongolia. The study recommended the establishment of such platform to allow stakeholders to develop and agree on key issues that will facilitate the growth of a value chain for sustainable cashmere.[70][69] Some of the existing sustainable cashmere standards/certifications in Mongolia include the Sustainable Cashmere Standard (Aid by Trade Foundation), Sustainable Cashmere (SFA), Responsible Nomads (Green Gold), Sustainable Cashmere (Agronomes et Vétérinaires Sans Frontières or AVSF), WCS, and Mongolian Noble Fibre (Mongolian Wool and Cashmere Association). UNDP, in partnership with PUGs, SFA and the Mongolian Wool and Cashmere Association, also piloted a blockchain-based traceability system in Dornod and Khentii aimags, working with herder communities to introduce a traceability mobile app. The proposed project will continue to exchange closely with UNDP on this initiative, to bring together the various initiatives working on sustainable cashmere in Mongolia.

South Gobi Cashmere Project

The South Gobi Cashmere Project is a unique partnership working with Mongolian herders to deliver a source of high-quality sustainable cashmere into the local and global cashmere supply chains. The project is a partnership comprising a mining company (Oyu Tolgoi), a luxury goods company (Kering), two non-government organisations (WCS and VET Net), academia and aerospace agency. The aim of the project is to improve animal husbandry practices to consistently produce a higher quality of cashmere, while reducing the number of goats on the rangelands. Coupled with income diversification, this will increase the income for herders, improve the quality of the rangelands, and reduce the competition between domestic animals and wildlife. The GEF-7 project will seek to exchange with this project and build on its lessons learned, in particular with regard to private sector engagement in promoting sustainable land management and cashmere value chain.

[1] http://southgobicashmere.com/our-partnership/

Community-based organizations/PUGs/FUGs

SLM/SFM user groups lay the foundation of positive land use changes contributing to global environmental benefits. There are 23 Forest User Groups in the project area (Bayan-Adraga and Norovlin soums) providing stewardship to over 46% of forests outside PAs. Khentii and Dornod aimags have formulated forest management plans for boreal forest. Pasture User Groups (PUGs) with rangeland use agreements are equally important. Agreements serve useful land use management, collaborative NRM responsibility and conflict resolution tool. The project will work closely with existing local institutions and community-based organizations.

In conclusion, the project builds on a wealth of relevant baseline initiatives and investments in the target aimags and soums. GEF incremental funding will be used to consolidate and scale up some of these achievements, as well as further enhance capacity of local stakeholders and institutions for sustainable dryland management and biodiversity conservation. In particular, it will help to consolidate approaches that link value chains and market access for agricultural (including livestock) products to sustainable dryland management. Importantly also, it will enhance capacity for landscape-level planning and monitoring to ensure sustainable land use and secure landscape connectivity for critical biodiversity.

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

The project will directly contribute to the objective of the SFM Drylands IP, which is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management. Along with the Drylands child project in Kazakhstan, the Mongolia child project will contribute to the sustainable management of rangelands and steppe forests of Central Asia.

Accordingly, the project will support the transformation of Mongolia's Eastern Steppe ecosystems to a resilient dryland landscape and ecosystem sustaining inclusive, resilient and sustainable livelihoods and securing multiple environment benefits, in line with the LDN vision adopted by the country. To achieve transformational change, the project will employ an integrated and inclusive approach that enhances biodiversity conservation and sustainable utilization, builds landscape and livelihood resilience, and restores land quality and living standards. This will require: i) effective governance and policy responses; ii) sustainable land use by productive sectors and communities; iii) public-private partnerships (PPP), market access, and incentive support; iv) knowledge sharing; and v) conservation and restoration of critical ecosystems.

The project's Theory of Change, as shown in Annex K of the Project Document, reflects the Program's Theory of Change and provides an integrated approach to tackle the complex drivers of land degradation and biodiversity, by addressing the key barriers in the target landscape. The project's Theory of Change implies that, if stakeholders (women

and men) participate in adaptive and participatory sustainable dryland management, if sector institutions in Mongolia coordinate and collaborate on sustainable dryland management actions, and if policies and laws are in place that support sustainable dryland management and biodiversity conservation, effective dryland governance will be achieved. Furthermore, it is anticipated that, if farmers (women and men) have the capacities to reverse soil erosion and sustainably increase crop productivity, if local communities (women and men) are applying sustainable rangeland and forest management and restoration, and if local protected area (PA) managers and communities have increased capacity and incentives to protect biodiversity, this will lead to increased area under sustainable land and water use, restoration and conservation of critical biodiversity and ecosystems, which, in turn, will lead to livelihood, resilience, biodiversity (BD), sustainable land management (SLM) and climate change mitigation (CCM) benefits and Land Degradation Neutrality (LDN). For this to be achieved, it is required to strengthen (a) access to technologies and investments, (b) guidelines, training and extension services that support improved crop production systems and pasture management, (c) enhanced value chains and access to markets through public-private partnerships, (d) sustainable financing mechanisms for protected areas, and (e) participatory PA management plans and implementation to ensure migratory species habitat connectivity. It will also be required to enable (a) the creation and sharing of knowledge on sustainable drylands management, (b) LDN and biodiversity monitoring systems, and (c) experience sharing with other drylands countries in Asia and globally.

The Theory of Change is based on a number of assumptions. First, it is assumed that, given their respective mandates and needs, sector institutions and stakeholders have sufficient common interests in sustainable management of dryland ecosystems. It is also assumed that, if livestock management and health and market incentives are improved, this will provide sufficient motivation to herders to agree on reducing livestock numbers (as currently being tested in the Green Pasture Pilot in Bayan-Ovoo). Furthermore, it is assumed that sustainable dryland management, restoration and conservation will lead to measurable and sustainable BD, LD, CCM and livelihood benefits during the lifetime of the project and beyond. The project also assumes continued commitment to national, regional and global exchange on sustainable drylands management in line with current national commitments under international conventions. The Theory of Change is a living document that will be revisited regularly, along with the assumptions, as part of the project's adaptive management.

In accordance with this Theory of Change, the **project's objective** is *to reverse and prevent dryland ecosystem degradation and biodiversity loss through an inclusive and integrated landscape and value chain approach for sustainable, resilient livelihoods in the Eastern Steppe of Mongolia*. The project is divided into four components:

1) *Component 1:* Strengthening the enabling environment for the sustainable management of drylands in Mongolia.

2) *Component 2:* Scaling up sustainable dryland management in the Eastern Steppe of Mongolia.

3) *Component 3:* Strengthening biodiversity conservation and landscape connectivity.

4) *Component 4:* Project coordination, knowledge management and monitoring and evaluation.

These four components directly contribute to the components and outcomes of the SFM/Drylands IP, as summarized in the table below.

Project Component	Contributes to Program Component	Contributes to Program Outcome
Component 1	1. Strengthening the enabling environment for the sustainable and inclusive management of drylands	1.1 Key sector actors collaborating, coordinating and harmonising policies, plans, actions and investments in relation to sustainable and inclusive dryland management through intersectoral (national or regional) platforms and mechanisms in 11 countries. 1.2 Management decisions in target landscapes in 11 countries are guided by comprehensive land use planning and decision support mechanisms that take into account landscape configurations and dynamics, global environmental values and multiple stakeholder needs in a participatory manner. 1.3 Governance, tenure and access conditions are improved sufficiently to meet the requirements for effective and sustainable dryland management, in the target landscapes. 1.4 All relevant actors throughout the target regions are collaborating across borders on the definition, establishment and management of transboundary management units for improved land management, production and restoration, connectivity (corridors) and conservation (protected areas).
Components 2 and 3	2. Implementing and scaling up sustainable dryland management	2.1 Resource managers and users in the target landscapes have access to services or mechanisms for generation, communication and application of practices for the sustainable management and restoration of drylands. 2.2 Resource managers and users, government and private sector actors are collaborating in strengthening green value chains in support of sustainable and equitable dryland management. 2.3 Financial institutions and other investors (public and private) offer finance to support sustainable production, management and restoration of drylands, tailored to the needs and conditions of resource managers and users. 2.4 Direct investment in dryland rehabilitation and restoration.

Component 4	Programmatic coordination, monitoring and scaling out	3.1 Effective prioritisation, coordination and capacity development optimizes the relevance, social and environmental impact and cost-effectiveness of actions and investments in support of the sustainable management of drylands. 3.2 M&E systems at programmatic level and at project level in all 11 countries, supports learning and adaptive management. 3.3 Knowledge on dryland management experiences is systematized, managed and capitalized on.

The four components are described in summary, below. A more detailed description of the project outputs and activities, as well as responsibilities for each, is included within Annex H of the ProDoc. The detailed project results framework and indicators can be found in Annex A1 of the ProDoc (Annex A of the CEO ER).

Component 1: Strengthening the enabling environment for the sustainable management of drylands in Mongolia

Outcome 1.1: Strengthened policies and planning mechanisms for the sustainable management of drylands at national, aimag and soum levels

Under Component 1, Outcome 1.1, the project will strengthen cross-sectoral, multi-stakeholder collaboration for integrated land management planning and monitoring. The integrated land management planning will allow defining an appropriate mix of interventions to reverse past degradation, and to reduce current degradation and avoid future degradation thanks to sustainable management practices. The project will establish cross-sectoral, multi-stakeholder working groups at national and local (aimag and soum) levels to facilitate participatory, adaptive landscape planning and management in the existing land-use planning process. The working groups will be established under the existing mechanism of the National Land Reform Committee, and will include representation of the various government sectors as well as private sector and local groups. Linkages with the cross-sectoral LDN working group established during the LDN target setting process will be sought. The project will then collaborate with national and regional land agencies to develop an integrated, science-based and gender-sensitive landscape level planning, assessment and monitoring process for the target soums and aimags, building on the existing land management planning guidelines developed by ALAMGAC, and supporting national LDN and biodiversity targets. The existing ALAMGAC guidelines may be complemented with LADA-WOCAT[71][70] or other relevant land management planning tools, in consultation with experts and stakeholders. National and local stakeholders will then be trained in the implementation of this process through a comprehensive training program based on assessed needs.

Once the trainings have been conducted, the project will support incorporation of land degradation and biodiversity considerations into the ongoing land management planning process at aimag and soum levels, in line with the country's land degradation neutrality (LDN) and biodiversity targets. Based on the developed guidelines, it will conduct assessments to identify or confirm LD hotspots, priorities for biodiversity, land and water[72][71] conservation, and existing good practices for sustainable land management in the target soums and aimags. It will then support the development of aimag and soum level land management plans that incorporate ecologically sensitive, participatory landscape management. The land management planning process will involve detailed consultations with local stakeholders.

The project will also support the development of a comprehensive monitoring system and define a process for regular monitoring of land use/land degradation (including the three LDN indicators – land cover, land productivity and soil organic carbon) and biodiversity in the target soums and aimags (building on existing monitoring processes by ALAMGAC, NAMEM, IRIMHE, the National Statistical Office (NSO) and other agencies). Based on this, the project will strengthen and develop the land monitoring database/system within the three aimags and nine target soums, building on the national Land Information System established by ALAMGAC.[73][72] It will also provide technical training and equipment/tools to local government officers and local volunteers for regular monitoring and verification of land use/land degradation, biodiversity and other relevant indicators in line with the defined process.

Furthermore, through consultations at national and local levels and high-level policy sessions, the project will support the development (or strengthening) of policies, laws and regulations that contribute to sustainable land use and biodiversity conservation in Mongolia, by building on the ongoing policy reform process and on other initiatives working on policy issues. In particular, the project will target policies that support a reduction in the number of livestock in line with national targets. This is anticipated to include, but is not limited to, the Taxation Law, Law on Environmental Protection, Land Law, and/or Law on Protected Areas. The project will aim to incorporate principles of Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) and relevant international treaties into the land law revision. The project will also aim to ensure gender mainstreaming in the relevant policy reforms, and take into account the needs of vulnerable groups. The Ministry of Labour and Social Protection and Education Ministry as well as local Gender Committees will be engaged, in order to address social issues that are interlinked with sustainable land management and biodiversity conservation.

Component 1 directly contributes to the following two key policy actions identified in Mongolia's LDN targets: (i) Integrate grassland planning into the regional land use plans; and (ii) Develop legal instruments and/or establish mechanism for sustainable pastureland use.

Accordingly, the outputs under Outcome 1.1 include:

- 1.1.1 Cross-sectoral, multi-stakeholder working groups established at national and local (aimag and soum) levels to facilitate participatory, adaptive landscape planning and management in the existing land-use planning process.

- 1.1.2 Guidelines for science-based, integrated land management planning, assessment and monitoring developed and stakeholders trained.

- 1.1.3 Aimag- and soum-level land management plans developed incorporating ecologically sensitive, participatory landscape management (grazing, forest and other natural resources), through local consultations.

- 1.1.4 Regular monitoring of land use, land degradation and biodiversity in target soums conducted by local government officers and/or local volunteers.

- 1.1.5 National and/or aimag-level policies/laws and resolutions developed (or strengthened) to support sustainable land use and biodiversity conservation.

Component 2: Scaling up sustainable dryland management in the Eastern Steppe of Mongolia

Under Component 2, the project will strengthen sustainable dryland management in Eastern Mongolia through local-level interventions, in a three-pronged approach: i) First, the project will promote environmentally friendly, climate-smart crop and fodder production; ii) Second, the project will work with local herder and forest communities and local government in the target area to implement and scale up sustainable, climate-resilient management and restoration of rangelands and forest patches, and advance sustainable management of livestock, and; iii) Third, the project will support partnerships between herder groups/cooperatives (incl. women groups or women-led cooperatives), local government and private sector to develop value chains and access to markets for sustainably produced agricultural products. This will also involve close collaboration with the World Bank's Animal Health and Livestock Commercialization Project and other relevant initiatives to establish the enabling conditions for increased meat exports.

The project activities under Component 2 will be based upon highly participatory, locally defined priorities, planning and budgeting processes, in order to ensure i) coherence and integration with ongoing initiatives, ii) ownership of the project and its outcomes, and; iii) long term relevance and sustainability of the project interventions. The activities will be implemented at the *bagh* (village) or *hot ail* (herding camp consisting of group of households) level in order to make them more relevant and practicable. Component 2 involves not only technical assistance and human and institutional capacity development, but also investments in the form of small-scale machinery, equipment and tools that support sustainable crop and pasture management and restoration, investments in pasture rehabilitation, community risk funds, rehabilitation of wells, as well as small-scale investments in processing capacities, animal health and breeding services at the local level (see Annex A2 for details).

Activities under Component 2 are directly supporting the Government's COVID-19 response and will contribute to building the resilience of local livelihoods and value chains (meat, wool, cashmere) in a number of ways. First, the project will contribute to ensuring national food supply by enhancing productivity of the crop and livestock sectors. The

project will also support ongoing efforts to increase capacity for processing of livestock products (such as cashmere, hides and skins) within the country for value addition. Through co-financing from the World Bank project, the project will assist Mongolia in increasing its export capacity, in particular for meat, in line with Government priorities. Furthermore, the project aims to increase resilience of herders to climate and other shocks through animal health and breeding interventions, but also by enhancing access to sufficient feed/healthy grasslands through its pasture management activities. Lastly, in close collaboration with the World Bank project, the project will ensure implementation of the One Health approach, contributing to a coordinated approach in promoting public health, animal health, plant health and environmental outcomes, including in the area of human-livestock-wildlife interface.

Furthermore, Component 2 directly contributes to Mongolia's LDN targets, in particular Target 1 on reducing deforestation and forest degradation, Target 2 on promoting sustainable grassland management, and Target 3 on increasing agricultural yields, decreasing the use of pesticides and preventing erosion in agriculture.

Component 2 comprises three outcomes, as follows.

Outcome 2.1: Farmers/crop producers in target areas are applying more sustainable crop and fodder production practices through the introduction of improved/climate-smart technologies

Under Outcome 2.1, the project will work to enhance capacity of farmers (women and men), farmer groups and cooperatives, private companies and local government officers for environment and biodiversity-friendly, climate-smart crop and fodder production. Technical guidelines/handbook (with language, pictures, etc. tailored to farmer communities) will be developed for techniques including sustainable fodder production, reduced/minimum tillage, windbreaks and other natural barriers to prevent wind and water erosion, reduced use of chemical inputs, integrated pest management, crop rotation, legume crops, cover crop, optimization of cropping systems, seed selection, irrigation techniques, and access to climate/weather information.[74][73] This is important, in particular, in view of the planned expansion of cropland area in the eastern agricultural region. Biodiversity experts will be involved in the development of these guidelines in order to ensure incorporation of biodiversity considerations in crop management. A gender-sensitive training/extension program will then be developed based on assessed needs in close collaboration with the local agriculture offices/extension services. In addition to the technical capacities, the training program will also focus on strengthening leadership skills in farmer groups/cooperatives.

In parallel with the training, the project will provide support to farmers (women and men) in target areas to apply the above-mentioned environmentally friendly, gender-sensitive and climate-smart crop and fodder production practices. Technical assistance will be provided to local governments and crop companies/farmers to enable them to provide the

required technologies and inputs for environmentally friendly, climate-smart crop and fodder production. This will include capacity building support to enable local government and stakeholders to implement these practices and technologies in the long term (e.g., through extension services). The project will also enhance farmers' access to technologies, information, inputs such as seeds, and small-scale machinery by working with farmer groups and cooperatives.

Accordingly, the outputs under Outcome 2.1 include:

- 2.1.1 Farmers (women and men), private companies and local government officers in target areas are trained in environmentally friendly, climate-smart crop and fodder production techniques.

- 2.1.2 Support provided to farmers (women and men) in target areas to apply environmentally friendly, climate-smart crop and fodder production practices within overall landscape management.

The reader is referred to the Environmental and Social Risk Management Framework (ESMF) for mitigation measures under this Outcome, in particular with regard to the land management planning process.

Outcome 2.2: Local communities are applying sustainable management and restoration of rangelands, forest patches and riparian forests in the target area

Under Outcome 2.2, the project will help to increase the capacities of local herder communities for sustainable management of rangelands and forest patches upon which their livelihoods rely. It will also aim to develop organizational and institutional capacity of local user groups and government for enhanced management and restoration of rangelands and forest patches. The project will apply the LDN response hierarchy, i.e. the different interventions across the landscape will first aim to avoid, then reduce, and if required reverse land degradation.[75][74] The cost-effectiveness of interventions will also be taken into account. Furthermore, the project will build on existing strategies for the recovery of rangeland health developed in Mongolia.[76][75]

Under this outcome, guidelines and an on-the-job training program will be developed and implemented for local decision makers and stakeholders (herders, private sector, CBOs[77][76], soum and bagh leaders) on sustainable pasture management and the conservation/restoration of critical ecosystems. The project will ensure integration of gender and social issues into the guidelines and training. Existing good practices and approaches (such as from the Green Gold project, UNDP/GEF-6 ENSURE project) will be taken into

careful account. Furthermore, the project will also support the development of guidelines and/or local agreements/regulations on haymaking that reflect local characteristics, which was identified as an important gap by local stakeholders. Environmentally-friendly haymaking technologies will be introduced. Training programs and project activities will be designed in collaboration with local stakeholders, taking into account needs of different stakeholder groups, including women and vulnerable groups. Practical, locally-appropriate user guides and handbooks will be developed. Local trainers (equally involving local women and men) will be trained in a first step to then reach out to the soum, bagh and hot ail centres.

In particular, the handbooks will include practical information for herders on:

1) Pasture rotation and its importance for climate change adaptation and mitigation;

2) Information on climate-resilient plant types and species adapted to local conditions (for livestock nutrition, promoting resilience and biodiversity);

3) Wildlife protection techniques and knowledge;

4) Water source protection techniques and methods.

The handbooks will also include practical guidance for soum and bagh leaders on the following issues:

(i) Integration of social and gender issues in environmental protection and climate change adaptation.

(ii) Usage and interpretation of legal documents in support of sustainable land management.

(iii) Promoting meaningful participation of women, men and different social groups including the assistant herders in the local land management processes.

The project will then work to establish local pasture management and restoration plans and/or pasture use agreements by local herder groups/institutions in a participatory process. These pasture management and restoration plans will be in line with the soum development objectives and in conformity with local specificities, and will involve climate-resilient seasonal rotational grazing/resting/reserve pasture patterns. This activity may also involve participatory resource mapping, where relevant. The pasture management plans will also take into account the existing delineation of cropland and pastureland as described in relevant legal documents. Causes of degradation and suitable restoration/rehabilitation interventions for priority LD hotspots will be identified. Where possible, the plans will be established at the bagh level and incorporated into the soum land management plans.

The needs of vulnerable groups (as identified during the PPG consultations), women, youth, and assistant herders/helpers will continue to be identified and taken into close consideration.

Based on these plans, climate-resilient pasture and livestock management will be implemented that secures sustainable livelihoods, such as through improved grazing practices, water supply, hay and fodder production etc. Where relevant, this will also involve promoting or reactivating existing initiatives and practices among herders on pasture use. The project will help to link existing initiatives, herder organizations and CBOs with local government, and will provide them with required capacity development and recommendations. Restoration/rehabilitation interventions will also be implemented.[78][77] Selection of species and restoration interventions will be informed by ecosystem/rangeland experts, to identify locally and ecologically appropriate methods and species. In addition, measures will be put in place to reduce potential threats to restored areas (such as from livestock grazing or fires), and to ensure sustainable and equitable access to restored land.[79][78]

In addition, risk funds or other financing mechanisms (such as user fees) will be established to finance pasture management activities (co-financed by local government or herder groups), similar to the Livestock Risk Management Fund (LRMF) currently piloted under the Green Pasture Pilot and other similar past projects.

[1] See, in particular the following reports under the BIOFIN project: https://www.biodiversityfinance.net/sites/default/files/content/knowledge_products/Grazing%20fee%20_Policy%20report_Mongolia.pdf and https://www.biodiversityfinance.net/sites/default/files/content/knowledge_products/Grazing%20fee%20methodology%20report_Mongolia.pdf.

A risk fund is a community fund set up by the community/local leaders with contributions from communities, local government and other sources of funding, where community members can apply for small-scale funding for pasture management activities, sustainable haymaking, protection/rehabilitation of water sources, etc. The risk funds will ensure that communities have funding to implement the pasture management plans.

Furthermore, in close collaboration with the World Bank's Animal Health and Livestock Commercialization Project, the project will provide technical assistance to strengthen animal health services, and livestock breeding and feeding practices, with a view to strengthening quality rather than quantity.[80][79] Mechanisms to curb livestock numbers, such as by reducing non-breeding/male animals, will be promoted. Pasture management interventions will be implemented in parallel with market-based incentives and other measures that support a reduction in the stocking density (in particular, Outcome 2.3).

Importantly also, the project will support local herder and forest communities, primarily in Bayan-Adraga and Norovlin soums, to implement conservation and sustainable management of forest patches and riparian forests (Khulunbuir, Bayan-Ovoo and Bulgan soums). Support will be provided to existing or new Forest User Groups (FUGs) and local communities to develop (or improve existing) plans for sustainable forest management and riparian forest restoration. Restoration interventions will be based on lessons learned and experiences from previous forest projects in Mongolia, and will include interventions such as reforestation/forest patch rehabilitation; thinning; fire prevention; reduced grazing in forest areas; and protection/rehabilitation of riparian forest (including planting of willow). Fencing will be used locally to protect young trees from grazing livestock.

Accordingly, the outputs under Outcome 2.2 include:

- 2.2.1 Guidelines and training program for local decision makers and stakeholders (herders, private sector, CBOs[81][80]) on sustainable pasture management and the conservation/restoration of critical ecosystems developed and implemented.
- 2.2.2 Local pasture management and restoration plans and/or agreements established by local herder groups/institutions and implementation started as a part of landscape management.
- 2.2.3 Support mechanisms for climate resilient pasture and livestock management that secures sustainable livelihoods implemented as a part of landscape management.
- 2.2.4 Conservation and sustainable management of forest patches and riparian forests implemented as a part of landscape management.

The reader is referred to the ESMF for mitigation measures under this Outcome, in particular with regard to the cropland activities, the risk funds, and the pasture management plans.

Outcome 2.3: Local communities benefit from enhanced value chains, public-private partnerships and access to markets in support of sustainable grazing practices

Under Outcome 2.3, the project will aim to enhance and strengthen value chains, public-private partnerships and access to markets that can support sustainable grazing practices. Value chains for sustainable agricultural (including livestock) products will be identified and developed in partnership with private companies. Technical and business development support will be provided to herder and farmer groups and cooperatives to enhance capacity for processing, marketing and sale of agricultural products. Interventions will be targeted at enabling herders/farmers to increase the value of their livestock, in order to facilitate efforts to reduce the stocking density (and provide incentives for a

balanced herd composition and turnover and improved animal health and breeding). The project will strengthen capacities of women and men engaged in the micro, small and medium enterprises (MSMEs), cooperatives and household production, taking into account differentiated needs and requirements.

Activities under this outcome may involve, but are not limited to:

o Assist herder cooperatives in meeting sustainable codes of practice for animal husbandry. Technical assistance may also include developing guidelines and capacity related to animal welfare best practices, managing herds, kidding and kid management, combing and shearing, handling and transport, and slaughtering, with a view to supporting access to premium markets.

o Assist herders and herder cooperatives in meeting standards of processing plants or buyers.

o Link herders and herder cooperatives to agriculture product processing factories.

o Train herders and herder groups (in particular, women) in sorting cashmere according to quality in order to obtain higher prices.

o Enhance relevant facilities at the soum level (co-financed by government and cooperatives).

o Enhance local processing and packaging capacity for livestock products such as skins, hides, and wool, and dairy products (in particular, for women groups) by providing technical assistance and equipment.

o Train herder cooperatives (in particular, women-led cooperatives) in governance, business and legal skills. The focus of the project will be to strengthen cooperatives that are truly owned and managed by community members. The project will strengthen capacities of women and men engaged in micro, small and medium enterprises (MSMEs), cooperatives and household production, taking into account differentiated needs and requirements.

o Develop partnerships with financing institutions to enable access to affordable financing for herders in support of sustainable livestock production (soft loans, establishment of credit saving cooperatives, credit and savings unions).

o Pilot a small-scale feeding farming system for sheep and cattle.

o Organize annual community fairs or festivals to demonstrate and share best practices.

The project will initially aim to work with at least nine (9) herder groups/cooperatives (one per soum), and will then aim to replicate or scale up good practices with additional (approximately 9) groups in other baghs within the target soums. Moreover, access to information, technologies, and traceability platforms that promote sustainable value chains

will be strengthened. The project will also work with the Sustainable Cashmere Platform[82][81] and other national platforms to develop national standards, indicators and approaches that support sustainable livestock value chains. The exact interventions will be determined through inclusive consultations with local communities and local officials, and approved by the PSC.

Accordingly, the following output is included under Outcome 2.3:

· 2.3.1 Partnerships established and implemented between herder groups/farmers/cooperatives, local government and private sector to develop value chains for sustainably produced agricultural products.

Component 3: Strengthening biodiversity conservation and landscape connectivity

Outcome 3.1: Management capacity of Nature Reserves (NRs)[83][82] and Local Protected Areas (LPAs) in connectivity areas is increased to support survival of Mongolian gazelle and other iconic migratory species

Under Component 3, Outcome 3.1, the project will aim to increase the management capacity of Nature Reserves (NRs) and Local Protected Areas (LPAs) in connectivity areas to support survival of Mongolian gazelle and other iconic migratory species. In addition to technical assistance and capacity building, Component 3 will also involve investments, in particular small-scale equipment and tools for biodiversity monitoring and restoration activities in NRs and LPAs, small infrastructure for NR boards, and investments in developing processing and marketing capacities for buffer zone communities (see Annex A2 budget for details).

First, an assessment will be conducted on overall landscape connectivity of important biodiversity in the target soums, in particular, for key/umbrella/migrating species such as the Mongolian gazelle, as well as migratory birds such as the Great Bustard and White-naped Crane. This assessment will also include an analysis of the interactions between biodiversity (e.g. migratory birds) and crop production; as well as relevant baseline data collection on key species in target NRs and LPAs and along the linear infrastructure (paved roads, existing and planned railways, and power lines). Inputs will be provided to the handbooks developed under Component 2 to ensure incorporation of biodiversity in sustainable land management activities. The assessment will be conducted in line with the national standard on “Construction of Wildlife Crossings along Roads and Railroads in Steppe, Gobi, and Desert Regions”, and will be coordinated with any ongoing survey efforts.

There is currently some data on the migration of the Mongolian gazelle. However, it is not sufficient to identify key connectivity areas. Threats in these connectivity areas will be identified and assessed, and baseline biodiversity surveys will be conducted in the six NRs and selected LPAs in the connectivity areas. Three of these NRs are new (Ulziin ekh, Jaran togoony tal A&B and Menengiin tsagaan khooloi) and have not conducted any biodiversity surveys yet. Bayatsagaany tal also lacks biodiversity data.

The information from the assessment will be used to inform the selection of sites where management plans and interventions for LPAs will be supported through the project. More specifically, measures to ensure overall landscape connectivity improvement and key/umbrella species conservation will be incorporated into aimag and soum land management plans and NR and LPA management plans under Components 2 and 3, ensuring free migration of key/umbrella species in line with international guidelines and national standards, and taking into consideration potential climate change impacts. These measures may include, *inter alia*: (i) Communication and monitoring activities to ensure implementation of the national standard on wildlife crossings along roads and railroads; (ii) Addressing key threats to the free migration of migratory species, such as through specific and temporary regime of pasture and water source use in the connectivity areas; (iii) Enhancing understanding among local stakeholders of climate change adaptation and mitigation actions and incorporation into local plans, such as water source protection or sustainable pasture management; and (iv) Activities to raise knowledge and awareness among local stakeholders on connectivity and conservation issues. Regular monitoring will be conducted to guide implementation of the conservation measures, including with the support of local volunteer rangers.

In a participatory process involving local governments and stakeholders, management plans will be developed or updated for the six NRs in the target areas, and appropriate co-management structures for NR and buffer zone management will be identified. The management plans will aim to address the key threats identified by the participatory METT assessments conducted during the project design phase. The management plans and interventions will be based on the key gaps as identified through the METT and Annex S2. These threats include, among others, climate change and overgrazing, residential and commercial development, natural system modification, and threats to wetland areas. In line with these threats, the management plans are anticipated to include priority actions in the following areas: (i) Planning of land use and development, especially pasture use, cropland, mining and tourism development, to reduce impacts on the NRs and buffer zones, (ii) Improve and expand wildlife monitoring, and patrolling, (iii) Enhance knowledge and awareness of the values of biodiversity, and (iv) Enable local communities to benefit from the conservation, restoration and sustainable use of biodiversity resources. Co-management structures will build on the models currently implemented in Toson Khulstai and Khar Yamaat NRs, or other successful models implemented in other parts of Mongolia.

Additionally, the project will hold consultations to identify and confirm priority interventions in LPAs in connectivity areas and other critical patch ecosystems, with the aim to secure connectivity of ecosystems and key migratory species. Where appropriate, management plans will be developed for selected LPAs. In line with these management plans

and consultations, priority interventions will be implemented to support enhanced management of these NRs and LPAs. Local mining operations will be engaged as one of the key stakeholders for planning of sustainable land use and biodiversity conservation.[84][83]

Priority interventions in NRs and LPAs are anticipated to include:

- Implementation of BD monitoring plan.
- Target communication events and trainings for local people and school children.
- Restoration/rehabilitation of wildlife and nature resources.
- Improving professional skills and capacity.
- Development of community based eco-friendly small business.
- Strengthening of PA administration infrastructure. (IT and small equipment)
- Awareness and education program on PA values and global environmental benefits for herders and key stakeholders (including women and men, girls and boys).
- Enhancing pasture use and water source conservation.
- Rehabilitating wells in the pastureland to decrease the density of local herders and livestock along the river valleys where White-naped Cranes nest and winter, and where the Mongolian gazelle rests.
- Developing and implementing conservation-based income-generating opportunities for local communities (women and men), such as beekeeping, growing medicinal plants, nature-based tourism (including bird/wildlife watching) in buffer zone/adjacent areas, and introducing waste management technologies in line with local tourism development plans. The project may provide technical assistance for processing and marketing of sustainably produced goods, as well as inputs such as small-scale tools and machinery.

Finally, the project will develop and pilot sustainable financing mechanisms for NRs (such as revolving fund, sinking fund, biodiversity offset, or buffer zone fund) through public-private partnerships or other mechanisms. As explained above, without these funds, there is limited funding for the implementation of management plans in NRs. The

project will build on experiences and lessons learned from other protected area financing mechanisms piloted in Mongolia, such as the trust fund established in Toson Khulstai NR. The funds will be established with the financial contribution from local communities, government, and/or private sector, as well as from the project.

As explained under Component 2, the project will ensure implementation of the One Health approach, contributing to a coordinated approach in promoting public health, animal health, plant health and environmental outcomes, including in the area of human-livestock-wildlife interface. With regard to capacity building activities to develop skills and capacity of rangers, the WWF Standard on Community Health, Safety and Security will be duly applied.

Accordingly, the outputs under Outcome 3.1 include:

- 3.1.1 Assessment to enhance landscape connectivity and management of globally important biodiversity in the target landscape conducted and incorporated into local plans.
- 3.1.2 Management plans for NRs developed or updated in a participatory process involving local governments and stakeholders ensuring landscape level management.
- 3.1.3 Priority interventions implemented in target NRs in line with management plans.
- 3.1.4 Community-centred conservation interventions implemented in LPAs in connectivity areas and other critical patch ecosystems to secure connectivity of ecosystems and key migratory species.
- 3.1.5 Sustainable financing mechanisms for the implementation of the management plans developed and implemented.

The reader is referred to the ESMF for mitigation measures under this Outcome, in particular with regard to the NR management plans and any access restrictions resulting from them.

Component 4: Project coordination, knowledge management and monitoring and evaluation

Outcome 4.1: Project coordination, knowledge management and monitoring and evaluation for the sustainable management of drylands in Mongolia

Component 4, Outcome 4.1 of the project will support effective project coordination, monitoring of project performance and progress to enable adaptive management, as well as the systematic creation, documenting and sharing of knowledge related to best practices on sustainable dryland management and biodiversity conservation at the aimag, national and global levels. In particular, this Component will contribute to creating knowledge and catalysing action at the global level in line with the Global SFM/Drylands Impact Program strategies for replicability and to reach scale. The project will feed into and benefit from the systematic knowledge management strategy of the GEF IP Global Coordination Project. Special consideration will be given to experience sharing with other Central Asian countries practicing pastoral husbandry and sustainable dryland management. Exchange will be sought, in particular, with the Drylands child project in Kazakhstan, implemented by the World Bank with FAO as the Co-Implementing Agency. In coordination with the (virtual) regional hub/regional coordinator for Central Asia established under the Global Coordination Project, the Mongolia child project will build on relevant international platforms in which Mongolia already plays an active role, such as the UNCCD, WOCAT, the Central Asia Countries Integrated Land Management Initiative (CACILM), the Bonn Challenge, the Northeast Asia Desertification, Land Degradation and Drought Network, the Global Soil Partnership and Asian Soil Partnership, and the United Nations Environment Assembly, to share lessons learned and knowledge from the Impact Program.

Also, the project will support regional and cross-border coordination relevant to maintaining the ecological integrity of the Central Asian Steppe, in particular in relation to the Mongolia-Manchurian Grassland and the Daurian Forest Steppe Ecoregions. It will generate and systematically document lessons learned that will contribute to the understanding of the complex dynamics of ecosystems, their values and the multiple demands placed upon them. In particular, the project will aim to share lessons, through regional meetings, exchange visits and knowledge products, with neighbouring Russia and China and build on ongoing support for transboundary conservation by WWF Mongolia, in particular through mechanisms such as the CBD and UNCCD Conference of the Parties. Exchange will also be sought with regard to regional cooperation on White-Naped Crane conservation, in particular with China. The project will also provide important lessons with regard to land tenure and access, resilience, and the role of women in the sustainable management of drylands. Through the involvement of the private sector, the project will catalyse innovations that can be scaled up in other countries in the region and globally under the IP. These innovations may include, among others, market-based instruments such as certifications as well as innovative technologies introduced by the project.

Project coordination and monitoring and evaluation will include adaptive planning and management. The project strategy, assumptions and interventions will be regularly reviewed, and if needed revised, by the Project Steering Committee and relevant technical working groups, as well as in the annual stakeholder reflection workshops. Project M&E will be closely linked to the monitoring processes developed under Component 1. Links will also be established with program-level monitoring under the global Impact Program. Project indicators will feed into Program indicator reporting. Building on the indicators developed during PPG and in coordination with the global IP Program, the project will establish systems for M&E, knowledge management and knowledge sharing, including a methodology to capture good practices and lessons learned, contributing to national, regional and global IP implementation.

A gender-sensitive/responsive knowledge management and communications strategy will be developed at the start of the project to support implementation and replication of project activities. Knowledge management activities will include, among others: i) dissemination of best practices, cross-site visits at local, national and regional levels; ii) regular coordination meetings with other projects and institutions working on similar issues in Mongolia, and; iii) exchange with the global IP platform, and other Drylands child projects. Best practices will also aim to cover "effective learning practices" to document the transfer of skills and knowledge into practice.[85][84]

Furthermore, the project will continue to exchange closely with the Sustainable Cashmere Platform established under UNDP's lead, to bring together the various initiatives and value chain actors working on sustainable cashmere in Mongolia, in particular with regard to national standards and indicators for sustainable cashmere.

The project also aims to strengthen LDN target monitoring and reporting mechanisms in Mongolia. A regular planning, review and monitoring process will be developed for national and subnational LDN targets, supporting monitoring and reporting on the three LDN biophysical indicators (SDG Indicator 15.3.1) and on LDN targets/measures implementation. This process will contribute to the upcoming national report of Mongolia to the UNCCD (planned for 2021-2022). Moreover, information on LDN targets will be shared through national and global platforms to increase awareness and understanding of LDN among stakeholders from public and private sectors..

Accordingly, the outputs under Outcome 4.1 include:

- 4.1.1 Effective project coordination and monitoring and evaluation.
- 4.1.2 Systematic creation, documentation and sharing of knowledge on sustainable dryland management and biodiversity conservation through national and global IP platforms.
- 4.1.3 LDN target monitoring and reporting mechanism strengthened and relevant information shared through national and global IP platforms.

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

First and foremost, the project is aligned with the Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes. It directly contributes to the Impact Program objective of avoiding, reducing, and reversing further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management. As one of the two countries of Central Asia that are part of the Impact Program, the Mongolia child project plays an important role in addressing dryland degradation in the rangelands and steppe forests of Central Asia. As explained above, the project is closely embedded in the Impact Program and contributes to its overall goals, outcomes and outputs. Through exchange with and alignment to the IP, best practices and knowledge will be systematically documented and shared, and regional and global collaboration will be leveraged to have a greater impact at biome and ecoregion levels. The Mongolia child project will generate multiple environmental and social benefits and enhance resilience of ecosystems and livelihoods by focusing on addressing the barriers to sustainable dryland management and biodiversity conservation in Eastern Mongolia. Through its biome/ecoregion focus and by applying an integrated landscape approach, the project will aim to achieve impact at scale in multiple focal areas.

In line with the Impact Program strategy, the project also contributes to Biodiversity focal area Objective 2, “Address direct drivers to protect habitats and species”. It will contribute to improving the financial sustainability, effective management, and ecosystem coverage of the global protected area estate by: (i) establishing sustainable funding mechanisms for protected area management; (ii) implementing conservation-based income generating opportunities for local herders in the areas adjacent to NRs and in LPAs; (iii) investing in building local capacity for protected area management; and (iv) enhancing connectivity with adjacent areas through improved landscape-level planning and management.

Furthermore, the project is aligned with Land Degradation focal area Objective 1, “Support on the ground implementation of SLM to achieve LDN”. It will contribute to maintaining or improving ecosystem services to sustain sustainable production and livelihoods in Eastern Mongolia through improved governance, investments, and capacity for sustainable dryland management.

Finally, the project will also aim to generate benefits in the focal area of Climate Change and its Objective 2, “Demonstrate mitigation options with systemic impacts”. The project will aim to enhance carbon sequestration and reduce GHG emissions through improved soil and land management, land restoration, and forest management and restoration.

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

The incremental cost reasoning and the expected contributions from the baseline, the GEF financing and co-financing for each component is described below.

Project component	Baseline scenario	With-project scenario
Component 1: Strengthening the enabling environment for the sustainable management of drylands in Mongolia	In the baseline, the ongoing land management planning process led by ALAMGAC lays the foundations for the integration of multiple sectors in national and local level planning. Monitoring systems have been set up, with local land officers playing an important role. Also, the process to review the Draft Pasture Law or to incorporate it into the Land Use Law is ongoing. However, in the baseline, there is still limited capacity and financial resources at the aimag and soum level for integrated, cross-sectoral, multi-stakeholder planning at the landscape level. There is also limited incorporation of biodiversity considerations in the areas outside protected areas. In addition, there is a need to further support the evolving policy development, in particular with regard to supporting a reduction in the stocking density of livestock.	GEF incremental funding will support capacity building of national, aimag and soum-level actors for integrated, landscape level planning. It will support science-based, gender-sensitive planning that ensures engagement of multiple stakeholders, sectors and interest groups. GEF incremental funding will also be used to support incorporation of biome/ecosystem/landscape and biodiversity considerations into the land management planning process. Furthermore, GEF funding will support consultations to advance the policy dialogue to achieve the required systems transformation, in particular with regard to the Land Law and Taxation Law. GEF funding will also be used to further enhance monitoring capacity, and build monitoring systems at the aimag and soum levels.

Component 2: Scaling up sustainable dryland management in the Eastern Steppe of Mongolia (technical assistance and investments)	In the baseline scenario, several initiatives (Green Gold, IFAD, Green Pasture Pilot) are promoting sustainable rangeland management in the target landscape through building of institutions, capacities and investments. While efforts are being made under these initiatives to mainstream and scale up good practices of rangeland governance and management, there is a need to further develop capacity of local government, community groups, cooperatives and private sector to scale up and replicate these models of sustainable rangeland management. In the baseline also, the UNDP-GCF project will strengthen the adaptive capacity of rural communities in Dornod and Sukhbaatar aimags (along with the two western aimags Zavkhan and Khovd) through investments in enhanced early warning systems and adaptation approaches such as water resources protection and harvesting, sustainable pasture management, and enhanced livestock management. The World Bank's Animal Health and Livestock Commercialization project will provide technical assistance and make investments in improved animal health, livestock quality and commercialization of livestock products. FAO/UNIDO "Employment Creation in Agriculture Value Chains" and FAO "Piloting the Climate-Smart approach in livestock production systems" projects pilot value chain and sustainable livestock approaches.	GEF incremental funding will be used to build the capacity of local farmers, herders, government and cooperatives to sustainably manage the drylands ecosystems. Technologies and innovations for sustainable cropland management will be brought in to avoid further erosion of land. Guidelines will be developed and implemented based on previous pilots to ensure sustainable haymaking techniques and crop and fodder production that ensure sustainable land management but also livestock health. Concrete investments will be made in the target soums to support sustainable management of cropland, grasslands and forest patches; investments will also be made in restoration or rehabilitation of critical areas. Combined with the World Bank and GCF interventions, the GEF funded interventions will help to build resilience of the livestock sector and herders' livelihoods. By combining interventions on animal health, value chains and market access with improved pasture management and a reduction in the stocking density, the project will contribute towards sustainable dryland management and resilient livelihoods of herder communities in Eastern Mongolia. Furthermore, GEF incremental funding will be used to enhance women's participation in decision-making and local governance structures.

Component 3: Strengthening biodiversity conservation and landscape connectivity (technical assistance and investments)	In the baseline, several Nature Reserves (NRs) have been designated in the target landscape and have received support from conservation organizations such as WWF, WCS, and TNC. Co-management or buffer zone management councils have been established for two NRs (Toson Khulstai and Khar Yamaat). However, without the project interventions, the four remaining NRs would lack adequate management structures, plans, monitoring tools and equipment to ensure their sustainable management. Also, without the project, capacity for implementing and engaging the herder communities in the management of these NRs would be limited. In the baseline, several Local Protected Areas (LPAs) have been designated in the target area and ensure some degree of protection, such as from mining. However, despite the existence of these LPAs, considerations of landscape connectivity with areas outside NRs are limited. Yet, these landscapes are critical for gazelle movement.	GEF incremental funding will be used to enhance local capacity for management of NRs, LPAs, and adjacent areas to ensure landscape connectivity for critical biodiversity. Investments will be made in building capacity and infrastructure necessary to strengthen the administration of NRs and implementation of management activities. Moreover, GEF funding will support the establishment of required funding mechanisms to ensure long-term sustainability of the management interventions. It will also build the capacity of local community groups to identify and implement conservation-based income generating opportunities.
Component 4: Project coordination, knowledge management and monitoring and evaluation	Several platforms and associations exist that bring together various actors in Mongolia on sustainable natural resource management, such as the National Federation of Pasture User Groups (PUGs), monthly development partners meeting, MET coordination meetings on NRM, etc. There is also some ongoing exchange at the global level through the UNCCD and related mechanisms, with Mongolia taking a leading role on international efforts related to sustainable rangelands management. However, there is still a lack of systematic creation of knowledge, in particular with regard to the country's LDN and biodiversity targets.	GEF incremental funding will support the effective coordination of the project activities with ongoing initiatives in Mongolia. It will contribute to the generation and sharing of knowledge at the project and program level, and improved monitoring and access to land-use data. In particular, it will support monitoring and generation and dissemination of information related to the national LDN targets. Furthermore, it will support exchange with other countries at the biome and ecoregion level, as well as regional/global exchange on sustainable dryland management.

6) Global environmental benefits (GEFTF)

The project will generate multiple global environmental benefits and socio-economic benefits by reversing natural resource degradation through resilient land management and sustainable production, enhancing biodiversity conservation, and enhanced livelihoods across the target area.

First, the total project area of 7.08 million hectares will be under improved management through improved land management plans that incorporate land degradation and biodiversity considerations. Within this area, the project will bring 1.19 million hectares[86][85] of terrestrial protected areas under improved management for conservation and sustainable use by improving management effectiveness and financial sustainability of the six Nature Reserves in the target area.

Also within this area, the project will bring 5.64 million hectares of landscapes (grasslands, cropland and forested areas) under improved practices through improved land management planning and sustainable land and forest management interventions, to benefit biodiversity, ecosystems and local livelihoods (see Annex A1 of ProDoc/Annex A of CEO ER for detailed breakdown). Approximately 248,827 hectares of degraded grasslands and 200 ha of forest land will be under restoration by the end of the project.

Through these interventions, the project will contribute to the conservation of globally important biodiversity in the target landscape, including key/umbrella/migrating species such as the Mongolian gazelle (*Procapra gutturosa*), as well as migratory birds such as the vulnerable White-naped Crane (*Antigone vipio*) and Great Bustard (*Otis tarda*). It will also contribute to the conservation and sustainable use of an important portion of the Mongolia-Manchurian Grassland and the Daurian Forest Steppe Ecoregions, and its plant diversity.

It is anticipated that the above interventions will lead to avoided GHG emissions and carbon sequestered of 8.05 million tCO2eq. This is the estimated direct GHG mitigation target based on the attached EX-ACT calculation (Annex T). In addition, policy changes, capacity building and replication of the project interventions across the three target aimags and beyond are anticipated to lead to further indirect GHG mitigation of an estimated 2.25 million tCO2eq.

The project will have important socio-economic benefits, and adaptation benefits, for an estimated 24,841 women and men living in the target soums (of which 6,204 are herders), by maintaining or enhancing the natural resource base on which their livelihoods rely, as well as by enhancing value chains and income generating opportunities linked to the conservation and sustainable use of the target landscape. It will also build the capacity of an additional 400 aimag and national level stakeholders (women and men).

Benefits of GEF investments for smallholders and pastoralists include: (i) increased sustainable crop and livestock health, productivity and quality; (ii) improved access to financial services linked to sustainability standards; (iii) increased access to national and international markets for better employment and household incomes; (iv) improved soil and water conservation; (v) increased forest and steppe protection and coverage; (vi) increased resilience to climate change, in particular, to *dzud* (harsh winters) and drought; and

(vii) enhanced/ecologically sensitive pastoral and forest governance, with community-based natural resource management (CBNRM) roles in biodiversity conservation and management.

Furthermore, co-benefits will be realized in the area of International Waters through improved management of the headwaters of the Amur-Heilongjiang ecosystem.

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

Innovativeness

A major innovation of the project lies in its land use planning approach, aiming to reconcile trade-offs of different land uses within the landscape to address environmental/land degradation and biodiversity loss. The project builds on significant momentum of the ongoing land management planning process, which provides opportunity to enhance conservation and sustainable use of the dryland ecosystems in the target landscape. It is also innovative by directly supporting the national LDN targets and applying the LDN response hierarchy.

The project's innovativeness also consists in bringing in new technologies. Examples include innovations in the field of sustainable land management (such as reduced/minimum tillage, cover crops, windbreaks), as well as digital technologies such as for traceability. Innovative technologies for monitoring, such as the use of drones, may also be introduced.

Furthermore, the project is innovative by joining the competitive advantages of two GEF Agencies, FAO and WWF, as well as several government agencies including MET, MOFALI and ALAMGAC, and civil society, to achieve impacts at scale in the areas of land degradation, biodiversity, and climate change.

Lastly, the approach of linking pasture management interventions with the development of value chains and public-private partnerships is also innovative. The risk funds for pasture management activities, while not entirely new in Mongolia, are still an innovative mechanism that is new to many of the target soums.

Sustainability

The project directly works with and builds on existing government and community-based institutions and processes for natural resource management. In particular, it builds on the ongoing land management planning process led by ALAMGAC. It will strengthen capacity at national and local level to improve resource governance, management and restoration of drylands, and biodiversity conservation. The land management plans are directly embedded in government processes, they build on the land management planning process initiated at national level, and are a requirement for local governments. Once developed, it is expected that they will be an important cross-sectoral planning instrument for local government both in the short and long term. The working groups also build on existing mechanisms of the land management planning process, and it is anticipated that they will be continued under the lead of ALAMGAC and the aimag land offices. With regard to the local pasture management plans, it is expected that if these plans are effective in enhancing pasture quality and availability of feed through improved grazing management, local herder groups and local government will be incentivized (and capacitated) to take them forward after the project ends.

Furthermore, the project will establish sustainable financing mechanisms for the Nature Reserves, Local Protected Areas, as well as the community-based pasture management through local funds for herders. These funds/financing mechanisms will be designed in a way that they can be continued and sustained by local stakeholders after the project ends. Capacity building related to the management of these funds will be an important component of Outputs 2.2.3 and 3.1.5. The experience of WWF in establishing similar funds in other areas of Mongolia will be utilized. The management and funding mechanisms established by the project will be co-managed and co-financed by, and eventually entirely handed over to local actors (government and communities).

Moreover, the project aims to establish value chains that support sustainable management. The value chain interventions will establish links between value chain actors, such as between producers (herders) and processors as well as with traders and consumers, by collaborating with existing platforms in Mongolia, such as SFA. These interventions are anticipated to generate benefits for all actors involved and are, thus, expected to be sustained after the project ends.

At the local level, the project's soum coordinators will be based in the aimag/soum offices and will collaborate closely with local land, agriculture, and livestock officers, as well as *soum* and *bagh* (village) governors, private sector, civil society, and local communities, to build their capacity and ownership of the interventions based on identified needs. Moreover, the project will apply effective learning practices in its training activities, such as pre-event learning needs assessments, post-event follow-up support to facilitate the transfer of knowledge into practice, as well as institutionalization of curricula through partnering with and enhancing the capacities of local institutions. Through this process of local ownership, incorporation into local curricula, and strengthening of local institutions, it is anticipated that the developed capacity, management processes, planning and monitoring mechanisms will be sustained after the end of the project.

Potential for scaling up

In line with GEF STAP recommended guidance on scaling out, up and deep[87][86], the project will aim to support replication and scaling by enhancing system-wide capacity at the national and local level for landscape-level planning and management. If successful, the project interventions and approach can be replicated and scaled up in other soums of the three target aimags, covering a total area of 27.3 million hectares. In addition, through knowledge sharing and exchange, it is expected that the project interventions will be replicated and scaled beyond the target aimags at the national, regional and even global level. It is anticipated that successful demonstration of the land management planning process, including through improved guidelines, and mechanisms for implementing local pasture management by linking them with value chain interventions, will lead to their adoption in other areas of Mongolia. Furthermore, the project will collaborate closely with the UNDP/GEF-6 ENSURE project, which has similar interventions in Western Mongolia, to contribute to sustainable dryland management at scale in the country. The project will also collaborate with ENSURE to foster adoption and scaling up of best practices in the cashmere sector under the Sustainable Cashmere Platform. Most importantly perhaps, if the policy interventions are successful and if the systemic barrier of an absence of national regulation/pasture use tax can be addressed, along with support for meat exports, it is anticipated that this would lead to a reduction of livestock numbers throughout Mongolia and to livestock numbers that lead to healthy, sustainable herds and associated livelihoods.

Capacity development

The project is incorporating a system-wide capacity development approach to maximize country ownership, sustainability and scale of intended results[1]. Its interventions are

designed to develop capacity of people (women and men) (*individual capacity*), national and local institutions (*organizational, institutional and network capacity*), and to strengthen the policy environment (*systemic capacity*) to enable sustainable dryland management and biodiversity conservation in the target landscape and beyond, in line with the Program's approach. In particular, the project will enhance the capacity of local organizations and institutions for planning, monitoring, and implementation of sustainable dryland management and biodiversity conservation, and engagement of stakeholders based on a participatory assessment of needs. Furthermore, under Output 2.2.2, the project will aim to develop the institutional capacity of herder organizations and CBOs. An initial participatory assessment of capacity was undertaken during the project preparation phase through a Capacity Development Scorecard, focus group discussions and individual interviews, which will be strengthened during Year 1 of project implementation. Gender-specific capacity development considerations have also been incorporated into the project design. Finally, all capacity enhancement activities will be aligned with a harmonized approach across the GEF IP Programme including the capacity enhancement strategy of the Global Coordination Project and individual child project strategies.

Details on the identified capacity needs, and the project interventions to address these needs, can be found in Annex R, Report on capacity assessment.

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[1] See „System-wide capacity development for country-driven transformations", page 38 in „Feeding People Protecting the Planet – FAO-GEF Partners in Action". http://www.fao.org/3/CA0130EN/ca0130en.pdf

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[1] The Eurasian Steppe stretches from Bulgaria through Russia, Kazakhstan, and Mongolia to Manchuria, with one major exclave (the Pannonian steppe) located in Hungary, Serbia and Croatia.

[2] Onon, Ulz, Kherlen, and Khalkh Rivers. The Amur river runs 4,444 km and is the tenth largest in the world.

[3] E.g. including six globally endangered crane species. The Dauria alone supports more than 3 million migrating birds. Over 130 flora species, 25 species of mammal, 174 species of birds including the rare Great Bustard (*Otis tarda*) and White-naped Crane (*Antigone vipio*), 2 species of amphibians, and 5 species of reptiles are recorded in the Steppe.

[4] E.g. the Mongolian gazelle (*Procapra gutturosa*) and Brandt's vole are inseparable elements of the ecosystem, have helped shape this landscape.

[5] 6.86 million ha (territory of the nine target soums) plus an additional 221,262 ha located in one of the target Nature Reserves (Toson Khulstai) but outside of the nine target soums. See Annex A1 (Annex A of CEO ER) for details.

[6] https://whc.unesco.org/en/tentativelists/5946/

[7] https://www.iucn.org/content/serengeti-east (accessed 15 October 2019).

[8] The Nature Conservancy (2011). Identifying Conservation Priorities in the Face of Future Development: Applying Development by Design in the Grasslands of Mongolia.

[9] https://www.worldwildlife.org/ecoregions/pa0813

[10] https://www.worldwildlife.org/ecoregions/pa0804

[11] The Eastern three provinces have a total of 27.3 million ha land, of which 75% (21.39 million ha) is under the "pastureland" category. Mongolian National Statistical Office, www.1212.mn.

[12] National Statistical Office. https://www.1212.mn/

[13] Ca. USD 300 per month in the Eastern Steppes, compared with USD 450 in Ulaanbaatar. Dornod aimag stands slightly higher in average GDP per capita than the national average; while Sukhbaatar aimag is 20% lower and Khentii 50% lower.

[14] Mongolia's Initial Biennial Update Report (BUR1) under the UNFCCC (2017).

[15] UNDP (2019). Comparative Analysis of Sustainable Cashmere Projects in Mongolia.

[16] https://www.gschneider.com/2019/03/01/annual-cashmere-market-report/ (retrieved October 2019)

[17] In Eastern Mongolia licenses for exploration and exploitation cover roughly 2% of the territory. However, the infrastructure required for mining in Eastern Mongolia poses a risk to the migratory ungulates. Railroads traditionally surrounded by fences cut off inherited migration routes between grazing areas while absence of paved roads in steppe and desert areas causes off-road "multi-tracking" causing soil erosion in most productive lands near the settlements.

[18] 2018 Mongolian Livestock Census. A total of more than 66.5 m head of livestock.

[19] National Report on the Rangeland Health of Mongolia: Second Assessment (2018). Green Gold-Animal Health Project, SDC; Mongolian National Federation of PUGs. Ulaanbaatar.

[20] UNCCD Global Mechanism. "Mongolia: Investing in LDN, Making the Case." 2018. $US 2.1 billion, equivalent to 43% of national GDP.

[21] Khishigbayar et al. (2015). Mongolian rangelands at a tipping point? *Journal of Arid Environments*, 115, 110-112.

[22] National Report on the Rangeland Health of Mongolia (2018).

[23] National Report on Voluntary Target Setting to Achieve LDN in Mongolia (2018). National Committee on Combatting Desertification of Mongolia (NCCD); and The 5th National Report of Mongolia to the Convention on Biological Diversity (CBD).

[24] State of the Environment of Mongolia Report (2016).

[25] USAID/WCS Promoting Transformations by Linking Nature, Wealth and Power (TRANSLINKS) (2009) Case Study. The Potential for Intensive Crop Production in the Eastern Steppe of Mongolia: History, Current Status, Government Plans, and Potential Impacts on Biodiversity.

[26] Feasibility study of Joint Demonstration Project for the Prevention and Control of Dust and Sandstorms Source Areas, 2013.

[27] Government of Mongolia, 2019. National Program on Soil Conservation and Reduction of Land Degradation.

https://www.legalinfo.mn/annex/details/10091?lawid=14627

[28] FAO (2019). Trees, forests and land use in drylands: The first global assessment – Full report. FAO Forestry Paper No. 184. Rome.

[29] Niah B. H. Venable, Steven R. Fassnacht, Alyssa D. Hendricks. (2015). Spatial Changes in Climate across Mongolia. *Proceedings of the Trans-disciplinary Research Conference: Building Resilience of Mongolian Rangelands*, Ulaanbaatar Mongolia, June 9-10, 2015

[30] WWF, Sustainable Development and Ecosystem Research Institute (2019). Climate impact assessment on the key migratory species (Mongolian gazelle and White-naped crane) in Daurian steppe. Ulaanbaatar.

[31] National Report on the Rangeland Health of Mongolia (2018).

[32] ADB (2014). Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change, p. 2.

[33] WWF (2019). Climate impact assessment on the key migratory species in Daurian steppe.

[34] Mongolia's Initial Biennial Update Report (BUR1) under the UNFCCC (2017).

[35] Soil organic carbon content (at 0-30 cm depth) in the three (3) target provinces is 1.82 Pg (0.79 Dornod+0.5 Sukhbaatar+0.53 Khentii Pg) or 1,820,000,000 t.

[36] Mendsaikhan Bud, Mongolian Ecology Center/Rutgers University. 2014, p. 30.

[37] State of the Environment of Mongolia Report (2016).

[38] ADB (2014). Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change.

[39] Delger, N. et al. (2006). Exposure of Mongolian gazelles (*Procapra gutturosa*) to foot and mouth disease virus. Journal of wildlife diseases. 42. 154-8. 10.7589/0090-3558-42.1.154.

[40] Lkhagvasuren. B, Chimeddorj. B and Sanjmyatav. D, 2011. Analysing the Effects of Infrastructure on Migratory Terrestrial Mammals in Mongolia. Barriers to migration: Case study in Mongolia. WWF, Mongolia. Ulaanbaatar, Mongolia.

[41] WWF (2010). Filling the Gaps to Protect the Biodiversity of Mongolia, p. 70.

[42] Ministry of Environment and Tourism of Mongolia (2019). Sixth National Report to the Convention on Biological Diversity (2015-2018).

[43] USAID/WCS Promoting Transformations by Linking Nature, Wealth and Power (TRANSLINKS) (2009) Case Study. The Potential for Intensive Crop Production in the Eastern Steppe of Mongolia: History, Current Status, Government Plans, and Potential Impacts on Biodiversity, p. 16. The Atar Campaign refers to the Third Atar Campaign to Reclaim Arable Land, implemented from 2008-2010.

[44] Davaadulam et al. (2014). The pesticide use in Mongolia and the actual problems. Mong Med Sci J. 2014 Mar;167(1):55-63.

[45] Jamsranjav et al. (2018). Applying a dryland degradation framework for rangelands: The case of Mongolia. *Ecological Applications*, 0(0):1–21.

[46] Fernandez-Gimenez et al. (1999). Testing a non-equilibrium model of rangeland vegetation dynamics in Mongolia. *Journal of Applied Ecology* 36:871–885.

[47] National Report on the Rangeland Health of Mongolia (2018).

[48] Source: Aimag socio-economic status reports.

[49] https://www.mn.undp.org/

[50] National Report on the Rangeland Health of Mongolia (2018).

[51] International Monetary Fund (2019). IMF Country Report No. 19/298. Mongolia: Selected Issues.

[52] UN-REDD (2018). Assessment of Financing Mechanisms and Options for Mongolia's REDD+ Action Plan. Report for UN-REDD Program, Ulaanbaatar, Ministry of Environment and Tourism, Mongolia. See also Terminal Evaluation (TE) of FAO's GEF-5 Mainstreaming Biodiversity Conservation, SFM and Carbon Sink Enhancement Into Mongolia's Productive Forest Landscapes project (see section 6.b).

[53] ADB (2014). Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change, p. 9.

[54] As identified in the social and gender analysis (Annex Q1).

[55] IUCN (International Union for Conservation of Nature) (2007). Mongolian Law on Special Protected Areas and Law on Buffer Zones Review, comments and recommendations.

[56] I.e. Eastern Mongolia Plain, and Onon River basin. (National LDN Targets and Measures, Mongolia. Oct 2018).

[57] Initially introduced through a World Bank financed project between 2006 and 2009.

[58] UNDP (2019). Comparative Analysis of Sustainable Cashmere Projects in Mongolia.

[59] Management Effectiveness Tracking Tool.

[60] The METT tool has been used in PA management of Mongolia since 2005, and upgraded several times. The current version of the "Mongolian METT" was developed with the support of WWF and approved by the Minister of MET in 2018, and is officially used in the PA network of Mongolia.

[61] Jaran togoo NR, Bayantsagaan tal NR and Toson Khulstai NR. https://whc.unesco.org/en/tentativelists/5946/. The two others are Eastern Mongolian Strictly Protected Area and Yakhi Nuur Natural Reserve (in Dornod aimag).

[62] In part supported by the UNDP/GEF-5 Network of Managed Resource Protected Areas (MRPA) project.

[63] State of the Environment of Mongolia Report (2016).

[64] Overlapping soums with the GEF-7 project notably include Bulgan soum in Dornod aimag (Phase I-IV), Bayan-Adraga and Bayan-Ovoo soums in Khentii aimag and Tumentsogt soum in Sukhbaatar aimag (Consolidation Phase).

[65] National Report on the Rangeland Health of Mongolia (2018). The report also highlights that "it is important to act decisively and promptly before those opportunities are lost".

[66] The three pilot soums of the project are Luus soum of Dundgobi aimag, Tsenkhermadal soum of Khentii aimag, and Batsumber soum of Tuv aimag.

[67] Which include Kherlen, Batshireet, Umnudelger, Norovlin soums in Khentii; Kherlen, Sergelen, Khalkhgol, Khulunbuir soums in Dornod; and Baruun-Urt, Erdenetsagaan, Bayandelger, Tuvshinshiree soums in Sukhbaatar.

[68] Such as bore wells, hay sheds, tractors for haymaking, equipment for rodent control, and training and information centres.

[69] Initial certification of a herder cooperative follows three steps: (i) SFA conducts an initial assessment of rangeland management and animal welfare practices by herders in a cooperative; (ii) SFA provides training to the herders in a cooperative on how they can move towards best practices, as defined in the two SFA codes of practice; (iii) SFA conducts a formal audit of herder practices in a cooperative.

[70] UNDP (2019). Comparative Analysis of Sustainable Cashmere Projects in Mongolia.

[71] Land Degradation Assessment in Dryland Areas (LADA) – World Overview of Conservation Approaches and Technologies (WOCAT). LADA-WOCAT tools are used to assess land use/land degradation, as well as current management responses, in an integrated biophysical and socioeconomic approach. They build on nationally available data such as climate, land cover/land use, soil data, natural resources, etc. See also relevant best practices from China: https://www.wocat.net/library/media/91/.

[72] Including surface and groundwater.

[73] Linkages with the Global IP reporting are described under Component 4.

[74] The project will not implement any irrigation infrastructure, but may provide guidelines if relevant.

[75] UNCCD (2018). Checklist for Land Degradation Neutrality Transformative Projects and Programmes (LDN TPP).

[76] National Report on the Rangeland Health of Mongolia: Second Assessment (2018). Green Gold-Animal Health Project, SDC; Mongolian National Federation of PUGs. Ulaanbaatar.

[77] Community-based organizations, such as Herder Groups, Pasture User Groups (PUGs), and Forest User Groups (FUGs) and cooperatives.

[78] According to the National Report on Rangeland Health (2018), "a general utilization rate of 50-60%, at most, is needed to allow for the maintenance and recovery of rangeland health and the benefits it provides. In addition, a conservative utilization rate can act as insurance for droughts and dzuds that are likely to intensify with climate change."

[79] Rangelands and forests are part of the public land category, use of which can be regulated by local government (within the limitations of the legal frameworks).

[80] In overlapping soums (if any), the GEF-7 project will coordinate closely with WB to coordinate investments. In soums that are not WB target soums, the GEF-7 investment will aim to replicate good practices from the WB target soums. Note that WB target soums are yet to be defined.

[81] Community-based organizations, such as Herder Groups/Organizations, Pasture User Groups (PUGs), and Forest User Groups (FUGs).

[82] Established with support from UNDP's Green Commodities Program.

[83] This includes 'Toson Khulstai', 'Khar Yamaat' and 'Bayantsagaani tal' Nature Reserves, as well as 'Ulziin ekh', 'Jaran togoony tal A&B' and 'Menengiin tsagaan khooloi' which were established as a new Nature Reserves in 2019.

[84] Building on the lessons learned of the UNDP/GEF-5 Land Degradation Offset and Mitigation in Western Mongolia project.

[85] http://www.fao.org/3/a-be975e.pdf.

[86] This figure includes 221,262 ha of Toson Khulstai that is outside the nine target soums (in Tsagaan Ovoo and Bayantumen soums in Dornod). See Annex A1 (Annex A of CEO ER) for details.

[87] See https://mcconnellfoundation.ca/wp-content/uploads/2017/08/ScalingOut_Nov27A_AV_BrandedBleed.pdf

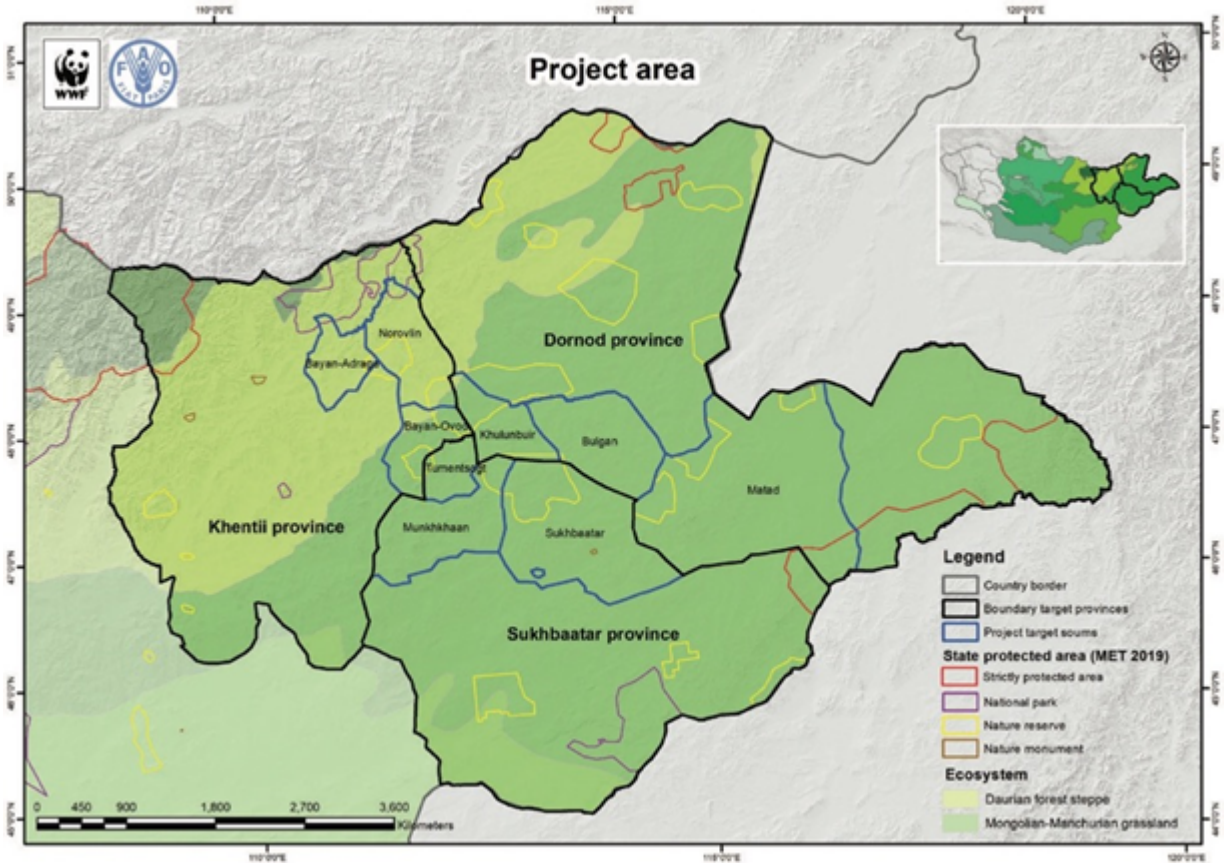
1b. Project Map and Coordinates

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

1.b Project Map and Geo-Coordinates.

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

The project interventions will take place in nine *soums* of the three eastern *aimags* of Dornod, Khentii and Sukhbaatar, as shown in the table and map below. Outreach to other soums of the three aimags, in particular Tsagaan Ovoo and Bayantumen soums (covering parts of Toson Khulstai Nature Reserve) and Bayan-Uul soum (important for gazelle movement) in Dornod aimag will be conducted as part of Component 4.



Aimag	**Soum**	**Area (ha)**	**Number of households** (as of 2018)
Dornod	Khulunbuir	382,045	622
	Bulgan	715,006	665
	Matad	2,319,351	924

Sukhbaatar	Tumentsogt	217,315	766
	Sukhbaatar	1,287,515	1,016
	Munkhkhaan	744,999	1,459
Khentii	Bayan-Ovoo	339,479	599
	Norovlin	550,580	787
	Bayan-Adraga	303,856	787
Total		**6,860,146**	**7,625**

1c. Child Project?

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

The Mongolia child project directly contributes to the SFM/Drylands program impact, in particular, producing significant global environmental benefits and national socio-economic benefits. The project is aligned with the program components and outcomes. It contributes to program outcomes 1.1 to 1.3 by strengthening cross-sectoral planning, policies and platforms for sustainable, inclusive dryland management. It also contributes to program outcomes 2.1 to 2.4 by strengthening capacity of resources users and managers for sustainable dryland management, enhancing value chains and access to markets, as well as by investing in conservation and rehabilitation of forest, pasture, and biodiversity in the target landscape. Furthermore, it contributes to program outcomes 3.1 to 3.3 by ensuring effective coordination, M&E and knowledge management. By sharing knowledge and fostering exchange with other countries in Central Asia (in particular the Drylands child project in Kazakhstan) and globally, the project will contribute to increased program impact.

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above,please explain why:

Detailed stakeholder consultations were conducted during the project identification and preparation phase with representatives of the National Development Agency, MET, MOFALI, MCUD, UNDP, the World Bank, ADB, SDC, IFAD, GIZ, TNC, WCS, aimag and soum governments, academic and research institutions, local NGOs, private sector, and local communities.[1] Inputs from stakeholders were taken into account in the elaboration of the project work plan (see Annex I2 for details). In particular, the project explicitly builds on achievements and mechanisms from previous and ongoing projects such as Green Gold, IFAD, and the UNDP GEF-6 ENSURE project. Also, the project will address some of the key issues highlighted by several stakeholders, including the rapidly increasing number of livestock and the impacts of climate change. The project work plan has also incorporated activities to promote sustainable livestock product value chains. In addition, the project design is ensuring that disadvantaged and vulnerable groups/individuals, such as assistant herders/helpers, poorer households with fewer livestock, and the unemployed, will be able to participate in and benefit from the project activities. A participatory stakeholder mapping was conducted during the PPG inception workshop in September 2019, aiming to identify different types of stakeholders at national and local levels, including veto players and stakeholders with high, medium and low interest or stake in the project (see Annex I2). The analysis was further refined during the project preparation phase based on consultations with stakeholders, and a detailed stakeholder engagement plan is included in Annex I2. Focus groups were conducted with local communities (women and men) in all nine target soums to gain an in-depth understanding of the social, economic and environmental dynamics in the target landscape (see Social and Gender Analysis in Annex Q). The Stakeholder Engagement Plan and Stakeholder Engagement Matrix in Annex I2 includes information on how stakeholders will be involved and consulted in the project execution, including any disadvantaged or vulnerable groups/individuals, as well as how stakeholder engagement will be continuously fostered during project implementation. Due to the COVID-19 outbreak, a smaller-scale validation meeting was conducted at national level in May 2020. Three validation meetings were also conducted at aimag level in May 2020, and final inputs incorporated. More detailed planning with local communities will be conducted as part of the project implementation.

Under Output 4.1.2, the project will develop a knowledge management and communications strategy to ensure information dissemination and sharing of knowledge with project stakeholders.

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[1] Records of engagement with stakeholders (at herder, soum, aimag, and national level) are available upon request.

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Annex I2: Stakeholder Engagement Matrix and Grievance Redress Mechanism

Stakeholder Engagement Plan

i) Introduction

This stakeholder engagement plan details the consultations held with stakeholders during the project design phase and lays out a process to ensure that stakeholder engagement during project implementation is in line with relevant GEF, FAO, and WWF policies and guidelines.[1]

Detailed stakeholder consultations were conducted during the project identification and preparation phase with representatives of the National Development Agency, MET, MOFALI, MCUD, UNDP, the World Bank, ADB, SDC, IFAD, GIZ, TNC, WCS, aimag and soum governments, academic and research institutions, local NGOs, private sector, and local communities. Inputs from stakeholders were taken into account in the elaboration of the project work plan (as described in this annex). In particular, the project explicitly builds on achievements and mechanisms from previous and ongoing projects such as Green Gold, IFAD, and the UNDP GEF-6 ENSURE project. Also, the project will address some of the key issues highlighted by several stakeholders, including the rapidly increasing number of livestock and the impacts of climate change. The project work plan has also incorporated activities to promote sustainable livestock product value chains. In addition, the project design is ensuring that disadvantaged and vulnerable groups/individuals, such as assistant herders/helpers, poorer households with fewer livestock, and the unemployed, will be able to participate in and benefit from the project activities. A participatory stakeholder mapping was conducted during the PPG inception workshop in September 2019 (see *Figure 7* below), aiming to identify different types of stakeholders at national and local levels, including veto players and stakeholders with high, medium and low interest or stake in the project (see below). The analysis was further refined during the project preparation phase based on consultations with stakeholders, as detailed in this annex.

Focus groups were conducted with local communities (women and men) in all nine target soums to gain an in-depth understanding of the social, economic and environmental dynamics in the target landscape. These focus groups were organized by a social and gender expert team from the Development Horizons Foundation (DHF) between 6-17 October 2019. During the mission, the social and gender team hired jointly by FAO and WWF visited three aimags and six soums; they met with 43 officials and representatives of key institutions and stakeholders (16 women, 27 men). A total of 104 persons (50 women, 54 men) were consulted including 61 persons (34 women, 27 men) who participated in nine focus group discussions. The report of these consultations is included in the Social and Gender Analysis in Annex Q of this project document. In addition, an Environmental and Social Impact Assessment (ESIA) was conducted to analyse safeguards issues more in detail (please refer to separate ESMF document).

In addition, several other local stakeholder consultations were organized as part of the baseline assessments by other national experts. Detailed lists of meeting participants at herder, soum, aimag, and national level are available upon request. Due to the COVID-19 outbreak, a smaller-scale validation meeting was conducted at national level in May 2020. Three validation meetings were also conducted at aimag level in May 2020, and final inputs incorporated. More detailed planning with local communities will be conducted as part of the project implementation.

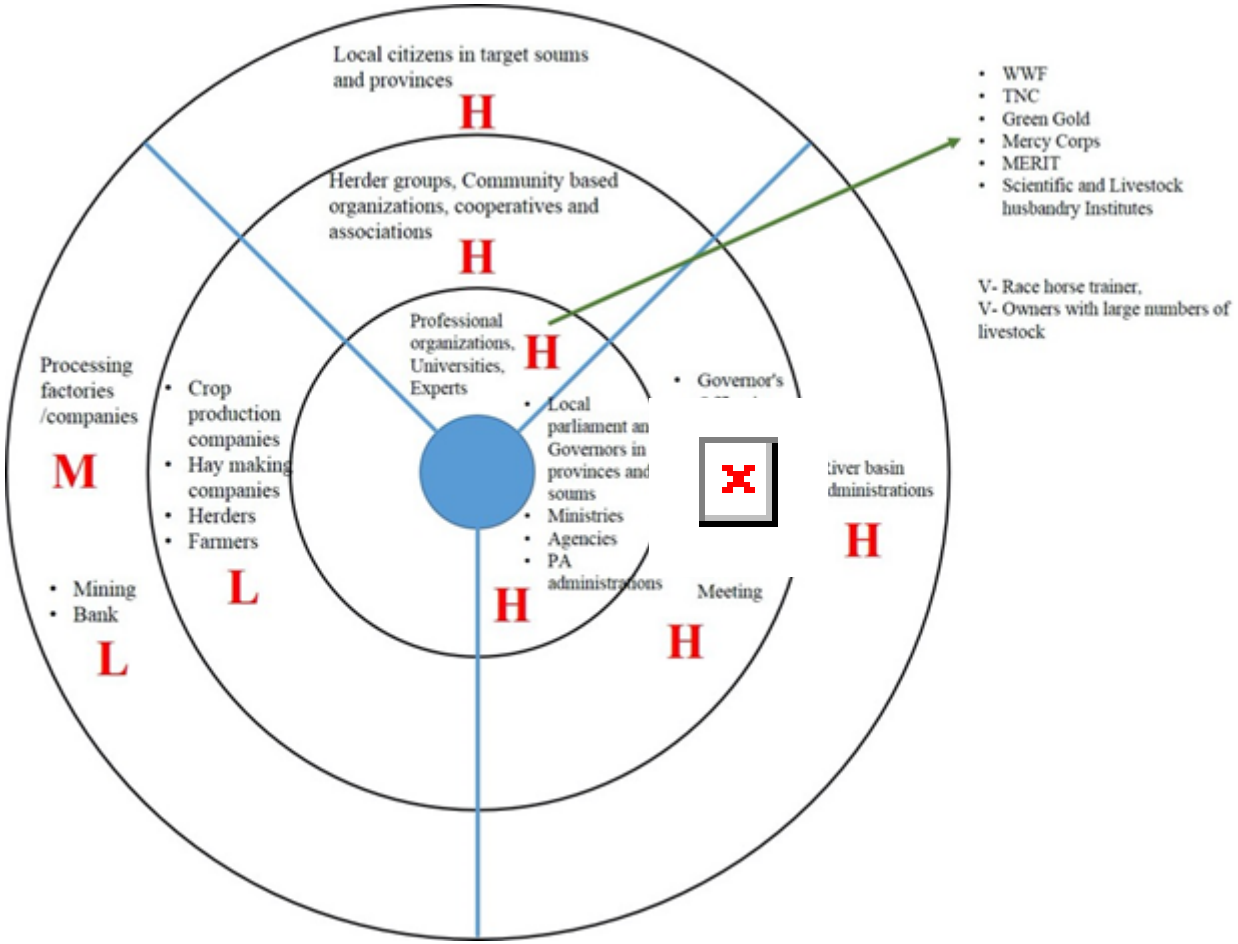

Figure 7: Stakeholder mapping conducted at the PPG inception workshop.

ii) Key issues raised

The Stakeholder Engagement Matrix included in the following section summarizes the key issues raised by the various stakeholders (including beneficiaries/local communities and other stakeholders, see details below), and how they were addressed in the project design. It also includes information on how stakeholders will be involved and consulted in the project implementation, including any disadvantaged or vulnerable groups/individuals.

The key issues, risks and potential impacts identified from the stakeholder consultations are summarized below.

Issue raised / risk / potential impact	How the issue has been addressed in the project design
1. Several stakeholders at the national and local levels highlighted the issue of overgrazing and the rapidly increasing number of livestock as one of the key issues to be addressed by the project. The stakeholders mentioned that, while local action and planning is required, national policies/regulations are needed in order to effectively address this threat (in particular, a livestock tax/pasture fee). Stakeholders also mentioned that climate change is affecting the rangelands, and that mining is having negative impacts on the dryland ecosystem.	Under Component 1 of the project, the project will support national policy and regulations to address this issue at the national level. It will also work on land management planning, management and governance at the local level to ensure adequate mechanisms for local action, in a gender and socially inclusive manner. Climate change risk is being addressed by the different project components, including through improved pasture management and rehabilitation of water sources.
2. Local stakeholders mentioned that disadvantaged or vulnerable groups/individuals, such as assistant herders/helpers, poorer households with fewer livestock, and unemployed, often have fewer opportunities to participate in training and project activities. Training is often organized in the soum centre, while more activities should take place at the *bagh* and *hot ail* levels.	The trainings, consultations and activities organized by the project will be implemented at *bagh* and *hot ail* levels. Nine Soum Coordinators will be recruited locally, and local project implementation teams will be established at the *bagh* and *soum* levels, involving local women and men to support project implementation at the local level. The project will ensure that vulnerable groups, such as poorer households and assistant herders as identified in the PPG consultations, as well as women, will be consulted and will be able to participate in and benefit from the project activities. Trainings will apply effective learning practices including a pre-event learning needs analysis and post-event support to facilitate the transfer of knowledge into practice.
3. Several herders raised the issue of low animal husbandry raw material prices, in particular for meat and skins/hides.	The value chain activities under Component 2 will aim to support herders in enhancing value chains for their products, including through improved processing and access to markets. The project will also assist herders in enhancing the quality of their products through animal health and breeding interventions.

iii) Stakeholder Engagement Plan

The stakeholder engagement plan might have to be updated after the finalization of the safeguards plans with respect to FPIC measures which would apply to all communities that are affected by project activities. Also, a grievance mechanism has been defined for project stakeholders (see following section).

The table below summarizes the main methods for consultation and engagement of different stakeholder groups, at both national and local levels. In addition, under Output 4.1.2, the project will develop a knowledge management and communications strategy (including timeline) to ensure information dissemination and sharing of knowledge with project stakeholders.

Stakeholder group	Methods for consultation and engagement
1. National and local government	National and local government stakeholders are aware of the project from the project design phase. They will be convened again at the beginning of the project, through the national inception workshop and local inception meetings, where they will be informed of the project and will have the opportunity to provide further inputs. Government stakeholders will be closely involved in the establishment of the cross-sectoral, multi-stakeholder working groups under Output 1.1.1. Furthermore, they will be closely engaged in all project activities, in order to ensure local ownership and sustainability beyond the project duration. The following methods will be the main channels for communication with government stakeholders. · Email, phone and face-to-face meetings. · Workshops. · Publications, project flyers, brochures.

2. Local communities and community groups	Although community stakeholders have been consulted in all target soums during the project design phase, local communities will be consulted more in detail at the beginning of the project implementation to ensure that local specificities and needs in each target *soum*, *bagh*, and *hot ail* will be taken into account. As explained above, local Soum Coordinators will be recruited locally, and local project implementation teams will be established at the *bagh* and *soum* levels, involving local women and men to support project planning and implementation at the local level. The project will ensure that vulnerable groups, such as poorer households and assistant herders, as well as women, will be consulted and will be able to participate in and benefit from the project activities. Consultations with communities and participatory approaches have been explicitly incorporated into all relevant activities of the work plan in Annex H. The following methods will be the main channels for communication with local communities. · Face-to-face meetings and consultations at the *soum*, *bagh* and *hot ail* levels. · Project handouts. · Focus groups specifically organized with women and vulnerable groups. The Mongolian language (verbal and written) will be used for the consultations, as all stakeholders in the project area are native Mongolian speakers.

3. Regional and international organizations, development partners	Regional and international organizations have been consulted during the project design phase and will continue to be kept informed of the project activities. The project will coordinate closely with relevant initiatives, as outlined in section 6.b of the project document. The following methods will be the main channels for communication with regional and international stakeholders. · Email, phone and face-to-face meetings. · Inception workshop, regular exchange meetings. · Publications, project flyers, brochures.
4. Civil society	Stakeholders from civil society have been closely involved in the project design, and will continue to be engaged during project implementation. WWF Mongolia will be a project executing partner, providing specific execution support to MET. Other civil society stakeholders include WCS, TNC, Sustainable Fibre Alliance, local community-based associations, as well as academia. The following methods will be the main channels for communication with stakeholders from civil society. · Email, phone and face-to-face meetings. · Publications, project flyers, brochures.
5. Private sector	Private sector stakeholders that have been consulted during the project design phase include local meat factories, cashmere companies, as well as local crop companies. As explained in section 4, the project will engage meat processing companies such as Bayandelger Khuns LLC, cashmere processing companies such as Gobi Company, as well as the Sustainable Fibre Alliance (SFA), under Outcome 2.3 on sustainable value chains. In addition, the project will engage with private crop companies under Outcome 2.1 to make their practices more sustainable and environmentally-friendly. These crop companies are providing co-financing to the project activities. The following methods will be the main channels for communication with private sector stakeholders. · Email, phone and face-to-face meetings. · Project flyers, brochures.

iv) Resources and Responsibilities

The PMU, under the overall supervision of MET, will be responsible for implementing the stakeholder engagement as outlined in the Stakeholder Engagement Plan and Stakeholder Engagement Matrix. It will also be responsible for monitoring and reporting on stakeholder engagement through the annual project implementation reports (PIRs). Relevant tasks have been incorporated into the Terms of Reference of the project staff (see Annex L). Budget for stakeholder engagement has been allocated through the meeting, training and travel budget lines as shown in Annex A2.

In the annual PIRs, the PMU will report on the following indicators:

1) Number of government agencies, civil society organizations, private sector, vulnerable groups and other stakeholder groups that have been involved in the project implementation phase.

2) Number of engagements (such as meetings, workshops, official communications) with stakeholders during the project implementation phase.

3) Number of grievances received and responded to/resolved (see Grievance Redress Mechanism described in the section below).

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[1] See GEF Policy on Stakeholder Engagement, FAO Operational Guidelines for Stakeholder Engagement, and WWF Procedures for Implementation of Standard on Stakeholder Engagement.

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.

WWF Mongolia will be a project executing partner. Other civil society stakeholders include WCS, TNC, Sustainable Fibre Alliance, local community-based associations, as well as academia.

The PMU, under the overall supervision of MET, will be responsible for implementing the stakeholder engagement as outlined in the Stakeholder Engagement Plan and Stakeholder Engagement Matrix. It will also be responsible for monitoring and reporting on stakeholder engagement through the annual project implementation reports (PIRs).

Relevant tasks have been incorporated into the Terms of Reference of the project staff (see Annex L). Budget for stakeholder engagement has been allocated through the meeting and travel budget lines as shown in Annex A2.

In the annual PIRs, the PMU will report on the following indicators:

1) Number of government agencies, civil society organizations, private sector, vulnerable groups and other stakeholder groups that have been involved in the project implementation phase.

2) Number of engagements (such as meetings, workshops, official communications) with stakeholders during the project implementation phase.

3) Number of grievances received and responded to/resolved (see Grievance Redress Mechanism described in Annex I2).

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The project *"Promoting Dryland Sustainable Landscapes and Biodiversity Conservation in the Eastern Steppe of Mongolia"* has great potential to provide support towards implementation of the national, sectoral and local level gender-responsive policy planning processes, in addressing emerging social and gender issues and in making contributions, initiated by the Government of Mongolia, towards the realization of the "UN Resolution on the Improvement of Livelihoods of Rural Women and Girls" and the objectives of the "Ulaanbaatar Declaration" adopted at the "SDG: Gender and Development" International Conference held in 2018.

To promote gender equality and the empowerment of women, the project has undertaken a social and gender analysis (see Annex Q1 'Social and Gender Analysis') to understand the context on gender and identify specific dimensions and entry points for gender mainstreaming. Based on this analysis, a gender-responsive approach has been identified for the project outcomes, outputs, and activities, and specific gender-sensitive indicators have been developed for the proposed project and integrated into a Gender Action Plan and project results framework for implementation. Gender aspects are cross-cutting and multi-dimensional and therefore it is imperative to recognize and deal with differentiated situation and needs of women, men and various social groups at all phases of the project and secure their equal participation as an essential ground for successful project implementation. This will further facilitate engaging local women, men and different social groups in more appropriate utilization of natural resources as well as improving their capacities towards climate change adaptation and mitigation processes.

Current Context:

Mongolian women and men maintain relatively equal relations within the households due to nomadic lifestyle and since the 1920s women's participation in education and employment was promoted extensively as practiced in most eastern-bloc countries. Therefore, the idea to deal fairly and equally with both women and men has been reflected in the four Constitutions of Mongolia, adopted first in 1924, then in 1940, 1960 and 1992 respectively. The country has acceded to and ratified the relevant international treaties and conventions including, the UN Convention on the Elimination of all forms of Discrimination against Women (CEDAW).

Gender issues in the socio-economic sphere:

Employment: Women's average monthly salary at the national level was 82.1 per cent of men's average monthly earning in 2018 and women remain subject to employment/enrolment discrimination because of their reproductive roles and responsibilities. Men are increasingly engaged in the seasonal and shift-work being separated from their families for longer period which might in turn affect their health, security and family relationships.

Business opportunities: Nationally, women make up 30.8 percent among all employers (e.g., cooperative and company owners) as of today. Women's share among livestock-breeders has declined since 2012 and they represented 42.8 per cent of herders in 2018. Although women make up a majority among SME holders, they are concentrated mostly in small businesses. They lack access to financial services and tangible investment opportunities. Women's businesses are smaller in size as well as turnover and employ fewer workers. Of late, men's engagement in entrepreneurship particularly, at the local level has been diminished. And unemployment is high in soum centres of target aimags.

Access to financial resources: The gender disparities manifested in property ownership generate similar gender imbalances when it comes to business-related decision-making or access to financial resources. For example, women growing vegetables or producing dairy products are unable to obtain bank loans for lack of assets that could be used as collateral. Another issue needing attention is the excessively low value of the housing and house plots of rural families, which turns into a factor inhibiting economic activities of women who constitute the bulk of small and medium enterprise (SME) operators. These gender disparities are also prevailing in the target aimags and soums. Women represent the minority among property owners (including in land tenure and ownership of livestock), which prevents their access to financial services, credit lines as well as their business opportunities. The focus group discussions with land farmers further revealed that while men engaged in grain or potato production on large land areas, or lend their land, women mostly do vegetable gardening on smaller plots.

Participation in decision-making: Women's participation in the nation's political decision-making remains inadequate. There is no woman nominated and/or appointed either to the top decision-making positions or aimag and the capital city governor's positions as well as speaker/s of the citizen's representatives Khural/s. However, more and more women are engaged in the private as well as public sector executive/management positions. There are a few women in the Citizen's Representatives Khural (CRKh) who play minor roles in making budget related decisions. There is a differing gender ratio amongst the civil servants working in the target soums. Women are a majority amongst the soum administrative officers and their management teams in Sukhbaatar aimag, while men predominate in soums of Khentii aimag, particularly in Norovlin soum. Gender ratio is comparatively equal in soums of Dornod aimag; however, men are dominant among the decision-makers.

Access to education and health services: In addition, although women's representation in the decision-making positions still needs improvement, women play an important role in making decisions at household level particularly as they equally participate in the household financial decision-making processes. Women are in a privileged position in terms of benefiting from the educational and health services while, men's social activity level is quite low especially in the rural areas and at the community level. Men's educational level is lower in rural areas and their average life expectancy is 9.67 years shorter as compared with that of women according to 2019 statistics. In recent years, more young women move from rural areas to cities leaving men behind, which is creating emerging gender issues (see Annex Q1, p. 8 and p. 19 ff., for more details).

Gender Analysis:

The "Social and Gender Analysis" (see Annex Q1) conducted for the finalization of the GEF-7 project document revealed the following factors that would directly impact the successful accomplishment of the project:

- The project planning processes should be based on the analysis of existing and emerging social and gender issues; knowledge and experiences, capacities and differentiated needs of critical stakeholders and beneficiaries including women, men and various social groups,
- The stakeholders' knowledge, experience and capacities are essential to reflect the social and gender issues in their planned activities,
- The realization of activities with the active, meaningful, equal participation and cooperation of critical stakeholders, particularly that of direct beneficiaries in local target areas,
- Building and strengthening of capacities of the local beneficiaries through participatory monitoring and evaluation processes.

GEF Gender Policy and the Mongolian National Committee on Gender Equality (NCGE) Recommendation for the Multilateral Partners issued in 2019 (See Table 9 of the Social and Gender Analysis) will be followed while planning and implementing the gender-specific actions as well as mainstreaming gender in the project planning processes by taking into consideration the specific gender related issues, situation and needs in the country.

Moreover, this project recognizes differentiated needs of men and women in planning and implementing of the gender-specific actions as well as in mainstreaming gender equality principles in the project activities.

Gender Action Plan:

Based on the project gender analysis, the project has identified entry points for ensuring gender mainstreaming and women's empowerment is incorporated into project activities – see Annex Q2 ("Gender Action Plan"). As the project is undertaking a framework approach, the Gender Action Plan (GAP) describes the process that will be undertaken to ensure gender dimensions are taken into consideration, with specific recommendations emerging based on project workplan priorities.

Under these circumstances, focusing on women's issues only within the GAP might misguide the critical stakeholders' attitude and participation. Therefore, the present project follows and pursues the Mongolian Government's approach towards recognizing differentiated needs of women and men in implementing the GAP under the project. This

approach has been reflected in the content and wording of the Law on Promotion of Gender Equality (LPGE) adopted in 2011. For instance, Article 10 guarantees equal rights in civil service and states that “the representation of any one sex among public servants in special public agencies shall not be less than 40 per cent”. It is of paramount importance for the success of the project to include national mechanisms that are promoting gender equality in the country including the NCGE, sectoral Gender Councils and local/aimag-level Gender Committees, gender focal points and gender experts working at the national, sectoral and local levels as strategic partners and stakeholders. It is planned that the NCGE will be represented in the Project Steering Committee (PSC).

The GAP is aimed at a) mainstreaming gender in all 4 components of the project; b) identifying necessary gender-specific actions with required budget and funds; and c) defining how the project will monitor gender mainstreaming. Gender-sensitive/responsive outputs and activities have been incorporated into the project’s results framework and work plan, in line with the GAP.

The PMU, and the agencies responsible for implementation of the respective project activities as indicated in Annex Q2, will be responsible for the implementation of the gender-specific actions, with support from the Safeguards and Gender Specialist. The Safeguards and Gender Specialist, with support from the Knowledge Management and M&E Specialist, will be responsible for periodically monitor implementation of the Gender Action Plan.

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

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

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.

Private sector engagement will be an important element of the project. A value chain analysis was conducted during the project preparation phase; please refer to Annex V. Through the implementation of Outcome 2.3, the project will aim to promote sustainable value chains and market incentives that are considered a prerequisite for sustainable rangeland management. In particular, the project will engage meat processing companies such as Bayandelger Khuns LLC, cashmere processing companies such as Gobi Company, as well as the Sustainable Fibre Alliance (SFA), an industry association promoting sustainable cashmere value chains. The project will assist herder cooperatives in meeting sustainable codes of practice and obtain certifications from existing certification bodies (such as SFA), in order to access premium (export) markets. It will also link herders and herder cooperatives to meat and cashmere processing factories and assist them in meeting standards of processing plants or buyers. It will train herder cooperatives (in particular, women-led cooperatives) in governance, business and legal skills. Furthermore, the project will continue to exchange closely with the Sustainable Cashmere Platform established under UNDP's lead, to bring together the various initiatives and value chain actors working on sustainable cashmere in Mongolia, in particular with regard to national standards and indicators for sustainable cashmere.

In addition, the project will engage with private crop companies under Outcome 2.1 to make their practices more sustainable and environmentally-friendly. These local crop companies will participate in the development and implementation of technical guidelines and a training/extension program on environment and biodiversity-friendly, climate-smart crop and fodder production techniques. They will then apply these techniques through field implementation. Two of these crop companies are providing co-financing to the project activities. Other companies engaged in agribusiness, such as fertilizer distribution companies, will also be engaged as stakeholders to promote sustainable crop management.

Under Outcome 2.3, as part of the value chain activities, the project will seek to develop partnerships with financing institutions to enable access to affordable financing for herders (in particular, women) in support of sustainable livestock production (soft loans, establishment of credit saving cooperatives, credit and savings unions). Specifically, the project aims to build on the outcomes of ongoing pilots such as the Green Pasture Pilot with XacBank and the collaboration between SFA and Khan Bank.

Lastly, local mining operations will be engaged as one of the key stakeholder groups for planning of sustainable land use and biodiversity conservation, building on lessons learned of the UNDP/GEF-5 Land Degradation Offset and Mitigation in Western Mongolia project. Biodiversity offsets are among the options for sustainable financing mechanisms for NRs that will be explored during implementation (Output 3.1.5).

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):

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

Section A: Risks to the project

In the section below, elaborate on indicated risks **to the project**, including climate 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.

Description of risk	Impact	Probability of occurrence	Mitigation actions	Responsible party
1) Local government and communities have limited implementation capacity due to a large number of donor-funded projects, leading to slow project implementation or delay.	Moderate	Moderate	The project will operate through soum coordinators, who will work closely with local government officers. This will allow for involvement of local government without overburdening them. In addition, the project directly supports priorities of local government (such as the land management planning, pasture management). The activities will be closely coordinated with and build on local baseline activities.	PMU

2) Shift in government priorities at national or aimag level due to 2020 elections and/or due to COVID-19.	Moderate	Moderate	The project will work at several different levels; it is anticipated that most activities will be implemented as planned, especially at the local level. Even after the 2020 elections (held in June 2020), it is anticipated that sustainable dryland management will remain a priority of the government. Furthermore, increasing exports (such as meat exports) as well as environmental protection and green economic recovery are among the priorities of the new Government, which is aligned with the GEF-7 project goals. MET has requested that FAO and WWF support the project execution in order to avoid delays in implementation. The project will regularly review its intervention strategy and take necessary adjustments reflecting the context of the country. Potential impacts of COVID-19 will be closely monitored.	PMU
3) Risks related to COVID-19: a) Delays due to COVID-19 lead to slow implementation or stalling, and/or impacts the stakeholder engagement process. b) Impacts from COVID-19 affects the availability of technical expertise and capacity. c) Enabling environment and changing government priorities/ availability of co-financing. d) Future risks of similar crises (including from human-livestock-wildlife interaction)			a) The project will implement adaptive management, and the work plan and stakeholder engagement plan would be adjusted, if necessary, to reflect the impacts of COVID-19. It is anticipated that, even if face-to-face interactions are reduced, the project would still be able to organize meaningful consultations with local stakeholders through the local representatives. Remote communication via email, online meetings and phone may be used increasingly to adjust to the new situation. b) It is not currently anticipated that the COVID-19 restrictions would affect the availability of national expertise. The project relies mostly on national experts for its implementation. With regard to any international experts, it is expected that expertise could be provided remotely, if necessary. c) As explained above, increasing exports (such as meat exports) as well as environmental protection and green economic recovery are among the priorities of the new Government, which is aligned with the GEF-7 project goals. The Government has also taken action to address vulnerabilities of herders by granting soft loans at a 3% interest rate to cashmere companies to support purchase of cashmere from herders. Additional measures will be taken in the near future to support the socio-economic recovery and increase resilience. In addition, under its COVID-19 response, the Government is promoting vegetable production, which provides opportunities for the project to engage with farmers (including women farmers). Availability of co-financing is not anticipated to be affected due to the additional investments in the COVID-19 response. d) As explained in Section 1.a.2) Alternative scenario, in close	

4) Local government does not allocate sufficient budget for the development of the land management plans.	High	Moderate	The project plans to finance the development of land management plans only partially, with significant government co-financing required. This is important to ensure local ownership and sustainability. The project will not start this activity in all three aimags and all nine soums at the same time, rather will do sequentially. In this way, it can make sure that sufficient local resources are made available to support the process.	PMU
5) Failure to incorporate land degradation and biodiversity considerations into land management plans due to conflicting interests at the local level.	Moderate	Moderate	The priorities of the project are well aligned with the objectives of the current land management planning process, as well as sectoral (MET, MOFALI) and local government priorities. Broad consultations will be held in order to ensure that all interests are taken into account and trade-offs reconciled where possible.	PMU
6) Livestock numbers increase despite project interventions. Goat numbers increase due to enhanced value chains for cashmere.	Moderate	High	There is a broad consensus among project stakeholders that policy interventions to support a livestock tax/pasture fee are critical to succeed in curbing livestock numbers. Consequently, Component 1 supports ongoing efforts directed at introducing a livestock taxation system and other required policy reforms. Moreover, the project will link value chain interventions with mechanisms to incentivize a reduction in stocking density. It will also promote a balanced herd composition in order to avoid an increase in the number of goats. It will promote value chains of several livestock products (including meat and wool), not only cashmere. It will bring different actors and organizations together to address the issue of overgrazing. Livestock numbers in the target soums and aimags will be closely monitored and corrective action taken if required.	PMU
7) Insufficient local market capacities to absorb domestically produced goods from improved value chains.	Moderate	Moderate	To address this risk, the project will focus on developing value chains of export oriented agricultural products. In particular, in collaboration with the World Bank project, MOFALI and FAO, the GEF-7 project will strive to put in place the necessary enabling conditions for promoting meat exports.	PMU
8) Risks of leakage (negative offsite effects) beyond the project area: There is a risk that target communities will shift activities such as the harvesting of timber, grazing, etc. to areas outside the project area.	Moderate	Low	This risk is considered low as the project activities are not aimed at introducing restrictions, but rather improved management practices that are agreed upon by the communities themselves. The project will monitor any unintended consequences and potential shifts to areas outside the project soums.	PMU

9) Extreme weather events (such as dzud or drought) negatively affect the project interventions.	Moderate	High	It is expected that strengthened animal health and improved breeding introduced by the project will lead to increased resilience of livestock to such extreme weather events. Improved pasture, crop and forest management will increase resilience of ecosystems. In addition, the UNDP-GCF project will further strengthen resilience and build local capacity to adapt to climate change, in particular with regard to early warning systems. The GEF-7 project will work closely with the GCF project to strengthen resilience of livelihoods in the target soums. It will also monitor closely any extreme weather events, and make adjustments to the project interventions if needed.	PMU
10) Long-term climate change impacts cancel out positive impacts of the project and lead to increased conflict among herders and increasing threats to biodiversity.	Moderate	High	As mentioned above, the project is aimed at strengthening resilience of livelihoods and ecosystems to climate change; it also aims to strengthen local governance and collaboration mechanisms, and, thereby, to reduce potential conflicts. The project will strengthen local capacity for planning and adaption to climate change, including with regard to biodiversity and protected areas. It will also introduce climate-smart crop production practices that address soil erosion and soil fertility loss. However, any future climate and demographic changes will need to be monitored and taken into account during project implementation and beyond.[1]	PMU

Section B: Environmental and Social risks from the project – ESM Plan

A detailed Environmental and Social Impact Assessment (ESIA) was conducted and an Environmental and Social Management Framework (ESMF) developed. A preliminary assessment of risks is included in the table below. Please refer to the ESMF document for the detailed analysis and mitigation actions.

Risk identified	Risk Classification	Mitigation Action (s)	Indicator / Mean(s) of Verification	Progress on mitigation action
Access Restrictions / Economic Displacement The Project will help define and thereby potentially restrict access to natural resources and livelihoods activities. Economic displacement or restriction to livelihoods or access to natural resources may occur, e.g. as a result of negotiating through highly participatory consultations the establishment of collaborative management arrangements for pastureland and/or other natural resource sustainability parameters.	High (FAO), B (WWF)	The project will exclude financing any activities that would lead to physical displacement and voluntary or involuntary relocation. The Environmental and Social Management Framework (ESMF) has established a process to ensure that any access restrictions only occur with the consent of the affected people and following a decision made with all required information at hand.	To be established by ESMF	
Indigenous Peoples The target project areas include among others *khalkh*, *buryad*, *barga*, *uzemchin* and *dariganga* people. As a precautionary approach, the project therefore considers that indigenous peoples are present in the project site.	Moderate (FAO), B (WWF)	The ESMF has established an Ethnic Groups Planning Framework and a Free, Prior and Informed Consent (FPIC) process.	To be established by ESMF	-

Potential negative environmental impacts from small civil works (primarily from small-scale infrastructure in NRs under Output 3.1.3), if not carried out properly	Moderate (FAO), B (WWF)	The ESMF includes measures to mitigate and manage any environmental impacts of the proposed activities, such as through an Environmental Code of Practice for small civil works.	To be established by ESMF	-

[1] The ADB report (2014) *Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change* highlights the following strategies to reduce climate change impacts on herders' livelihoods, all of which are addressed by the GEF-7 project: Breed improvement; Animal health and registration; Rotational use of pasture; Improving pasture water supply, collecting snow and rainwater; Increasing hay harvest; Planting forage species and preparing supplementary feed; Value addition, marketing, and diversifying livelihoods; Strengthen institutions and collaboration. The report also mentions Livestock and pasture management as GHG mitigation strategy.

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.

The Ministry of Environment and Tourism (MET) will have the overall executing and technical responsibility of the project, with FAO and WWF-US providing oversight as GEF Agencies as described below. The MET will act as the Lead Executing Agency and will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions laid out in Annex N . At the request of the Government of Mongolia, FAO Mongolia and WWF Mongolia will provide limited execution support to MET. The execution support services provided will include:

a. Recruitment of consultants to be assigned to the Project Management Unit (PMU), in close consultation with the joint recruitment committee that will be established between the Ministry of Environment and Tourism (MET), FAO and WWF Mongolia.

b. Contracting of executing partners and purchase of goods and services based on the procurement decisions made by the PMU, and in line with the annual budgets and work plans that will be approved by the Project Steering Committee (PSC).

c. Financial management and reporting.

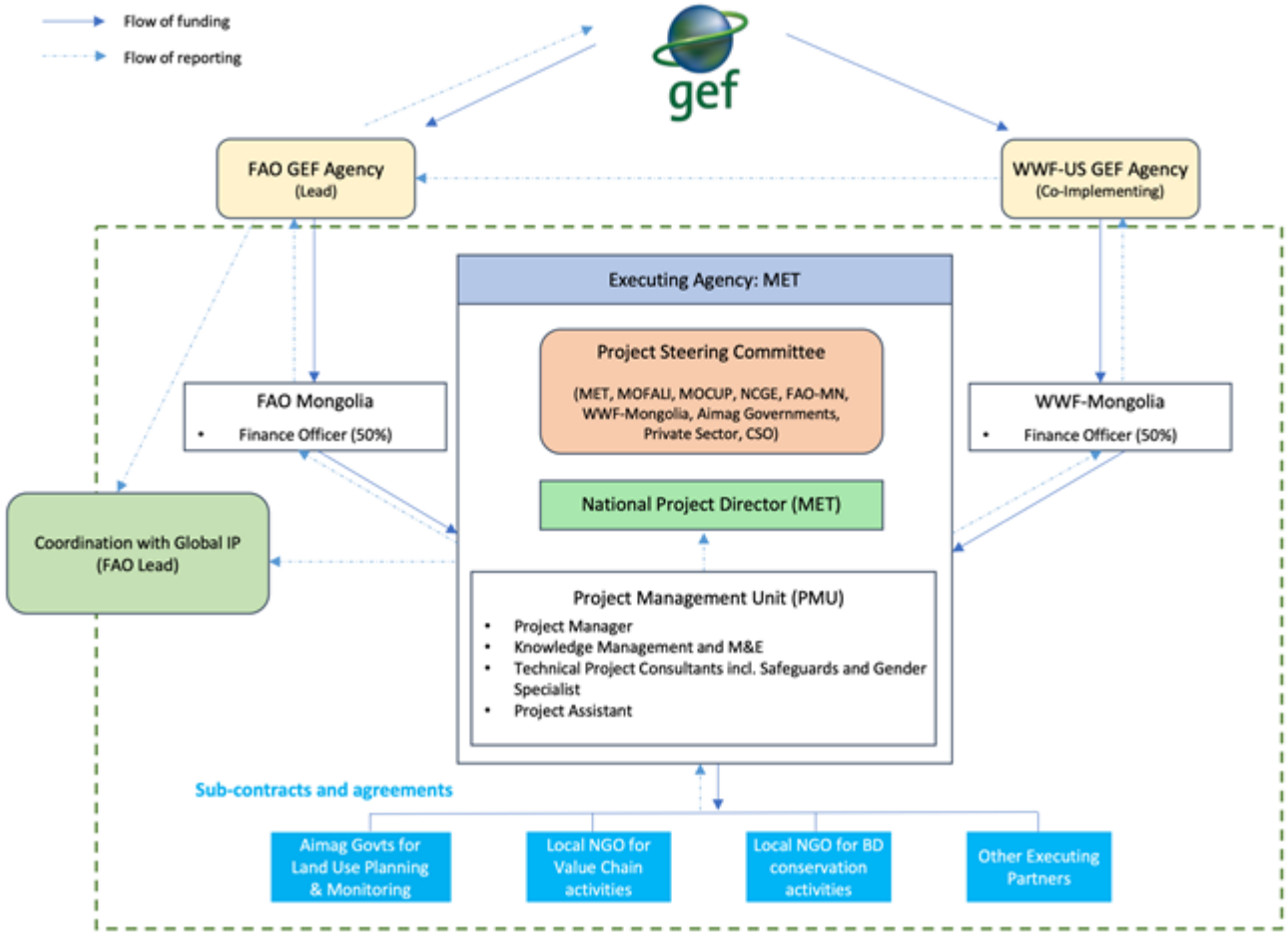
d. Contracting independent evaluators for the Mid-Term Review and Terminal Evaluation.

e. Processing of project terminal report and annual financial audits.

In addition, WWF-US will enter into a Grant Agreement with WWF-Mongolia which spells out the terms and conditions under which the GEF funding is being receive, disburse and accounted for project funding.

All other execution functions will be assumed by MET. As Lead Executing Agency of the project MET is responsible and accountable to FAO and WWF-US for the timely implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with FAO, WWF-US and GEF policy requirements.

The project organization structure is as follows:



The government will designate a **National Project Director (NPD)**. Located in MET, the NPD will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/she will also be responsible for supervising and guiding the National Project Manager (see below) on the government policies and priorities.

The NPD will chair the **Project Steering Committee (PSC)**, which will be the main governing body of the project. The PSC oversees the PMU for the overall project delivery according to the FAO/WWF GEF Project Document and take necessary decisions based on PMU documentation provided in advance of PSC meetings, including the approval of the annual work plans and budgets, the approval of project reporting before submission to the GEF agencies. It will also provide strategic guidance to the Project Management Team and to all executing partners. The PSC will be comprised of representatives from MET, the Ministry of Food, Agriculture, and Light Industry (MOFALI), the Ministry of Construction and Urban Development (MCUD), the National Committee on Gender Equality (NCGE), FAO Mongolia, WWF Mongolia, the three Aimag Governments, as well as the private sector and civil society. The members of the PSC will each assure the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each concerned institution. As Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

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

A **Project Management Unit (PMU)** will be co-funded by the GEF and established within MET. The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of a National Project Manager who will work full-time for the project lifetime. In addition, the PMU will include a Knowledge Management and M&E Specialist, as well as the Technical Project Consultants including a Safeguards and Gender Specialist, a Project Assistant, and two (part-time) Finance Officers to support the financial management of the WWF/FAO grant. The hiring of project staff and consultants will be undertaken by a joint committee constituted by FAO Mongolia, WWF Mongolia, and MET. The PMU will also ensure coordination with the Global Coordination Project (GCP), and in particular with the regional coordinator for Central Asia within the GCP.

The **National Project Manager (NPM)** will be in charge of daily implementation, management, administration and technical lead and supervision of the project, on behalf of the PSC. He/she will be responsible, among others, for:

i) Overall technical lead for the implementation of all project outputs and activities and ensure technical soundness of project implementation;
ii) Coordination and close monitoring of the implementation of project activities, including cooperation with the Global Coordination Project;
iii) Supervise preparation of various technical outputs, e.g. knowledge products, reports and case studies, inputs to publications including at the global level;
iv) Lead, monitor and document the implementation of the system-wide capacity development measures in line with the Capacity Development Report;

v) Tracking the project's progress and ensuring timely delivery of inputs and outputs;

vi) Overall responsibility for compliance with FAO Safeguards and with WWF Environment and Social Safeguards Integrated Policies and Procedures;

vii) Providing technical support and assessing the outputs of the project national consultants hired with GEF funds, as well as the products generated in the implementation of the project;

viii) Coordination with relevant initiatives;

ix) Ensuring a high level of collaboration among participating institutions and organizations at the national and local levels;

x) Ensuring compliance with all sub-agreements to project partners provisions during the implementation, including on timely reporting and financial management;

xi) Manage requests for provision of financial resources using provided format in sub-agreement annexes;

xii) Monitoring financial resources and accounting to ensure accuracy and reliability of financial reports;

xiii) Ensuring timely preparation and submission of requests for funds, financial and progress reports to FAO and WWF Mongolia as per reporting requirements;

xiv) Maintaining documentation and evidence that describes the proper and prudent use of project resources as per sub-agreement provisions, including making available this supporting documentation to FAO and WWF and designated auditors when requested;

xv) Implementing and managing the project's monitoring and communications plans;

xvi) Organizing project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan;

xvii) Submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC, FAO and WWF GEF Agency;

xviii) Preparing the first draft of the Project Implementation Review (PIR);

xix) Supporting the organization of the mid-term and terminal evaluations in close coordination with the FAO Budget Holder, the FAO Independent Office of Evaluation (OED), and WWF GEF Agency;

xx) Submitting the six-monthly technical and quarterly financial reports to FAO and WWF and facilitate the information exchange between the Lead Executing Agency, the PMU, FAO and WWF, if needed;

xxi) Reflect on opportunities for adaptive management based on M&E and other project data;

xxii) Inform the PSC, FAO and WWF of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support.

The **Food and Agriculture Organization (FAO)** will be the Lead GEF Implementing Agency (IA) for the Project. **World Wildlife Fund, Inc. (WWF-US)** will be the Co-Implementing Agency. Both IAs will provide project cycle management, which includes project identification, preparation of project concept, preparation of detailed project document, project approval and start-up, project implementation and supervision, and project completion and evaluation, and support services as established in the GEF Policy. As the GEF IAs, FAO and WWF hold overall accountability and responsibility to the GEF for delivery of the results. FAO will monitor implementation of FAO GEF funded activities under FAO policies, and WWF GEF will monitor implementation of WWF GEF funded activities under WWF policies.

For the activities funded by FAO, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project (see Annex N for details):

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

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

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

FAO and WWF-US responsibilities, as GEF agencies, will include:

· Administrate funds from GEF in accordance with the rules and procedures of FAO and WWF-US, respectively;

· Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, project sub-agreements, and other rules and procedures of FAO and WWF-US, respectively;

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

· Conduct at least one supervision mission per year (to be coordinated between FAO and WWF); and

· Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review (PIR), the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress (to be and reviewed and approved by WWF GEF Agency and submitted to GEF by FAO as the Lead Agency);

· Financial reporting to the GEF Trustee.

Local level coordination

Nine Soum Coordinators will be responsible for day-to-day management of the activities at the local level, in collaboration with the local soum government officers and communities. The Soum Coordinators will be recruited locally in each soum (wherever possible), and will be based at the local government offices in order to ensure close collaboration with the local land, agriculture, and livestock officers. Local project implementation teams will be established at the bagh and soum levels, involving local women and men to support project implementation at the local level. Regular project meetings will be held at the bagh and soum levels, where project progress and monitoring and evaluation will be discussed. Women federations at local level will be engaged to facilitate the participation of women and to ensure that project activities are also responsive to the interests and needs of local women.

In addition, a National Agriculture Expert, National Value Chain and Finance Expert, National Livestock Expert and Protected Area/Biodiversity Experts will also coordinate and facilitate local level activities, in line with their Terms of Reference (TORs). At the aimag level, project activities will be coordinated directly with the different aimag agencies (land agency, environment, and agriculture).

Technical Assistance

Project consultants will be hired as required to provide the technical assistance required for project implementation. These include:

- National Land Management Expert
- National Policy and Legal Expert
- National Agriculture Expert
- National Value Chain and Finance Expert
- National Livestock Expert
- National Safeguards and Gender Specialist (may be two separate positions)
- National Biodiversity Expert

Sub-contracts

In addition, sub-contracts will be awarded to NGOs for specific project tasks. These include:

- Sub-contract for sustainable cashmere training and certification, and traceability, in target soums (Output 2.3.1);
- Sub-contract for Protected Area/Biodiversity Expertise (Outputs 3.1.1-3.1.4).

Draft TORs for project staff, consultants and sub-contractors are included in Annex L.

For mid-term review and terminal evaluation of the project, independent evaluators will be recruited directly by FAO with TOR reviewed and approved by WWF GEF Agency, using FAO's internal procurement system.

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

The project will incorporate lessons learned, exchange knowledge and coordinate with the following past and ongoing GEF-financed projects and other relevant initiatives:

UNDP	*GEF-6 ENSURE* UNDP's GEF-6 Ensuring Sustainability and Resilience (ENSURE) of Green Landscapes in Mongolia project (2019-2026) aims to enhance ecosystem services in multiple landscapes of the Sayan and Khangai mountains and southern Gobi by reducing rangeland and forest degradation and conserving biodiversity through sustainable livelihoods. The project is implemented in the four target aimags of Zavkhan, Arkhangai, Gobi-Altai and Bayankhongor. While geographically distinct areas, this GEF-6 project has similar objectives to the GEF-7 project. The GEF-7 project will collaborate closely with this project, and build on its achievements, in particular with regard to the Sustainable Cashmere Initiative, its capacity development approach, and the use of technology such as smartphone applications. *BIOFIN* The UNDP managed Biodiversity Finance Initiative (BIOFIN) is piloting solutions to mobilise finance for conservation and better management of biodiversity. The pasture use tax in Mongolia is one such mechanism and BIOFIN is supporting the government through the Ministry of Environment to assess the most beneficial structures for a reformed pasture use tax. A Feasibility Study on Pasture User Fee was conducted by CPR under BIOFIN in 2017 and a proposal for implementation mechanisms of the grazing fee system including capacity development activities developed. [1] https://www.biodiversityfinance.net/sites/default/files/content/knowledge_products/Grazing%20fee%20_Policy%20report_Mongolia.pdf and https://www.biodiversityfinance.net/sites/default/files/content/knowledge_products/Grazing%20fee%20methodology%20report_Mongolia.pdf *GEF-5 SLM* The GEF-5 Land Degradation Offset and Mitigation in Western Mongolia project (2015-2020) aims to reduce negative impacts of mining on rangelands in the western mountain and steppe region by incorporating mitigation hierarchy and offset for land degradation into the landscape level planning and management. The project is working in the predominantly pastoral landscapes of the five western aimags (Uvs, Bayan Ulgii, Khovd, Zavkhan and Gobi-Altai), as well as at the national level. The GEF-7 project will build on the lessons learned of this project with regard to sustainable land management (SLM) and mining. *GEF-5 MRPA* The GEF-5 Network of Managed Resource Protected Areas (MRPA) (2013-2018) aimed to catalyse the strategic expansion of Mongolia's protected area (PA) system through establishment of a network of community conservation areas covering under-represented terrestrial ecosystems. The project goal was to ensure the integrity of Mongolia's diverse ecosystems to secure the viability of the nation's globally significant biodiversity. The term "managed resource protected area" referred to LPAs that are managed through community conservation arrangements. The project laid the groundwork for a revision of the Law on Special Protected Areas and an amendment to the Law on Environmental Protection that would recognize local protected areas (LPAs) as part of the national system and provide legal status to community-based organizations (CBOs) under a managed resource protected area modality. The project supported the development of a comprehensive database on LPAs, working with partners from ALAMGAC and the Mineral

FAO	*GEF-5 SFM* FAO's Mainstreaming Biodiversity Conservation, SFM and Carbon Sink Enhancement Into Mongolia's Productive Forest Landscapes (2014-2020) project has been implemented in five aimags (Selenge, Darkhan-Uul, Khovsgol, Khentii and Bulgan). The project has promoted Sustainable Participatory Forest Management (PFM) approaches that generate forest-based livelihood, biodiversity and carbon benefits. The project has supported more than 100 Forest User Groups (FUGs), which are producing diversified items (handicrafts, furniture of aesthetic value, some processed food, traditional medicines from the forest plants, firewood, animal feed). Support has been provided to FUG members to establish market linkages. The Terminal Evaluation (2020) concluded that the project managed to enhance institutional capacity, developed field tested SFM tools and practices, and helped in scaling up the SFM practices, which contribute to the national forests management plans and objectives as well as help to improve FUGs livelihoods. The TE recommended that in order to improve their capacity to manage Forest Management Plans effectively, FUGs should strengthen their internal governance systems (e.g. regular meeting, keeping minutes), consolidate and raise their issues and challenges with the concerned authorities through FUG associations; and explore innovative technologies, initiate value addition activities and partnership for better market access. The GEF-7 project will build on the achievements and lessons learned of this project, in particular for its sustainable forest management activities in Bayan-Adraga and Norovlin soums under Output 2.2.4. *GEF-6 CBIT* FAO's Strengthening Capacity in the Agriculture and Land-use Sectors in Mongolia (2019-2022) aims to build national capacity and a mechanism for Mongolia by 2020 to be able to prepare reports to the UNFCCC under the Paris Agreement Enhanced Transparency Framework (ETF) with strengthened agriculture, forestry and other land use sector components including inventories of emissions sources and sinks, and information necessary to track progress against priority actions identified in Mongolia's NDC. The GEF-7 project will collaborate closely with the CBIT project, in particular with regard to carbon monitoring under the project. *Sand and dust storms* FAO is implementing a project on "Prevention and Mitigation of Sand and Dust Storms Originated in Dry Land Areas of Mongolia" (2018-2021), a follow-up to the Changwon initiative and the Northeast Asia Desertification, Land Degradation and Drought Network (DLDD NEAN) demonstration program[4]. The project is funded by the Korea Forest Service (KFS) through the UNCCD Secretariat. It aims to demonstrate approaches to prevent and mitigate sand and dust storms (SDS) to combat desertification in Mongolia. The project will demonstrate activities to reduce the risk and impacts of SDS and mitigate land degradation in a participatory manner. The project is implemented in Zamiin Uud city of Dornogovi aimag (eastern Gobi).

UN-REDD Programme in Mongolia	Mongolia officially adopted its national REDD+[5] Readiness Roadmap in 2014, followed by the UN-REDD National Programme being launched in 2016. A comprehensive process of engagement with stakeholders was undertaken and the readiness process was completed in December 2018 with completion of the "Warsaw Framework" elements for REDD+ (National Strategy or Action Plan; National Forest Reference Level; National Forest Monitoring System; and Safeguard Information System). Two aimags were selected for the analysis of the different values of forests, and potential benefits from REDD+, at the subnational level: Khovsgol aimag in northern Mongolia and Tov aimag in central Mongolia. FAO's Open Foris Tool Kit, Collect Earth, was used for the National Forest Reference Level land assessment.

ADB	*Vegetable Production and Irrigated Agriculture Project* (in preparation) The project aims to increase income and employment opportunities for rural households by implementing a community farming model, providing a sustainable irrigation system, securing access to value chain support services and infrastructure, and improving farm-to-market linkages. The project will: (i) rehabilitate irrigation systems and integrate farming groups into inclusive agriculture value chains in up to six aimags; (ii) set up cold storage, packaging, and wholesale trading capacity in Ulaanbaatar; and (iii) strengthen institutional capacity and coordination to enable sustainable and inclusive use of project supported irrigation systems and value chain facilities, including strengthening of farmer capacity on proper use of chemicals and fertilizers (e.g. integrated pest management and good agriculture practice). - *Agriculture and Rural Development Project* (Additional Financing, 2016-2020) The project is supporting value chain development of the Mongolian agro-processing sector, and helps herders and primary-processors to improve their production capacity and income generation through capacity development and provision of works, goods, and services (such as for leather, meat, dairy, wool and cashmere processing). The project is implemented in Ulaanbaatar, Darkhan-Uul, Orkhon, Tuv, Zavkhan, and Khentii aimags. In Khentii aimag, the project focused on a new slaughtering and processing plant, as well as a milk and beverage plant, in Kherlen soum of Khentii aimag. *Sustainable Tourism Development Project* (2019-2025) The project will help transform two national parks in Khovsgol and Khentii aimags as models for economically inclusive tourism and conservation in the protected area network, by improving park infrastructure, sanitation, and capacity to manage tourism growth sustainably. The designs emphasize tourism benefits for communities, protection of natural capital, and climate-resilient facilities; and scale up from previous grant projects in each park. Five sites are listed to pilot and catalyze ecotourism development, two of which are designated the highest priority: Khovsgol Lake National Park in Khovsgol Aimag and Onon-Balj National Park in Khentii Aimag. *Strengthening community resilience to dzud, and forest and steppe fires (2017-2020)* Project jointly implemented by the ADB, MENA with financial support of the Japanese Poverty Reduction Fund provides good practice on establishing of “Bagh neighbours groups” and working with groups headed by female members.

TNC	TNC has expanded its work in Mongolia from the Eastern Steppe to three new project sites in grassland areas of western, northern and eastern Mongolia. The new demonstration projects will help communities sustainably manage natural resources important for herding and wildlife. TNC is helping herders to form community-based organizations that allow them to care for their land collectively, while providing opportunities for additional income from handicrafts and tourism. In 2011, TNC conducted an assessment on "Identifying Conservation Priorities" in the Eastern Mongolia Grasslands.
WCS	WCS is implementing a Program on Sustainable and Wildlife-Friendly Cashmere Value Chain (the Sustainable Cashmere Project). WCS works with communities in the Gobi desert, where cashmere, the primary source of income for herders, is being used as a point of entry to engaging local communities with sustainable livestock husbandry and wildlife-friendly practices. The project is based on a collaborative partnership with Kering Group (a luxury fashion group), Oyu Tolgoi LLC (a copper mine), the Natural Capital Project, and other partners.
Mongolian Bird Conservation Center (MBCC)	The MBCC aims to create tools and research that shape new solutions to the challenges of sustainable development in Mongolia, and to make a clear contribution to the understanding and preservation of national avian species and their habitat resources through implementing scientific research and conservation activities. MBCC implements educational activities, research projects (including a study on endangered birds in Eastern Mongolia such as the White-naped Crane, the Great Bustard, and the Saker falcon), and other activities.
GIZ	The Biodiversity and Adaptation of Key Forest Ecosystems to Climate Change, Phase II (2015-2018) project was aimed at ensuring that tried-and-tested strategies are available to stakeholders in the Mongolian forestry sector for the conservation and sustainable use of forest ecosystems and their biodiversity and that stakeholders apply these strategies. The project has worked to draft regulations on access and benefit-sharing for forest-based genetic resources, SFM certification, and reproductive forest materials, as well as a to propose a strategy for sustainable financing. The five aimags included Selenge, Khovsgol, Zavkhan, Khentii, and Tuv aimags. Furthermore, GIZ is commissioning a feasibility study related to the UNESCO World Heritage application for the Eastern Mongolian Steppes.
MORSTEP	"MORSTEP – nomad pastoralism at risk: protection and conservation of the Mongolian steppe eco-system and its sustainability" is a research project supported by Mongolian and German research and educational institutions. 12 organizations are working together under this project in Tuv, Khentii, Sukhbaatar and Dornod aimags.

KfW	The KfW project “Biodiversity and Adaptation to Climate Change” (2015-2020) aims to strengthen the management of the Protected Area Network (including the buffer zones and future ecological corridors) of Mongolia, the conservation of biodiversity and at the same time to improve the livelihoods of local population. Phase I supported four Eastern Mongolia Protected Area administrations; Phase II is focusing on the Western and Gobi region. Under this project, some equipment was provided to Toson Khulstai and Khar Yamaat Nature Reserves (as part of the support to Khan Khentii and Dornod Mongol Strictly Protected Areas). The GEF-7 project will build on the achievements of this project to further strengthen the protected area network in Eastern Mongolia, with a differentiated focus on the Nature Reserves.
Czech Development Agency	The Czech Development Agency and the Mendel University in Brno have been implementing several projects on sustainable forest and land management, cooperative agriculture-forest associations, water resources conservation, etc. The GEF-7 project will aim to build on the lessons learned, and in particular on the forest management guidelines developed under these projects.
International Land Coalition (ILC)’s National Engagement Strategy (NES) Mongolia	The NES process aims to facilitate a cooperative and coordinated action among the various stakeholders at national level involved in solving land problems to promote people-centred land governance. At present, the NES Mongolia platform include four ILC members of Mongolia, namely Center for Policy Research (CPR), Environment and Development Association (JASIL), Mongolian Land Management Association (MLMA) and National Federation of Pasture User Groups (NFPUG).

[1] UNDP MRPA Terminal Evaluation Report, 2018.

[2] UNDP SPAN Terminal Evaluation Report, 2015.

[3] UNDP Terminal Evaluation Report, 2006.

[4] The DLDD NEAN demonstration program aimed for regional cooperation among Mongolia, FAO, the Korea Forest Service, and the State Forest Administration of China to identify, disseminate and adapt best practices combating desertification.

[5] Reduced emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks. https://redd.unfccc.int/

7. Consistency with National Priorities

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

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

National Report on Voluntary Target Setting to Achieve LDN in Mongolia (2018)	The project directly supports Mongolia's Voluntary Land Degradation Neutrality (LDN) Targets under the UNCCD and SDG 15.3. The report refers to the following targets to achieve land degradation neutrality in Mongolia by 2030: 1) Reduce deforestation and forest degradation to maintain the forest area and reach 9% of the total area by 2030 compared to 7.85% in 2015. 2) Promote sustainable grassland management and stop further grassland degradation. 3) Increase agricultural yields by 2.5 t/ha per annum by 2030 compared to 1.6 t/ha per annum in 2015. 4) Ensure no net loss of wetlands by 2030 compared to 2015 (3963.3 sq. km). The following technical measures are highlighted in the report (among others): - Reforestation of land affected by forest fire, pest insect and deforestation. - Recover the traditional seasonal rotational pasture system. - Air seeding, sowing of perennial grasses in areas where gradual grassland decline. - Developing agroforestry including shelterbelt system development. - Decrease in use of pesticides. - Erosion prevention in agriculture. The report also highlights the following two key policy actions to advance LDN in Mongolia: (i) Integrate grassland planning into the regional land use plans; and (ii) Develop legal instruments and/or establish mechanism for sustainable pastureland use. The report identified three areas "needing long-term action to avoid the risk of land degradation", among which the Eastern Mongolian plain as well as Onon river basin in Eastern Mongolia.
UNCCD	The project also supports UN Resolution 72/225 on 'Combatting Sand and Dust Storms' and Mongolia's commitment to UNCCD COP-10 'Changwon Initiative'.
Bonn Challenge	The project is in line with Mongolia's commitment to the Bonn Challenge made in 2017: (i) 600,000 ha forest restoration, and (ii) increased forest cover to 12.9 million ha. The implementation and monitoring of Mongolia's Bonn Challenge pledge is under the responsibility of MET.

National Biodiversity Program (2015-2025) under CBD	The project supports the following strategies, objectives and targets of Mongolia's National Biodiversity Program under the CBD, and related Aichi Biodiversity Targets. *Strategy 2: Develop and implement science based policy on conservation and sustainable use of biological resources* *Goal 5:* At least 30% of representatives from each main ecosystem and all patch and vulnerable to climate change ecosystems are included in to the National Protected Area network and their management is ensured. · Objective 11: Improve management and capacity of PAs in cooperation of all interested parties. · Objective 12: Develop and implement conservation plan on ecosystems that are patch or vulnerable to climate change. Indicators: • Management efficiency of protected areas • Total area of ecosystems that are unique or vulnerable to climate change *Goal 6:* Protect soil and water resources from chemical and nutrient pollution. · Objective 14: Increase public awareness on direct and indirect effects on biodiversity by chemical substances used in agriculture. Indicators: • Amount of fertilizer and pesticides used in a unit area • Amount (in hectares) of soil and water that is prevented from degradation and productivity loss agricultural crop and pastoral land area *Goal 7:* Increase forest cover to 9% by 2025 through the improvement of forest management, and thereby protect forest biodiversity. · Objective 16: Ensure intersectoral cooperation on the national policy on forest and its implementation plans. Indicators: • Forest cover of Mongolia • Amount of forest area with cooperative management • Amount of forested area in agricultural crop production territory

National Program on Protected Areas and its Action Plan	The National Program on Protected Areas and its Action Plan state an important target, which is to “expand the PA network by including the ecologically important areas that represent different natural zones and complexes that preserve pristine conditions, ensure ecological balance, enhance natural wealth, and protect natural, historical, and cultural heritages putting at least 30 percent of the country’s total territory under protection”.

Nationally Determined Contribution (NDC) under UNFCCC	Mongolia's NDC highlights the following mitigation and adaptation priorities and targets in the AFOLU sector. *Mitigation* Agriculture: Maintain livestock population at appropriate levels according to the pasture carrying capacity (in line with the National Livestock Program). Mongolia is also interested to pursue some additional mitigation actions: […] Agriculture: Development of a comprehensive plan for emission reductions in the livestock sub-sector for implementation between 2020 and 2030. In future communications, Mongolia intends to include actions for mitigation in the forestry sector to reduce GHG emissions from deforestation and forest degradation by 2% by 2020 and 5% by 2030. *Adaptation* Adaptation aims to reduce risks and vulnerabilities for the following sectors: · Animal husbandry aims to maintain ecosystem balance through improving pasture management. · Arable farming aspires to meet the total national need in crops by reducing bare fallow and soil moisture loss, introducing medium and long-term varieties of crops, increased irrigation with water saving technologies including snow, and rain water harvesting. · Water resources sector's objectives are to expand state protected areas covering especially river headwater areas, where 70% of water resources are formed, to ensure proper use of water resources, and to strengthen integrated water resource management in river basins. · Forest resource aims to reduce forest degradation, and to implement re-forestation and sustainable forest management strategies. Some adaptation activities under these goals will also have mitigation co-benefits: • Improving pasture management would increase the carbon sink of CO_2 equivalent to 29 million tons per year, which is equal to 1/3 of emission reduction in energy sector. • Reducing bare fallow to 30% in rain-fed crop land, increasing variety of crops, zero-tillage and crop rotation would consequently increase a carbon sink.

National Action Program on Climate Change (2011-2021)	Mongolia's National Action Program on Climate Change identified the following as priority adaptation measures: (i) conserving natural resources, especially natural pasturelands; (ii) strengthening the bio-capacity of domestic animals; (iii) enhancing the capacities and livelihood opportunities of rural communities; (iv) increasing food security and supply; (v) improving understanding of climate extremes, and strengthening disaster risk capabilities; and (vi) introducing new and reliable insurance systems.[1]
Sustainable Development Vision 2030 Green Development Policy and national legislation related to NRM/land use	Mongolia's Sustainable Development Vision 2030 and its Action Program for 2016-2020 address key legal frameworks for agriculture and environment, promote 'green growth', encourage sustainable land and forest management, and initiate fiscal incentives for biodiversity and rangeland sustainable management. In particular, the GEF-7 project will contribute to the following objectives of the Vision 2030: 1. Agriculture Sector Objective 1: Preserve the gene pool and resilience of pastoral livestock breeding that is adept to climate change, increase productivity; create proper flock structure of livestock in line with grazing capacity, reduce the grazing and land deterioration and rehabilitate, adopt international standards in animal disease traceability, inspection and maintenance technology, and develop livestock sector that is competitive in international markets. 2. Agriculture Sector Objective 2: Develop intensive livestock farming based on the population concentration and market demand; increase the manufacture of meat and milk products; and develop the supply, storage and transportation network for raw materials and raw products. 3. Ecosystem Balance Objective 1: Preserve the natural landscape and biodiversity, and ensure sustainability of the ecosystem services. The Green Development Policy (2014) and laws relating to natural resource management and land use provide enabling frameworks for sustainable land and forest management, and productive sectors, biodiversity protection, and reversal of land degradation. The project will contribute to strategic objectives 1 and 2 of the Green Development Policy: 1. Promote a sustainable consumption and production pattern with efficient use of natural resources, low greenhouse gas emissions, and reduced waste generation. 2. Sustain ecosystem's carrying capacity by enhancing environmental protection and restoration activities, and reducing environmental pollution and degradation.

National Livestock Program (2010)	The project also contributes to Mongolia's National Livestock Program and the Mongolian Agenda for Sustainable Livestock.
Action Plan of the Mongolian Agenda for Sustainable Livestock (2018)	The goal of the action plan is to support the sustainable development of the Mongolian livestock sector as economically efficient while implementing sustainable pastureland management, enhancing food security and safety and social inclusiveness, and strengthening stakeholder partnerships and participation. It's objectives are: · To restore, rehabilitate and utilize pastureland and water resources sustainably and responsibly, to adapt to climate change, and to mitigate climate change impacts; · To improve the efficiency and productivity of livestock production in various livestock product value chains, and to develop export-oriented livestock production; · To develop veterinary and animal breeding services, and to improve food security and safety; · To support rural development, to reduce poverty and income inequality, and to improve the social service delivery and quality; · To develop partnerships between stakeholders including professional associations, research organizations, non-government organizations, herder organizations, cooperatives and international organizations, and to support public-private partnerships. The activities of the action plan are closely aligned with the aims of the GEF-7 project, such as 1.1 Improve restoration, rehabilitation and sustainable utilization of the pastureland, and 1.2 Establish "Sustainable livestock" revolving fund" in the local areas, which is replenished by pasture use fee. One of the targets is to reduce the number of livestock that exceeds the pastureland carrying capacity from 25 to 20 million sheep units.
UNDAF	The project contributes to UNDAF (2017-2021) goals, and in particular Outcome Area 1 "Promoting inclusive growth and sustainable management of natural resources", targeting improved resilience of poor and vulnerable communities.

[1] ADB (2014). Making Grasslands Sustainable in Mongolia: Herders' Livelihoods and Climate Change.

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 detailed analysis of lessons learned from previous and ongoing projects was conducted during the project preparation phase, and recommendations have been incorporated into the project design. The most relevant projects are described in section 6.b Coordination with other relevant GEF-financed projects and other initiatives.

In line with GEF Knowledge Management Guidelines[1], knowledge generation and management will be an essential component of the project and has been incorporated in the project design as Output 4.1.2. Under this output, the project will develop a knowledge management and communications strategy to support implementation, replication and scaling of project activities. Knowledge will be created, documented and shared systematically throughout the project in close alignment with the DSL IP Global Coordination Project.

Building on the indicators developed during PPG and in coordination with the global IP Program, the project will establish systems for M&E, knowledge management and knowledge sharing, including a methodology to capture good practices and lessons learned, contributing to national, regional and global IP implementation. Special consideration will be given to experience sharing with other Central Asian countries practicing pastoral husbandry and sustainable dryland management. Exchange will be sought, in particular, with the Drylands child project in Kazakhstan, implemented by the World Bank with FAO as the Co-Implementing Agency. The project will build on relevant international platforms in which Mongolia already plays an active role, such as the UNCCD, WOCAT, the Central Asia Countries Integrated Land Management Initiative (CACILM), the Bonn Challenge, the Northeast Asia Desertification, Land Degradation and Drought Network, the Global Soil Partnership and Asian Soil Partnership, and the United Nations Environment Assembly, under which Mongolia is leading efforts to designate an International Year of Rangelands and Pastoralists, among others. The project will also coordinate closely with FAO’s Committee on Forestry (COFO) Working Group on Dryland Forests and Agrosilvopastoral Systems. The project will also seek to establish linkages with FAO’s Pastoralist Knowledge Hub.

Furthermore, the project will support regional and cross-border coordination relevant to maintaining the ecological integrity of the Central Asian Steppe, in particular in relation to the Mongolia-Manchurian Grassland and the Daurian Forest Steppe Ecoregions. It will generate and systematically document lessons learned that will contribute to the understanding of the complex dynamics of ecosystems, their values and the multiple demands placed upon them. In particular, the project will aim to share lessons, through regional meetings, exchange visits and knowledge products, with neighbouring Russia and China and build on ongoing support for transboundary conservation by WWF Mongolia, in particular through mechanisms such as the CBD and UNCCD Conference of the Parties. The project will also provide important lessons with regard to land tenure and access, resilience, and the role of women in the sustainable management of drylands. Through the involvement of the private sector, the project will catalyse innovations that can be scaled up in other countries in the region and globally under the IP. These innovations may include, among others, market-based instruments such as certifications as well as innovative technologies introduced by the project.

The following budget and key deliverables are included in the project design:

Deliverable	Timeline	Budget
Gender-sensitive/responsive knowledge management and communications strategy to support implementation and replication of project activities.	Q1 2021	· Knowledge Management and M&E Specialist: USD 81,000 over 5 years
Implementation of knowledge management and communications strategy. Outcome indicator targets (see Annex A1 of ProDoc/Annex A of CEO ER): · At least 10 knowledge products (publications, leaflets, case studies, best practice documents, videos or other media content, etc.) developed and disseminated, of which at least one best practice document and one media content specifically focused on women · At least 50,000 people (women and men) at national/aimag level reached by communications and knowledge management activities (social media posts, TV clips, workshops and seminars, etc.).	Throughout project implementation	· Knowledge Management and M&E Specialist (see above) · Participation in global and regional IP and knowledge sharing events: USD 40,000 · Regional/global cross-visits: USD 40,000 · National/local cross-visits: USD 25,000 · Software costs for knowledge exchange platforms/METT system: USD 30,000 · Materials, layout and printing for knowledge management and LDN targets: USD 20,000
Total Budget		**USD 236,000**

[1] See GEF Approach on Knowledge Management https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.48.07.Rev_.01_KM_Approach_Paper.pdf

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Project oversight will be carried out by the PSC, FAO-GEF Coordination Unit and relevant technical units in FAO headquarters, as well as WWF GEF Agency. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits/adaptation benefits are being delivered.

The FAO-GEF Coordination Unit, HQ Technical Units, and WWF GEF Agency will provide oversight of GEF financed activities, outputs and outcomes largely through the semi-annual project progress reports, annual PIRs, periodic backstopping and annual supervision missions.

Project monitoring will be carried out by the PMU, the FAO Budget Holder (BH), and WWF Mongolia. Project performance will be monitored using the project results matrix, including SMART [1] indicators (baseline and targets) and annual work plans and budgets. At project inception, the results matrix will be reviewed to validate and, if required, update: i) outputs; ii) indicators; and iii) baseline information and targets, based on any new developments in the country. The project's M&E plan is summarized below, and detailed indicators and methods for verification have been established in Annex A1 of ProDoc (Annex A of CEO ER). A more detailed M&E plan, which builds on the results matrix and defines specific requirements for each indicator (with annual targets for certain indicators, data collection methods, frequency, responsibilities for data collection and analysis, etc.) will also be developed during project inception by the Knowledge Management/M&E Officer appointed at the PMU, and reviewed and approved by the PSC, FAO and WWF-US.

[1] Specific, Measurable, Achievable, Relevant and Time-bound.

Project Monitoring and Evaluation Plan

M&E Activity	Responsible Parties	Timeframe	GEF Budget (USD)
Inception and Final Workshop	Project Management Unit (PMU)	Inception workshop within two months of project document signature, and final workshop prior to the project completion	14,000
Results-based annual workplan and budget	PMU	Within one month of project start-up and on an annual basis thereafter covering the July to June reporting period	USD 9,600 (estimated as approx. 12% of KM and M&E Specialist's time)

Project Progress Reports (PPRs)	National Project Manager and Knowledge Management/M&E Officer	Every six months	USD 9,600 (as above)
Project Implementation Review report (PIR)	National Project Manager	Annually in July	USD 9,600 (as above)
Joint supervision missions	Government, FAO, WWF	Annual	FAO's costs from GEF Agency fees (others via project's travel budget as needed)
Mid-term Review	PMU, FAO and WWF GEF Agency	During the 3rd year of the project	40,000
Terminal evaluation	By independent consultants. FAO Office of Evaluation and WWF GEF Agency will agree on TOR.	To be launched within six months prior to the actual project completion date	40,000
Terminal Report	PMU, GEF Coordination Unit, FAO South-South Cooperation and Resource Mobilization Division (TCS) Report Group	Within two months of project closure	6,550
Total Budget			**129,350**

Specific reports that will be prepared under the M&E program are: (i) Project inception report; (ii) Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing reports; and (vii) Terminal Report. In addition, assessment of the relevant GEF-7 core indicators (see Annex A1 of ProDoc/Annex A of CEO ER: Project Results Framework) and capacity scorecards against the baselines (completed during project preparation) will be required at mid-term and final project evaluation.

Project Inception Report. It is recommended that the PMU prepare a draft project inception report in consultation with the FAO Lead Technical Officer (LTO), the FAO Budget Holder (BH), WWF Mongolia and other project partners. Elements of this report should be discussed during the Project Inception Workshop and the report subsequently finalized. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan.

The draft inception report will be circulated to the PSC for review and comments before its finalization, no later than one month after project start-up. The report should be cleared by the FAO BH, LTO, the FAO-GEF Coordination Unit, WWF GEF Agency, and will be uploaded in FAO's Field Program Management Information System (FPMIS) by the FAO BH.

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

Project Progress Reports (PPR): PPRs will be prepared by the PMU based on the systematic monitoring of output and outcome indicators identified in the project's Results Framework (Annex A1 of ProDoc). The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. They will also report on projects risks and implementation of the risk mitigation plan. The Budget Holder has the responsibility to coordinate the preparation and finalization of the PPR, in consultation with the PMU, FAO LTO, FAO FLO, WWF GEF Agency and WWF Mongolia. After LTO, BH, FLO, and WWF GEF Agency clearance, the FLO will ensure that project progress reports are uploaded in FPMIS in a timely manner.

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

Key milestones for the PIR process:

- Early July: The LTOs submit the draft PIRs (after consultations with BH, project team, and WWF Mongolia) to the FAO-GEF Coordination Unit (faogef@fao.org, copying respective GEF Unit officer) and WWF GEF Agency for initial review;

- Mid July: FAO-GEF Coordination Unit responsible officers review main elements of PIR and discuss with LTO and WWF GEF Agency as required;

- Early/mid-August: The FAO-GEF Coordination Unit prepares and finalizes the FAO Summary Tables and provides it to WWF GEF Agency for review and clearance before sending it to the GEF Secretariat by (date is communicated each year by the GEF Secretariat through the FAO-GEF Coordination Unit);

- September/October: PIRs are finalized. PIRs carefully and thoroughly reviewed by the FAO-GEF Coordination Unit and discussed with the LTOs and WWF GEF Agency for final review and clearance;

- Mid November: The FAO-GEF Coordination Unit submits the final PIR reports – cleared by the LTO and approved by the FAO-GEF Coordination Unit and WWF GEF Agency – to the GEF Secretariat and the GEF Independent Evaluation Office.

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

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

Terminal Report: Within two months before the end date of the project, and one month before the Terminal Evaluation, the PMU will submit to the FAO BH, LTO, the WWF GEF Agency, and WWF Mongolia a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

Evaluation Provisions

Two independent project evaluations, a Mid-Term Review (MTR) within 6 months from the mid-term and a Terminal Evaluation (TE) within 6 months from financial close of project, will be carried out, covering both FAO and WWF components of the project. The FAO BH will arrange an independent MTR in consultation with the PSC, the PMU, the LTO, the FAO-GEF Coordination Unit, the WWF GEF Agency, and based on cleared TOR for such independent consultant by WWF GEF Agency. The MTR will be conducted to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. The MTE will allow mid-course corrective actions, if needed. The MTE will provide a systematic analysis of the information on project progress in the achievement of expected results against budget expenditures. It will refer to the Project Budget

(see Annex A2) and the approved AWP/Bs. It will highlight replicable good practices and key issues faced during project implementation and will suggest mitigation actions to be discussed by the PSC, the LTO, the FAO-GEF Coordination Unit, the WWF GEF Agency and WWF Mongolia.

An independent Terminal Evaluation (TE) will be carried out three months prior to the terminal report meeting. The TE is to be coordinated between the FAO Office of Evaluation and the WWF GEF Agency and TOR to be agreed upon by FAO and WWF GEF Agency. The TE will aim to identify the project impacts, sustainability of project outcomes and the degree of achievement of long-term results. The TE will also have the purpose of indicating future actions needed to expand the existing project results, mainstream and upscale its products and practices, and disseminate information to management authorities and institutions with responsibilities for food systems, land use and restoration, and improvement of agricultural livelihoods to assure continuity of the project initiatives. The TE evaluation report will be shared with project stakeholders and the donor, and is a public document. Both the MTR and TE will pay special attention to outcome indicators, including the GEF core indicators and the capacity scorecards.

Disclosure

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

10. Benefits

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

The project will generate socio-economic benefits by maintaining and enhancing the resource base on which the local communities in Eastern Mongolia rely for their livelihoods.

Moreover, the project will support women and men small-scale producers in the target landscape in accessing markets and modern value chains. It thereby aims to realize socio-economic benefits for the herders and farmers, while incentivizing them to manage their resources sustainably. The project, thus, works towards achieving full and productive employment and decent work in rural areas.

The project seeks to achieve additional income from enhanced value chains, public-private partnerships and/or access to markets for at least 450 people (of which at least 50% women). A baseline income survey will be conducted at the beginning of the project implementation. A target of 10% increase in income has been included in the results framework in Annex A1 of ProDoc/Annex A of CEO ER.

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
	High or Substantial		

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.

An Environmental and Social Impact Assessment (ESIA) was conducted and an Environmental and Social Management Framework (ESMF) developed to analyse the safeguards issues mentioned below more in detail and develop adequate mitigation measures.

FAO Risk Certification

Because the Standard on Involuntary Resettlement is triggered, the project is classified high risk under FAO's Environmental and Social Management (ESM) Guidelines.

WWF Risk Certification

The proposed project has been screened according to the Standard on Environmental and Social Risk Management and has been categorized as a Category "B" project, given that it is essentially a conservation initiative expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts are site specific and can be mitigated.

Policy on Environment and Social Risk Management - The proposed project is a Category "B" given that it is essentially a conservation initiative, expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts due to project activities are minor and site-specific and can be mitigated.

Policy on Natural Habitat – is triggered as the proposed project directly targets protecting and restoring species and their habitats; strengthening local communities' ability to conserve the natural resources they depend on.

Policy on Involuntary Resettlement – While the proposed project is unlikely to cause displacement of people, the project might lead to certain access restrictions. Given that the activities proposed under the project include, but are not limited to, protected area management and pastureland management and restoration, FAO's environmental and social standard on Involuntary Resettlement and Displacement and WWF's policy on Involuntary Resettlement is triggered because the Project will help define and thereby potentially restrict access to natural resources and livelihoods activities. FAO and WWF policies prohibit forced evictions which include acts involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating or limiting the ability of an individual, group or community to reside or work in a particular dwelling, residence, or location without the provision of and access to, appropriate forms of legal and other protection. In addition, the Project will exclude financing any activities that would lead to physical displacement and voluntary or involuntary relocation. However, economic displacement or restriction to livelihoods or access to natural resources may occur (e.g. as a result of negotiating through highly participatory consultations the establishment of collaborative management arrangements for pastureland and/or other natural resource sustainability parameters). This, however, will eventually only occur with the consent of the affected people and following a decision made with all required information at hand.

Policy on Indigenous People – The target project areas include among others *khalkh*, *buryad*, *barga*, *uzemchin* and *dariganga* people. As a precautionary approach, the project therefore considers that indigenous peoples are present in the project site.

Policy on Pest Management – The project is not expected to trigger the policy on Pest Management as the proposed activities do not include the promotion or usage of pesticides but will aim to reduce the amount of fertilizers and pesticides used through strengthening of farmer capacity on the proper use of chemicals and fertilizers (e.g. integrated pest management and good agriculture practice).

Please refer to the ESMF document for the detailed analysis and mitigation actions.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Environmental and Social Management Framework (ESMF)	**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).

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Objective-level indicators/GEBs								
GEF-7 Core Indicators	a) **Core Indicator 1:** Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares) **Sub-Indicator 1.2:** Terrestrial protected areas under improved management effectiveness	There are six NRs in the target area, with total area of 1,189,866 ha (includes area of Toson Khulstai that is outside of the 9 target soums). 2 NRs (Khar Yamaat and Toson Khulstai) have existing management plans. METT scores: See separate file	1,189,866 ha METT score targets: See separate file	1,189,866 ha 6 NRs have new or improved management plan. METT score targets: See separate file	GEF-7 BD Tracking Tool (based on Mongolian METT) www.mpa.gov.mn Review of management plans	Increased management effectiveness in the target PAs leads to enhanced conservation and measurable improvements of biodiversity and ecosystems.	PMU, MET, Department of Environment and Tourism of aimags	Resulting from Outputs 3.1.2 and 3.1.3

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	b) **Core Indicator 3:** Area of land restored (hectares) **Sub-Indicator 3.2:** Area of forest and forest land restored **Sub-Indicator 3.3:** Area of natural grass and shrublands restored Note: This indicator captures the total area of land undergoing restoration in terms of ecosystem function and/or ecology.	Baseline: 0	**Sub-Indicator 3.2:** 50 ha **Sub-Indicator 3.3:** 49,765 ha (20% of end-of-project target)	**Sub-Indicator 2.3:** 200 ha **Sub-Indicator 3.3:** 248,827 ha Note: This target is based on 20% of the area severely and strongly affected by land degradation – which will be priority for government in terms of restoration. The target will be confirmed once the assessments under Output 1.1.3 have been conducted.	Aimag/soum-level monitoring system (to be put in place under Output 1.1.4) Reports from aimag-level land department (prepared annually) Will be monitored annually starting from Year 2 of the project.	Restoration efforts are not (entirely) offset by climate change and other factors. Sustainable dryland management, restoration and conservation lead to measurable and sustainable BD, LD, CC and livelihood benefits.	PMU, MET, ALAMGAC Land officer at each soum will collect the data and land officers in 3 aimags will review and compile data.	Resulting from Outputs 2.2.2, 2.2.3 and 2.2.4

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	c) **Core Indicator 4:** Area of landscapes under improved practices (excluding protected areas) (hectares) **Sub-Indicator 4.1:** Area of landscapes under improved management to benefit biodiversity **Sub-Indicator 4.3:** Area of landscapes under sustainable land management in production systems (sub-indicator may include agriculture, rangeland, and forests)	Sub-Indicator 4.1 will correspond to LPAs in connectivity areas under improved management. LPAs already exist, but connectivity areas have not yet been identified. Baseline and targets will be defined based on assessments under Activity 3.1.1.1 and 3.1.4.1 Sub-Indicator 4.3 will refer to the area under improved land management plans. To avoid double-counting, areas under Core Indicators 1 and 3 and Sub-Indicator 4.1 will be deducted from this number. Baseline: 0	**Sub-Indicator 4.1:** TBD **Sub-Indicator 4.3:** 2,826,660.5 ha (50% of end-of-project target)	**Sub-Indicator 4.1:** TBD **Sub-Indicator 4.3:** 5,640,117 ha 6,857,748 ha will be under improved land management plans (entire area of 9 soums). To avoid double-counting, Core Indicator 1 and Core Indicator 3 were deducted from this target. Sub-Indicator 4.1 will also have to be deducted, when available. Within this	Review of project reports on LPA implementation Will be monitored annually starting from Year 2 of the project. Review of approved soum land management plans under implementation Aimag/soum-level monitoring system (to be put in place under Output 1.1.4). Reports from aimag-level land department (prepared annually).	Connectivity areas in target areas will be determined for migratory species such as Mongolian Gazelle and improved the conservation management with participation of local people. Improved land management plans are implemented and monitored, and lead to measurable and sustainable improvements in cropland, pastureland and forest quality. Improved pasture management combined with livestock health, market incentives and policy measures provide sufficient foundation for reducing livestock numbers.	PMU, MET, ALAMGAC, Aimag Food and Agricultural Department	Resulting from Outputs 3.1.1 and 3.1.4 Resulting from Output 1.1.3 Resulting from Outputs 2.1.1 and 2.1.2 Resulting from Outputs

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	d) **Core Indicator 6:** Greenhouse Gas Emissions Mitigated (metric tons of CO2e) **Sub-indicator 6.1:** Carbon sequestered or emissions avoided in the AFOLU sector	Baseline: 0 Without project scenario: net emissions of 175,184 tons of CO2e	TBD - target will be defined in Year 1.	10,302,215 tons CO2e (of which 8,052,215 direct, 2,250,000 indirect) With project scenario: net emissions of -787,7031 tons of CO2e Difference: 8,052,215 tons of CO2e	FAO EX-ACT calculation (and possibly future carbon monitoring system for AFOLU sector) Monitored annually starting from Year 2 of the project.	Project interventions lead to measurable changes in soil and vegetation carbon content.	PMU, MET	Resulting from Outputs 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 3.1.2, 3.1.3

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	e) **Core Indicator 11:** Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Baseline: 0	(i) 12,420 people (53.4% men, 46.6% women) receive targeted support and/or use the resources that the project maintains or enhances (50% of total population of 9 target soums). (ii) 200 national and aimag stakeholders trained* (at least 40% representation of female and male participants).	(i) 24,841 people living in nine target soums (53.4% men, 46.6% women) receive targeted support and/or use the resources that the project maintains or enhances (100% of total population of 9 target soums). (ii) 400 national and aimag stakeholders trained* (at least 40% representation of female and male participants)	Annual M&E survey Training reports (and certificates, if available) Monitored annually starting from Year 2 of the project.		PMU	Resulting from all Outputs

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
			*Trained in any of the following: - Sustainable land management planning (Output 1.1.2) - Sustainable crop production (Output 2.1.1) - Sustainable pasture management (Output 2.2.1) - NR management (Output 3.1.2) Trained stakeholders will include: - Ca. 50% of aimag government officials - Ca. 10% of MET, MOFALI, MOCUP ministry staff - University and civil society representatives					
Capacity Scorecard results	a) Capacity development scores (average of 3 aimags and 9 soums) See Annex R1 and R2 for the detailed scores.	47% (21.1 points)	52.5% (23.6)	61.3% (27.6)	Capacity Development Scorecard (mid-term and end score)		PMU	Resulting from all Outputs
Component 1: Strengthening the enabling environment for the sustainable management of drylands in Mongolia								

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Outcome 1.1: Strengthened policies and planning mechanisms for the sustainable management of drylands at national, aimag and soum levels.	b) Number of multi-stakeholder working groups established and operational.	Baseline: 0 National Land Reform Committee in government level established by Prime Minister Resolution in 2017.	1 national, 2 aimag-level working groups (under existing committee)	1 national, 3 aimag-level working groups and 9 soum level working groups	State land management general plan implementation report	Sector institutions and stakeholders have sufficient common interests in sustainable management of dryland ecosystems. State and aimag land management general plan implementation will be improved through improved multi-stakeholder collaboration mechanism. There is sufficient resources and buy-in to engage with working group for the long term.	PMU, ALMGAC, 3 aimag land officers, 9 soum land officers	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	c) Number of aimag and soum land management plans incorporating sustainable land use, landscape management and biodiversity conservation strategies and targets.	Baseline: 0 Norovlin has developed land management plan but does not incorporate specific LD and BD targets.	3 aimag land management plans Annual targets will be defined with stakeholders in Year 1.	3 aimag land management plans, 9 soum territorial development (mid-term land management) plans	State and aimag unified land territory annual report Aimag and soum land management plan implementation report	Land management plans will be developed in line with revised national land management plan and implemented accordingly.	PMU, ALMGAC, 3 aimag land officers, 9 soum land officers	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	d) Number of improved monitoring systems and processes in place.	Baseline: 0 Existing land monitoring database but does not provide comprehensive information on land use and status. IRIMHE existing soum-level pasture monitoring stations. Mongolian METT, BIOSAN systems in place, but not used systematically. Last gazelle population assessment conducted in 2009. Aimags conduct gazelle surveys every 5 years; but these are not coordinated.	Process and methodology for land use/land degradation and biodiversity monitoring agreed upon by relevant stakeholders (as per law and/or multi-stakeholder working group). Annual targets will be defined with stakeholders in Year 1.	9 soum-level and 3 aimag-level land monitoring systems	State and aimag unified land territory annual report Aimag and soum land management plan implementation report METT, BIOSAN – MET, www.mpa.gov.org, www.eic.mn	Information from land monitoring database will be used for reporting to the aimag/national government. BD and management effectiveness monitoring will be conducted regularly and data will be incorporated into national database on eic.mn and mpa.gov.mn. Results will used.	PMU, MET, ALMGAC, 3 aimag land officers, 9 soum land officers	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	e) Area under improved land management plans: See Core Indicator 4.	*- See Core Indicator 4 above -*						Contributing to Core Indicator 4
	f) Number of revised policies, laws or resolutions drafted and submitted to Cabinet/local Khural.	Baseline: 0 Existing legal and policy framework includes, among others, Law on Soil Conservation and Desertification Prevention, Land Law, Law on Environmental Protection, State Policy on Forests, Sustainable Livestock Action Plan, National Agriculture Development Policy, Law on Special Protected Areas, Law on Buffer Zones.	n/a (progress towards the final target will be monitored annually)	At least 3 revised policies, laws or resolutions drafted and submitted to Cabinet/ local Khural. Note: This is anticipated to include 1 national level law/policy related to pasture/land use, and 2 aimag-level resolutions on land management planning process.	Laws, policies and resolution texts		PMU	
Component 2: Scaling up sustainable dryland management in the Eastern Steppe of Mongolia								

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Outcome 2.1: Farmers/crop producers in target areas are applying more sustainable crop and fodder production practices through the introduction of improved/climate-smart technologies.	a) Area under improved practices: See Core Indicator 4.	*- See Core Indicator 4 above –*						Contributing to Core Indicator 4
	b) Quantity of crop and fodder produced from sustainable and climate-smart practices (referring to the technologies/ practices described in the work plan).	Baseline: 7,506.7 tons of cereals, potatoes and vegetables and 2,092.5 tons of fodder produced with traditional practices in 9 target soums	5% (375 tons) of total food crops and 5% (104 tons) of fodder produced with sustainable practices Annual targets will be defined with stakeholders in Year 1.	10% (750 tons) of total food crops and 10% (208 tons) of fodder produced with sustainable practices	Aimag Food and Agricultural Department reports, including production technology report (prepared annually). MOFALI project monitoring reports	Crop farmers are willing to adopt new technologies. New technologies provide sufficient incentives (more stable production, increased yields) to be adopted by farmers.	PMU, Aimag Food and Agricultural Departments	
	c) Number of farmers (women and men) participating in environment friendly or improved crop management activities	0	20 individual farmers (of which at least 40% women farmers, or households involving both spouses) At least 2 crop companies	40 individual farmers (of which at least 40% women farmers or households involving both spouses) At least 2 crop companies	Annual project M&E survey		PMU, Aimag Food and Agricultural Departments	Contributing to Core Indicator 11

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Outcome 2.2: Local communities are applying sustainable management and restoration of rangelands and forest patches in the target area.	d) Number of bagh-level pasture management and/or pasture use agreements adopted by local stakeholders. (Note: Pasture management plans will also encompass restoration.) (Adopted through Soum Governor's resolution or decision of Citizen Representatives Khurals.)	Baseline: 0 PUGs, pasture management plans in Bayan-Ovoo, Tumentsogt soums. Winter and spring camp agreements between herders and local government in soum annual plans, but implementation is not monitored. There are 39 baghs in the 9 target soums.	6 (15% of baghs in the 9 soums) Annual targets will be defined with stakeholders in Year 1.	13 (33% of baghs in the 9 soums)	Annual land management plans of each target soum. Soum Governor's resolution and decision of the local Bagh and Soum Citizen Representatives Khurals.	Soum and bagh governors will assume their responsibilities to regulate seasonal movements and carrying capacity (stocking rate). Pastureland conservation and rehabilitation planning will be assessed and discussed by bagh and soum citizens khurals.	PMU, MET, ALAMGAC Land officer at each soum will collect the data and land officers in 3 aimags will review and compile data.	
	e) Area under restoration: See Core Indicator 3.	- *See Core Indicator 3 above* -						Contributing to Core Indicator 3
	f) Area under improved practices: See Core Indicator 4.	- *See Core Indicator 4 above* –						Contributing to Core Indicator 4

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Outcome 2.3: Local communities benefit from enhanced value chains, public-private partnerships and access to markets in support of sustainable grazing practices.	a) Number of people (women and men) benefiting from enhanced value chains in support of sustainable grazing practices. (Note: Refers to the interventions described in the ProDoc under Outcome 2.3. Enhanced value chains may result from public-private partnerships, improved market linkages, improved standards of production that enhance quality, etc.)	Baseline: 0 Note: This target adds up to the # of beneficiaries listed above as core indicator. Benefits may include capacity development, monetary benefits, and/or other measurable benefits.	180 (average 20 per soum), of which at least 50% women Annual targets will be defined with stakeholders in Year 1.	450 (average 50 per soum), of which at least 50% women	Baseline survey Annual project M&E survey End-of-project survey with beneficiaries	Market linkages and enhanced marketing and processing capacity lead to measurable benefits for herders. Perceived benefits by herders is the same as measurable benefits for herders.	PMU, MOFALI	Contributing to Core Indicator 11
	b) Number of herder groups/cooperatives that obtain certification on sustainable practices through project (e.g., SFA codes of practice for cashmere, traceability standards for meat)	Baseline: 0	3 herder groups/ cooperatives (of which at least 1 women-led) Annual targets will be defined with stakeholders in Year 1.	9 herder groups/ cooperatives (of which at least 3 women-led)	Baseline survey Annual project M&E survey	Certifications lead to enhanced market linkages and premium price for herders (and, more generally, increased capacity of herders to increase the quality of their livestock).	PMU, MOFALI	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
	c) Additional or new income from value chain activities (% increase).	Baseline: TBD Note: Targets will be elaborated in consultation with the communities during implementation.	Increase over baseline measurement	10% increase over baseline measurement	Baseline survey Annual project M&E survey End-of-project survey with beneficiaries		PMU, MOFALI	
Component 3: Strengthening biodiversity conservation and landscape connectivity								
<u>Outcome 3.1:</u> Management capacity of Nature Reserves (NRs) and Local Protected Areas (LPAs) in connectivity areas is increased to support survival of	a) Area of terrestrial PAs under improved management effectiveness: See Core Indicator 1.	*- See Core Indicator 1 above -*						Contributing to Core Indicator 1
	b) Area of landscapes under improved local protection to benefit biodiversity: See Core Indicator 4.	*- See Core Indicator 4 above (Sub-Indicator 4.1) –*						Contributing to Core Indicator 4

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
Mongolian gazelle and other iconic species.	c) BD/species indicators: (i) Mongolian Gazelle: Number of individuals and number of days in which gazelles are observed in target NRs during relevant season (ii) White-naped Crane: Number of breeding pairs in target area; Nesting success	Baseline and targets will be defined based on baseline survey result under Activity 3.1.1.1. See Biodiversity baseline report for more details. In Khar Yamaat NR –Mongolian gazelle – 2,500 individuals/40 days in 2019.	TBD Monitored annually starting from Year 2 of the project.	TBD	Biodiversity monitoring report from PAA and Department of Environment and www.eic.mn (BIOSAN: integrated BD database for PAs) Project-supported survey data	Key species monitoring will be stable and PA managers are able to use the data to assess and improve management.	PMU, MET, aimag and soum environmental officers Rangers, volunteers	
Component 4: Project coordination, knowledge management and monitoring and evaluation								
Outcome 4.1: Project coordination, knowledge management and monitoring and evaluation for the sustainable management of	a) Number of knowledge products (publications, leaflets, case studies, best practice documents, videos or other media content, etc.) developed and disseminated.	Baseline: 0	5 Annual targets will be defined with stakeholders in Year 1.	10 (of which at least one best practice document and one media content specifically focused on women)	Review of knowledge products		PMU	

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection	Project Outputs/ GEF Core Indicator targets
drylands in Mongolia.	b) Number of people (women and men) at national/aimag level reached by communications and knowledge management activities (social media posts, TV clips, workshops and seminars, etc.).	Baseline: 0 Note: This target is in addition to (i.e., not included in) the # of beneficiaries listed above as core indicator.	10,000 Annual targets will be defined with stakeholders in Year 1.	50,000	Records by Knowledge Management and M&E Specialist	Communications and knowledge management activities lead to increased awareness of sustainable dryland management and biodiversity conservation issues.	PMU	
	c) M&E deliverables (reports, MTR, TE, etc. as outlined in the ProDoc) are submitted on time.	Baseline: n/a	Yes	Yes	Records by Knowledge Management and M&E Specialist		PMU	

[1] Please refer to the GEF-7 Results Architecture for the core indicator and sub-indicator definitions. https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.11.Rev_.02_Results.pdf

[2] According to the official MoMETT, METT should be conducted once every 2-3 years.

[3] If it is determined that some of the area to be restored is inside the protected areas above, it will need to be deducted from Core Indicator 1 target (to avoid double-counting).

[4] Area of Toson Khulstai that is outside of the 9 target soums = 221,262 ha (Tsagaan-Ovoo 192,522 ha and Bayantumen 28,740 ha). Thus, area of Core Indicator 1 that needs to be deducted from Core Indicator 4 (to avoid double-counting) is 1,189,866 ha minus 221,262 ha = 968,604 ha. 6,857,748 ha minus 968,604 ha minus 249,027 ha = 5,640,117 ha.

[5] Estimate calculated as 33% of total 5,640,117 ha. See Outcome 2.2, Indicator d), 33% of baghs have improved bagh-level pasture management plans.

[6] Total forest area in the nine soums is 109,872.7 ha. Project interventions are anticipated to cover approximately 20,000 ha of forest area, of which 200 ha of forest restoration.

[7] Lifetime indirect GHG emissions mitigated are those attributable to the long-term outcomes of GEF activities that remove barriers, such as capacity building, innovation, and catalytic action for replication. See GEF-7 Results Guidelines.

[8] Toson Khulstai, Khar Yamaat, Bayantsagaani tal, Ulziin ekh, Jaran togoony tal A&B and Menengiin tsagaan khooloi NRs.

[9] Protected Areas.

[10] Target area will be determined as part of Output 3.1.1. Nesting success can be assessed by monitoring the number of nesting cranes when the chicks are visible in July. Nesting success is determined by at least one chick successfully fledged from the nest site.

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).

Council comments on PFD (relevant to Mongolia child project)	**Responses** (specific to Mongolia child project)
1) US comment on land tenure and political stability. For all child projects, additional information on the diversity of land ownership arrangements on terrain subject to the program's interventions will be required moving forward. Several of the countries included in this program have endured recent and chaotic land redistribution schemes, and a successful (and durable) set of interventions would presumably influence land value moving forward.	In the context of the Mongolia child project, project activities will be mostly implemented on public land. As explained in the baseline section, Mongolia's Law on Land (2002) places pasture land firmly within public tenure. The same is true for forests. Cropland, in turn, is leased by individual farmers or companies. The highlighted land redistribution schemes are not relevant in the Mongolian context. However, as part of the land management planning process, which is embedded in the ongoing land reform process of Mongolia, the project will address some of the issues with regard to land governance in Mongolia, in particular the absence of regulations or local planning mechanisms leading to unsustainable use of grasslands. Furthermore, the project will work to improve the policy environment and support ongoing improvements in the Land Law.
STAP comment on PFD (relevant to Mongolia child project)	**Responses** (specific to Mongolia child project)
1) STAP recommends that the project team apply the Checklist for Land Degradation Neutrality Transformative Projects and Programmes; this was developed to help country-level project developers and their technical and financial partners, to design effective and innovative interventions, while ensuring consistency and completeness in the implementation of LDN, and the application of the fundamental features of the LDN framework. […] In component 1, STAP recommends that countries apply LDN methods for landscape planning. LDN is a participatory land use planning process to avoid land degradation, reduce land degradation, and reverse the productive potential of land.	The Mongolia child project has used the LDN checklist since PIF development to guide the project design. In particular, the project applies a landscape approach and the response hierarchy. It also supports further development and recognition of the land degradation neutrality principles in Mongolia. The project aims to deliver multiple benefits within the landscape, promotes responsible and inclusive governance (including gender equality and women's participation), promotes scaling, enhances national and sub-national capacities and ownership, and mobilizes innovative finance.

2) STAP strongly encourages the development of a theory of change for each of the child projects. Such TOC should follow the underlying assumptions of the global Dryland IP (e.g. a common vision of what the future would look like, para 66), but be tailored to the political, social, economic, legal and environmental circumstances (e.g. pressures on State Change of Land) of each child project. […] Suggest that each country develops their theory of change with context-specific stakeholders. […] The program identifies key contributions it will make to add value to large-scale programming: innovation and integration; moving to scale; and working effectively. STAP suggests that the country projects should keep these contributions in mind when developing the theory of change, and to assign indicators to monitor whether progress is being made on these conditions. Suggest for the country projects to consult a gender specialist when developing the project document, and to mainstream gender into the theory of change.	The Mongolia child project has developed a detailed Theory of Change (including a detailed TOC per component plus an overall TOC diagram, see Annex K), which is aligned with the global Dryland IP but also reflects the specific circumstances of Mongolia. The TOC from EOI stage was refined based on stakeholder consultations during workshops and individual consultations. Barriers to sustainable dryland management and biodiversity conservation in Eastern Mongolia, and their scaling up, were identified in consultation with stakeholders, and are reflected in the TOC and project description. A detailed gender analysis was conducted during PPG, and gender has been mainstreamed into the project's results framework.
3) STAP also suggests testing the impact of behavioral change on pro-environment behavior by embedding contextual interventions (e.g. norms, sensory cues) in the project. Influencing behavior may result in more durable effects than training farmers (Byerly, 2018).	In addition to training/organizational and institutional capacity development, several project interventions are aimed at achieving a behavioural change, such as through improved pasture and PA management, policy and regulations, and on-the-ground implementation of sustainable dryland management.
4) STAP welcomes the GEB table, explaining the baseline scenario, the GEF scenario, and the value of projects being part of the IP. It will be important to identify the assumptions and barriers to scaling and transformation in the child projects to reach the stated incremental value. Although the GEBs are stated, the program document does not state the methods that will be used to monitor the GEBs, or to implement adaptive management. Suggest that the country projects should detail the methods that will be used to monitor GEBs, and implement adaptive management as necessary.	The assumptions and barriers to scaling and transformation are described in detail in the project description. The assumptions will be regularly reviewed during project implementation through its adaptive management approach. Monitoring is integral part of the project; methods are described in the project results framework.

5) Suggest that countries should embed these questions to address risks to climate, when developing the project: For climate risk, and climate resilience measures: • 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? Note: it is logically problematic to assess the risks arising from climate change (or other long-term changes such as population and demography, market demand, technologies, etc) in a conventional risk management sense after establishing the project, since these 'risks' are certain to happen in some fashion and should be part of the initial design rather than post hoc risk treatment. Otherwise the solution space is not open to creating a project that is likely to be robust in the first place. For example, if climate change may undermine local farming practices, then it may be better to promote different practices from the start. Consequently climate risk in particular should be considered in establishing the ToC, not in this risk management section, especially in child projects.	During project formulation, an assessment of climate risks was undertaken, which were taken into account when designing the project activities. For example, crop production is to be promoted only in soums that are expected to have sufficient rainfall based on current and future climate scenarios. Generally, all project activities are designed to increase adaptive capacity and resilience of local stakeholders. Resilience building is a key element of the project. Also, the Mongolia child project has applied elements of the RAPTA framework in the project design. Key stakeholders have been consulted extensively and participated in the project formulation process. Several options of project interventions have been assessed and discussed with stakeholders. The project will apply an adaptive management approach and periodically review the validity of its intervention strategy through consultation with key project stakeholders.
6) The program does a good job of identifying initiatives that it can leverage upon. Suggest doing the same in the country projects.	A detailed analysis of past and ongoing initiatives was conducted during the project formulation phase, in order to build on lessons learned, avoid duplication, and identify synergies. Key stakeholders and projects were consulted in detail, and partner initiatives and co-financing was identified. See baseline scenario description and section 6.b Coordination with other relevant GEF-financed projects and other initiatives.

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

PPG Grant Approved at PIF: USD 150,000 (FAD USD 75,000; WWF USD 75,000)			
Project Preparation Activities Implemented	*GEF/LDCF/SCCF Amount ($)*		
	Budgeted Amount	*Amount Spent Todate*	*Amount Committed*
Salaries Professional	0		0
Consultants	90,700	83,166	7,534
Contracts	0	0	0
Travel	30,075	17,683	12,392
Training	16,425	5,069	11,356
General Operating Expenses	12,800	7,008	5,792
Total	**150,000**	**112,927**	**37,073**

FAO			
Project Preparation Activities Implemented	*GEF/LDCF/SCCF Amount ($)*		
	Budgeted Amount	*Amount Spent Todate*	*Amount Committed*
Salaries Professional	0		0
Consultants	42,900	42,203	697
Contracts	0	0	0
Travel	13,500	4,825	8,675
Training	16,425	5,069	11,356
General Operating Expenses	2175	159	2,016
Total	**75,000**	**52,256**	**22,744**

WWF			
Project Preparation Activities Implemented	*GEF/LDCF/SCCF Amount ($)*		
	Budgeted Amount	*Amount Spent Todate*	*Amount Committed*
Salaries Professional			
Consultants	47,800	40,963	6,837
Contracts			
Travel/meetings	16,575	12,858	3,717
Training			
General Operating Expenses	10,625	6,849	3,776
Total	**75,000**	**60,671**	**14,329**

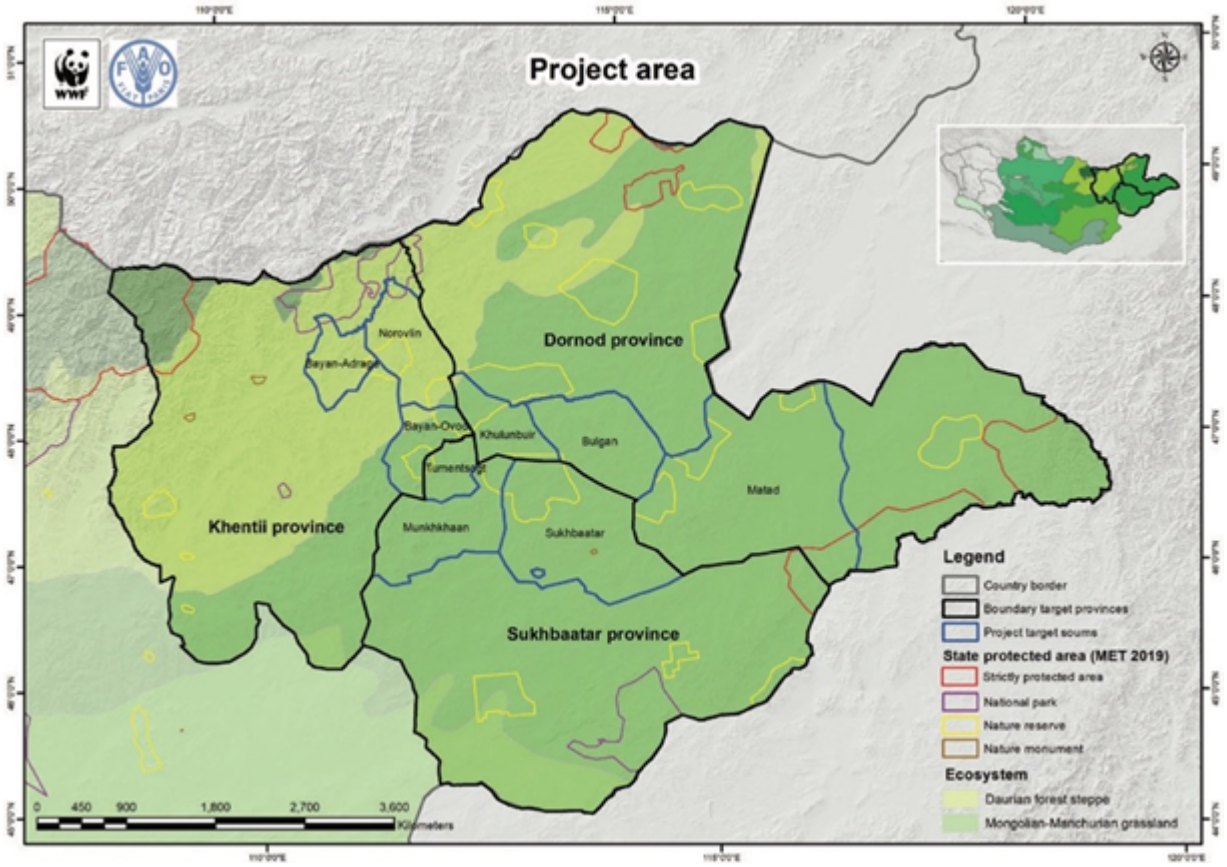
ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

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

n/a

ANNEX E: Project Map(s) and Coordinates

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



ANNEX F: Project Budget Table

Please attach a project budget table.

		Budget per Component (USD)			Total (USD)	Administered	Administered	Operated by

		Component 1	Component 2	Component 3	Component 4	M&E	PMC		by FAO	by WWF	Partner
5011	Professional Salaries	-	-	-	-	-	-	-	-	-	-
5013	Consultants	235'150	473'050	199'450	186'250	28'800	204'700	1'327'400	673'800	653'600	-
5014	Contracts	423'000	417'000	603'000	6'000	86'550	30'000	1'565'550	142'550	30'000	1'393'000
5021	Travel	56'800	97'610	108'000	165'000	-	-	427'410	155'900	138'010	133'500
5023	Training / workshop / meeting	46'300	63'000	55'000	28'500	14'000	-	206'800	75'100	53'500	78'200
5024	Expendable Procurement	145'450	820'451	298'450	38'450	-	4'000	1'306'801	257'600	83'951	965'250
5025	Non-expendable Procurement	-	135'000	90'000	65'000	-	-	290'000	65'000	-	225'000
5027	Technical Support Services (TSS)	-	-	-	-	-	-	-	-	-	-
5028	General Operating Expenses (GOE)	47'520	50'668	49'312	66'900	-	16'225	230'625	129'393	71'232	30'000
	Grand Total	**954'220**	**2'056'779**	**1'403'212**	**556'100**	**129'350**	**254'925**	**5'354'586**	**1'499'343**	**1'030'293**	**2'824'950**