

Strengthening capacity in the agriculture, land-use and other sectors for monitoring and reporting on Afghanistan's mitigation and adaptation targets

Part I: Project	Information
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GEF ID 10155

Project Type MSP

Type of Trust Fund

GET

CBIT/NGI

□CBIT □NGI

Project Title

Strengthening capacity in the agriculture, land-use and other sectors for monitoring and reporting on Afghanistan's mitigation and adaptation targets

Countries

Afghanistan

Agency(ies)

FAO

Other Executing Partner(s):

National Environmental Protection Agency (NEPA)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Climate Change, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Capacity Building Initiative for Transparency, Nationally Determined Contribution, Paris Agreement, Climate Change Adaptation, National Adaptation Plan, Mainstreaming adaptation, Climate information, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Stakeholders, Type of Engagement, Consultation, Information Dissemination, Participation, Civil Society, Non-Governmental Organization, Community Based Organization, Academia, Beneficiaries, Communications, Awareness Raising, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Capacity Development, Participation and leadership, Access to benefits and services, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Learning, Indicators to measure change, Theory of change, Knowledge Generation, Workshop, Training, Professional Development, Knowledge Exchange, Peer-to-Peer, Private Sector

Rio Markers Climate Change Mitigation Climate Change Mitigation 1

Climate Change Adaptation Climate Change Adaptation 1

Submission Date 1/29/2020

Expected Implementation Start

1/1/2021

Expected Completion Date

12/31/2023

Duration

36In Months

Agency Fee(\$)

128,250.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-3-8	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through the Capacity Building Initiative for Transparency (CBIT)	GET	1,350,000.00	1,500,000.00
	Tot	al Project Cost(\$) 1,350,000.00	1,500,000.00

B. Project description summary

Project Objective

By 2023, Afghanistan has: 1) developed a national monitoring and reporting system for greenhouse gas (GHG) emissions in the agriculture, forestry and land-use sectors; and 2) is able to track, monitor and report on mitigation and adaptation outputs and outcomes in line with the Enhanced Transparency Framework (ETF).

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

Project Component	Financin g Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co- Financing(\$)
Component 1. Enhancing institutional coordination for the	Technical Assistance	1.1 Improved institutional arrangement s and	1.1.1 The NEPA Climate Change Division has capacity established to coordinate regularly with relevant ministries, government agencies, and academia at national and provincial level for data sharing for ETF reporting.	GET	326,440.00	520,000.00
preparation of ETF		capacities to integrate	1.1.2 Strengthened multi-sectoral coordination mechanism among national entities under the supervision of newly			
reports in all		AFOLU and	established NEPA Climate Change Division (project output			
relevant		other	1.1.1) for GHG inventory data collection, updating and			
sectors, with		relevant	inventory preparation with a particular focus on the AFOLU			
focus on the		to comply	sector.			
agriculture,		with ETF	1.1.3 National ETF monitoring and reporting roadmap is			
forestry and		processes	prepared and adopted, building on previous efforts for			
other land use		and	UNFCCC reporting in Afghanistan.			
(AFOLU)		reporting.				
sector			1.2.1 Systematic documentation, archiving and electronic			
			information is established in NEPA with a focus on the ETF			
		1.2 ETF	requirements for the AFOLU, and other relevant sectors.			
		reporting	•			
		best	1.2.2 Data and information arrangements established between			
		practices,	mitigation, adaptation and climate finance documentation,			
		gathering	Afghanistan Environmental Data Centre (AEDC)[1]			
		and system	Arghanistan Environmentar Data Centre (AEDC)[1].			
		infrastructur	1.2.3 ETF reporting best practices in the AFOLU and other			
		e shared	relevant sectors are prepared and shared with national and			
		throughout	provincial stakeholders as well as with the CBIT Global			
		and other	Coordination Platform.			
		relevant				
		sectors and	[1] This online repository of Afghanistan's environmental data,			
		coordinated	knowledge, and research products was initiated by NEPA and			
		with other	the United Nations Environment Programme (UNEP).			
		CBIT				
		programs.				

Project	Financin	Expected	Expected Outputs	Trust	GEF Project	Confirmed Co-
Component	g Type	Outcomes		Fund	Financing(\$)	Financing(\$)
Component 2. Strengthenin g capacity for monitoring and reporting on mitigation targets in the AFOLU and other relevant sectors.	Technical Assistance	2.1 Increased capacity to assess and report emissions and removals in the AFOLU and other relevant sectors, and to design and monitor related emission reduction activities as defined in the Nationally Determined Contribution (NDC).	 2.1.1 Strengthened capacity of NEPA Climate Change Division (project output 1.1.1) to prepare activity data through access to IT hardware and software for spatial analysis of AFOLU sectors and gender-sensitive specific training programmes[1] on spatial change analysis, GHG inventory data collection, inventory preparation and reporting focusing on AFOLU and other relevant sectors (energy, waste, and transport). 2.1.2. GHG Information Management System (GIMS) for AFOLU and other relevant sectors is established in the relevant line ministries. 2.1.3. Improved emission factors and activity data are developed for national/international reports on inventory of emissions sources, sinks and emission reduction activities focusing on AFOLU sectors in line with 2006 IPCC guidelines. 1] Including participation in international and regional training, and other events. 	GET	501,441.00	420,000.00

Project Component	Financin g Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co- Financing(\$)
Component 3. Strengthenin g capacity for monitoring and reporting on adaptation targets in the AFOLU and other relevant sectors.	Technical Assistance	3.1 Increased capacity to monitor, report and communicat e on adaptation, in particular on NDC priority adaptation actions, in the AFOLU and other relevant sectors.	 3.1.1. Assessment prepared of good practices for monitoriand reporting on NDC priority adaptation actions in the AFOLU and other relevant sectors. 3.1.2. Afghanistan Adaptation Information Management System (AAIMS) for AFOLU and other relevant sectors i established in the relevant line ministries. 3.1.3. NEPA capacity for monitoring and reporting NDC priority adaptation actions strengthened through gendersensitive training programs on adaptation data collection, analysis and quality assurance and control. 3.1.4. Data are collected and analysed for national reports priority adaptation activities consistent with the national framework for monitoring and reporting on priority NDC adaptation actions in the AFOLU and other relevant sector and the requirements of ETF modalities, procedures and guidance for monitoring and reporting adaptation. 	ing GET s on rs	406,393.00	420,000.00
				Sub Total (\$)	1,234,274.00	1,360,000.00
Project Manag	jement Cost (PMC)				
			GET		115,726.00	140,000.00
			Sub Total(\$)		115,726.00	140,000.00
			Total Project Cost(\$)	1	,350,000.00	1,500,000.00

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	NEPA	In-kind	Recurrent expenditures	700,000.00
Recipient Country Government	Ministry of Agriculture, Irrigation and Livestock (MAIL)	In-kind	Recurrent expenditures	700,000.00
GEF Agency	FAO	In-kind	Recurrent expenditures	100,000.00
			Total Co-Financing(\$)	1,500,000.00

Describe how any "Investment Mobilized" was identified

During the finalization of the Project Document phase, UNEP has confirmed that there is no relevant co-financing from their side. On the other side, FAO has identified additional co-financing sources to support the project, and the total co-financing amount remains the same as at the PIF approval stage.

D. I rust Fund Kesources Requested by Agency(les), Country(les), Focal Area and the Programming of Fund

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FAO	GET	Afghanistan	Climate Change	CBIT Set-Aside	1,350,000	128,250
				Total Grant Resources(\$)	1,350,000.00	128,250.00

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 (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
FAO	GET	Afghanistan	Climate Change	CBIT Set-Aside	50,000	4,750
				Total Project Costs(\$)	50,000.00	4,750.00

Core Indicators

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	10	15		
Male	30	45		
Total	40	60	0	0

Part II. Project Justification

1a. Project Description

1. The Islamic Republic of Afghanistan is a landlocked country located in an arid sub-tropic and predominantly mountainous area in South Central Asia. The country's heterogeneous landscape varies widely in altitude, rainfall and ecosystems. These ecosystems provide valuable goods, natural resources and services for local communities and their livelihoods. However, the country's natural resource base is being compromised by continuing conflict, environmental degradation and climatic change. Consequently, the livelihoods of local communities are under threat. As part of its national commitments to the United Nations Framework Convention on Climate Change (UNFCCC), the country has prepared two national communications in order to contribute to global efforts on climate change mitigation. Among many competing economic development needs, priorities include institutional and human capacity building related to climate change mitigation and adaptation in order to mainstream and track the country's progress in this area.

2. Geography and territory. Afghanistan shares borders with: Pakistan to the south and east; Iran to the west; Turkmenistan, Uzbekistan and Tajikistan to the north; and China in the far northeast. It is the 41st largest country in the world with a total geographic area of 652,864 km2. The country has some of the most complex and varied geology in the world with more than 50 percent of its territory at an altitude of 2,000 metres or higher.[1]¹ Its varied topography includes high mountains in the east and the central highlands, and plains in the south and west. Most of the country is covered by high snow-capped mountains and traversed by deep valleys. It is split east to west by the Hindu Kush mountain range, which reaches 7,315 m high in the east. It is also divided by five major river basins: Amu Darya in the northeast; Helmand in the south; Kabul/Indus in the east; Harirod-Morghab in the west; and the Northern River Basin in the central north.[2]² The bulk of the country's flatlands are in the southwest, centred around the drainage basin of the Helmand River, and in the north between the northern foothills of the Hindu Kush and the Amu Darya River, which marks the border with Tajikistan and Uzbekistan.

3. Along with its geographical complexity, Afghanistan has experienced continuous conflict since the late 1970s. This includes the Soviet war in 1979 and subsequent occupation, the Taliban era in the late 1990s and the October 2001 United States-led military operations to overthrow the Taliban government. This extended period of conflict has

resulted in a huge loss of institutional and human capacity, [3]³ as well as significant land and infrastructure degradation. Recovery has been slowed by ongoing conflicts with various anti-government groups within the country.

4. Demographics. Afghanistan is the 39th most populous nation in the world, consisting of 35 million people.[4]⁴ The country was ranked as 171st out of 188 countries on the Human Development Index in 2015.[5]⁵ Population growth is estimated at 2.03 percent based on 1979 population estimates as compared to those from 2016,[6]⁶ and the urban population is estimated at 23.6 percent – a significant rise from 20 percent in 2004.[7]⁷ Urban population growth is largely driven by rural-to-urban migration, forced internal displacement and returning refugees.[8]⁸ More than 70 percent of Afghanistan's population lives in rural areas, and about 75 percent of Afghans rely on agriculture for their incomes and livelihoods.[9]⁹ In addition to rural and urban dwellers, an estimated 6 percent of the population are nomadic Kuchi herders.[10]¹⁰ The country's demographic



profile is presented below. Between 2002 and 2017, the total population, urban population and share of women in the labour force increased, demonstrating socio-economic

growth during this period.

Figure 1: Demographic profile of Afghanistan with selected variables between 2002 and 2016

(Source: World Development Indicators[11]¹¹)

5. Climate and climate change-induced hazards. Afghanistan's climate is arid and semi-arid, with cold winters and hot summers that vary substantially from one region to another. While the wet season, including the snowy season, usually runs from winter through early spring, the country is relatively dry and the climate classified as desert or desert steppe. Historically, regular drought cycles occurred approximately every 15 years, lasting for two to three years.[12]¹² However, in the past 50 years, this drought cycle has been occurring more frequently and lasting longer, with droughts in 1963-1964, 1966-1967, 1970-1972, 1998-2006, 2008 and 2011.[13]¹³ In 2018, the country again faced a

severe drought across 20 of its 34 provinces.[14]¹⁴ The period from 1998 to 2006 marked the longest and most severe drought in Afghanistan's recorded history. Between 2000 and 2003, over 4 million people were affected by drought. With 75 percent of the population relying on agriculture for their livelihoods, droughts poses a serious threat to incomes and efforts to reduce poverty.[15]¹⁵ Climate models predict that average temperatures in Afghanistan will rise by 1.7°C to 2.3°C between 2006 and 2050, and by 2.7°C to 6.4°C between 2006 and 2099.[16]¹⁶ As a result, increasing evapotranspiration is likely to exacerbate Afghanistan's existing water stress: the frequency and magnitude of heat waves will likely increase. These impacts will be greater at lower elevations since increased runoff at high altitudes could lead to floods and increased sand deposition at lower altitudes. For this reason, many consider drought and its negative impacts on the country's largely rain-fed agriculture[17]¹⁷ to be the biggest challenge created by climate changed-induced extreme weather events.[18]¹⁸

6. As presented in Figure 2 below, floods are the most frequent natural hazard in Afghanistan and cause the largest economic damage after drought. Changes in precipitation patterns as well as earlier spring snowmelt than expected as a result of climate change will increase the risk of flash floods. Flooding from heavy rainfall and snowmelt, and rising temperatures, can also cause an increase in the incidence of diseases like malaria, typhoid, and diarrhoea. The country's increased vulnerability from climate change-induced flash floods has already manifested: more than 112,000 people were affected by flash floods in March 2019.[19]¹⁹ A statement issued by the International Federation of Red Cross and Red Crescent Societies that month stated that an estimated 10 million people in the country (more than 25 percent of the population) were facing severe acute food insecurity in the wake of floods and drought.[20]²⁰



Annual Natural Hazard Occurrence for 1900-2018

Figure 2: Annual natural hazard occurrence in Afghanistan

(Source: World Bank Climate Change Knowledge Portal[21]²¹)

7. Agriculture sector and its vulnerability to climate change. The agriculture sector is the powerhouse of Afghanistan's economy and livelihoods, sustaining approximately 75 percent of its population.[22]²² Agriculture's share of the country's gross domestic product (GDP) is 24.5 percent.[23]²³ About 78 percent of households (1 million households) cultivate irrigated land to grow wheat during the spring harvest season.[24]²⁴ Other major food crops produced on irrigated land include maize, sorghum

and rice. Approximately 19 percent of households cultivating irrigated land produce fodder crops (including alfalfa and clover) – partly to feed their own livestock, partly to sell to others. $[25]^{25}$ Wheat production is even more concentrated on rainfed land, with 92 percent of households growing this crop on rainfed land. However, the total volume of wheat produced on rainfed land is only one third of that produced on irrigated land – even though the total area of rainfed land is almost 20 times larger than that of irrigated land. $[26]^{26}$ While Afghanistan was nearly self-sufficient in wheat prior to four decades of conflict, this near self-sufficiency drastically declined during that period. Its wheat productivity has been increasing again, but it is still well below full import substitution with an estimated 3.5 million of wheat imported in 2018. $[27]^{27}$ About 13 percent of households have their own garden plots to grow high-value and high-nutrition crops – usually grapes, apples, apricots and nuts.

8. Household surveys suggest that the total land area available for rainfed land farming is almost 20 percent greater than the irrigated land area (177,000 km2). The northern and north-eastern parts of the country account for two thirds of all rainfed land. However, 36 percent of this land was left uncultivated. In 17 provinces (50 percent of all provinces) more than half of rainfed land is left fallow. Poor quality of soil was cited as the predominant reason for not cultivating rainfed land by 56.2 percent surveyed, followed by a lack of water (16.5 percent).[28]²⁸ In addition, livestock products contribute more than 50 percent of agricultural GDP. Livestock populations in Afghanistan have fluctuated over the past 30 years from more than 5 million cattle and 30 million sheep and goats to only 3.7 million cattle and 16 million sheep and goats.[29]²⁹ The most recent prolonged drought has contributed to a marked decrease in livestock numbers.[30]³⁰ Projected hotter and drier conditions[31]³¹ will affect agricultural production by: (i) challenging water access and storage capacity; (ii) reducing soil moisture availability during planting; (iii) reducing the frequency of rain during the peak cultivation season, leading to yield decreases; (iv) livestock migration, starvation and forced sale; and (iv) reducing the availability of animal feed.[32]³²

9. Water resources and their vulnerability to climate change. Despite increasing droughts and pervasive water scarcity issues, Afghanistan is not considered water poor. The country's annual renewable surface water resources are estimated at 57 billion m3 distributed across five river basins – equivalent to 2,775 cubic meters per capita per year.[33]³³ This volume is considered to be sufficient to satisfy the water demands of a population for domestic, agricultural, industrial, energy and environmental needs.[34]³⁴

Therefore, the country theoretically has sufficient water.[35]³⁵ However, the water availability varies widely within and across river and sub-river basins, and the distribution of water does not always correspond with the location of irrigable land and populations. For example, the Northern River Basin holds 20 percent of all irrigated land, but only 3 percent of the country's total water resources flow within the basin's hydrological borders. This amounts to less than 700 cubic meters per capita per year, which is very close to absolute water scarcity.[36]³⁶ In other water-scarce areas, deep wells have been dug to access water, which not only has downstream effects on groundwater users, but also creates greater energy demands when automated pumping is used.

10. With projected economic and population growth, water storage limitations and reliance on snowmelt and transboundary watersheds will create significant climate change vulnerability.[37]³⁷ Low water storage capacity combined with conflict-damaged irrigation and water distribution systems increases the country's vulnerability to floods, droughts and other changes in precipitation patterns. For example, more rapid and earlier spring snowmelt increases risk of flash flooding, exacerbated by drought-induced land degradation and increased soil impermeability. In addition, a reduction in glaciers and snow cover reduce river flows and limit irrigation resources.[38]³⁸

11. Forests. A few centuries ago, deciduous and evergreen forests covered 5 percent of Afghanistan's current land area, including 1 million hectares of oak and 2 million hectares of pine and cedar – mostly in the eastern part of the country. $[39]^{39}$ Open woodland dominated by pistachios, almonds and junipers occupied an additional 33 percent of Afghanistan's land area. Today, natural forests occupy less than 1.51 percent of the total land area (1 million hectares total), $[40]^{40}$ with nearly half of those forests having less than 10 percent crown density. $[41]^{41}$ The largest forested areas are in the eastern provinces, but remote sensing of these provinces in 1977 and 2002 showed that their forest cover had been reduced by more than 50 percent. $[42]^{42}$ From 2000 to 2005, the forest declined at a rate of 3 percent – or 30,000 hectares – per year. $[43]^{43}$ This reduction has implications for groundwater tables, which appear to be declining precipitously, $[44]^{44}$ and for soil erosion, which currently affects over 80 percent of Afghanistan's land. $[45]^{45}$ Community-based

forest management has been introduced, but it is limited in scope – in part because climate change adaptation (CCA) and natural resource management programming in Afghanistan is in its infancy.

12. Rangelands. Afghanistan's rangelands are estimated at 30 million hectares, or approximately 45 percent of the country's land. [46]⁴⁶ However, because large areas of 'waste land' are also used for grazing, the total grazeable area is estimated at between 70 percent and 85 percent of the total land area. [47]⁴⁷ This area provides habitat and forage for nearly 35 million livestock as well as numerous wild animals. Rangelands support significant export potential and generate income for rural people via livestock products such as carpets, leather and wool, as well as medicinal plants. [48]⁴⁸ However, these rangelands are in poor condition from soil erosion and overgrazing. The scarcity of high-quality rangeland coupled with its importance to the rural population is increasing the incidence of disputes between communities, tribes and neighbours who claim land rights despite the lack of a clear legal framework. [49]⁴⁹ Additionally, changes in rangeland species and productivity have forced rural people to shift grazing to higher elevations, increasing pressure on alpine ecosystems where vast areas of formerly productive grasslands have been converted into grazing-resistant cushion shrub lands. [50]⁵⁰ There are no comprehensive studies of grassland soil carbon sequestration, and this research is urgently needed. The Second National Communication (SNC) under the UNFCCC submitted in 2017 does not estimate GHG emissions as a result of abandonment of managed land, or CO2 emissions and removals from soil.

13. Climate change impacts. Afghanistan is frequently ranked among the countries most vulnerable to climate change, [51]⁵¹ ranking 26th in the world on the Climate Risk Index in 2017.[52]⁵² The key sectors of water, energy, agriculture and livestock are among the most vulnerable. The country is regularly hit by extreme weather and climatic events, causing substantial economic damage and loss of life. Insurgency and resource disputes will likely worsen as climate change threatens already limited and poorly managed land and water resources. Given the country's high reliance on agriculture and related land use, rural livelihoods are significantly impacted by changes to the natural landscape and climate-driven natural disasters. The majority of Afghan households in recent years have reported more frequent incidence of floods, landslides, droughts, livestock diseases and crop pests, all of which have led to low agricultural production and income, and a decline in the production of almost all staple and cash crops, decreasing farmers'

productivity. $[53]^{53}$ Since 1978, there has been a 60 percent decrease in arable land. $[54]^{54}$ However, due to an increase in irrigated land – and people moving onto that land – agricultural productivity overall is still on the rise in non-drought years.

14. Climate change poses significant threats to the country's food security and development trajectory. Food insecurity especially impacts smallholders, returnees, internally displaced persons, handicapped people, women-headed households and other marginalized groups.[55]⁵⁵ Since wheat is the staple crop and main source of food for the majority of the population, declines in wheat production can have widespread and serious impacts. Current estimates suggest that 9.8 million people in the country (or 43.6 percent of the rural population) face severe acute food insecurity, with an additional 6.9 million facing moderate food insecurity.[56]⁵⁶ Food insecurity is a consistent issue in Afghanistan: while it increases significantly in drought years, it is likely to continue rising overall due to returning refugees, a growing population and the impacts of climate change.

15. Climate change also impacts livestock production – another important source of Afghanistan's economic and food security. During drought years, livestock have less access to water and fodder, and farmers often cannot afford to buy fortified animal feed due to drought-induced price increases.[57]⁵⁷ This leads to an increased incidence of animal disease and poor animal health. In order to avoid premature deaths from sickness or starvation, many pastoralists resort to distress selling of livestock, which floods the market with meat and results in decreased profits for all livestock keepers.[58]⁵⁸ The quality and productivity of milk production also decreases, which results in lower profits for dairy keepers and the entire industry. FAO and other agencies have responded by delivering high-quality animal feed to smallholders so that they can preserve their animals for breeding in subsequent years. However, this solution is not sustainable since it does not address the underlying issues of water management, soil erosion, reforestation and rangeland rehabilitation.

16. Scientific study. Very few thorough studies have been conducted on climate change risks or trends in Afghanistan. This is likely due to the inaccessibility of much of the country, coupled with low in-country capacity to study climate change. However, at least one study reported that historical climate patterns have shown an average

temperature increase of 1.8° C from 1950 to 2010, with the highest increase of 2.4° C in the east and the lowest of 0.6° C in the Hindu Kush.[59]⁵⁹ Growing season length is also projected to increase by approximately 20 days for all regions until 2050,[60]⁶⁰ which might create an opportunity for extended agricultural husbandry or additional harvests when water resources are properly managed. Until 2099, models show a decrease in precipitation of more than 30 percent. Because of the heterogeneity of Afghanistan's elevation and landscape, it is hard to apply predictions to the entire nation since some regions will experience positive effects and some negative effects. However, under the most extreme emissions scenario (Representative Concentration Pathway 8.5), trends in all regions by 2099 are extreme, [61]⁶¹ including regularly occurring hazards like avalanches, floods, droughts, landslides, dust storms and erosion. The need for more climate change research capacity within country – as well as for more international attention to researching Afghanistan's climate – has been identified in several national planning and policy documents.[62]⁶²

17. Climate change and its impact on the Afghanistan's GDP. Since 2002, Afghanistan's GDP has grown, on average, in the double digits. While average per capita GDP has also risen consistently since 2002, almost 54 percent of Afghans still live below the poverty $line[63]^{63}$ – a disturbingly high increase from the estimated 36 percent poverty rate in 2011. Much of the rise in poverty is concentrated in rural areas where agricultural productivity and opportunities for off-farm labour have decreased. [64]⁶⁴ While this has been offset by a rise in incomes in urban areas, GDP growth has been volatile. This is because agriculture constitutes 22 percent of GDP and agricultural productivity (both crops and livestock) varies widely from year to year depending on winter and spring precipitation. This has far-reaching impacts since 45 percent of the population is directly employed in agriculture and up to 40 percent is employed indirectly. Within agriculture, 32.8 percent of workers are women and 58.6 percent of those employed in livestock production are women. [65]⁶⁵ Agriculture has room for continued growth and can both help Afghanistan to recover economically as well as constitute a path to women's empowerment. However, for the agriculture sector to grow, the underlying issues of water use, soil degradation and climate change adaptation need to be addressed in a holistic, cross-sectoral and coordinated manner. As the World Bank reported in April 2019, the economy has suffered from low agricultural production due to severe drought (see the Figure 3 below), with wheat production declining by 24 percent and milk production declining by 30 percent.[66]



Figure 3: The decline of agriculture of GDP due to recent drought in Afghanistan

(Source: World Development Indicators[67]⁶⁶)

18. Adaptive capacity. Four decades of armed conflict have destroyed the country's infrastructure, damaged its institutions and led to widespread poverty and underdevelopment. The country's low adaptive capacity is evident in numerous areas, from technical, institutional and policy limitations to the lack of agriculture and land-use subsector-specific tools, methodologies, data and fora for identifying best practices, and national policy, decision-making and investment frameworks for climate resilience.

19. This low adaptive capacity is evidenced by deficiencies in data collection and analysis, reporting, knowledge sharing and coordination among national agriculture, water, land use and rural development institutions. There are also funding gaps, a lack of national climate and meteorological expertise, a lack of reliable historical climate data, and weak public awareness about environmental issues. Finally, civil unrest prevents researchers and project implementers from accessing some of the most vulnerable areas of the country. Afghanistan has identified a number of key actions as part of its National Capacity Needs Self-Assessment for Global Environmental Management (NCSA) and a National Adaptation Programme of Action for Climate Change (NAPA) in order to adapt to climate change. The total estimated cost of full NAPA implementation is USD 10.78 billion over ten years.[68]⁶⁷

20. Mitigation. Afghanistan's per capita GHG emissions total 2.028 t CO_{2e} – relatively low [69]⁶⁸ compared with the global average of 6.73 t CO_{2e} per capita.[70]⁶⁹ However, according to its Initial and Second National Communications, the country's GHG emissions increased from 28,759 Gg CO₂e in 2005 to 60,237 Gg CO₂e in 2013. This represents an increase of 13.69 percent per year, caused by growth in Afghanistan's population and agricultural and industrial production. This trend is expected to continue in the coming years. According to the Second National Communication (SNC), the highest GHG emissions (64.3 percent) came from the agriculture sector, followed by 18.8 percent from land use, land-use change and forestry (LULUCF), and 16.2 percent from energy. Industrial processes and waste each comprised 0.3 percent of total emissions.[71]⁷⁰ In total, more than 80 percent of the country's GHG emissions were also led by the agriculture sector, which contributed 94 percent. Of total agricultural methane emissions, 93 percent came from livestock, 85 percent from enteric fermentation, 8 percent from manure management, 6 percent from rice cultivation and 1 percent from field burning of agricultural residues. In addition, Agriculture contributed over 98 percent of the nitrous oxide (NO2) emissions in Afghanistan.[72]⁷¹

21. GHG emissions estimates for Afghanistan vary widely from source to source[73]⁷² and contain different types of data. The latest national GHG inventory was completed for 2013 using the 1996 Intergovernmental Panel on Climate Change (IPCC) guidelines.[74]⁷³ Work on the latest Biennial Update Report (BUR) is almost completed

by the United Nations Environment Programme (UNEP) in collaboration with NEPA, the Independent Directorate of Local Governance (IDLG), the Ministry of Agriculture, Irrigation and Livestock (MAIL), the Ministry of Energy and Water (MEW), the Ministry of Mines and Petroleum (MoMP), the Ministry of Rehabilitation and Rural Development (MRRD), Kabul University and other institutions. A GHG inventory for 1990-2017 was also prepared using the IPCC 2006 guidelines; data were collected from the National Statistics and Information Authority (NSIA), but for historical years only international data were available. Technical training was provided on compiling and updating the national GHG inventory. For the agriculture and land-use sectors, this inventory mainly focused on Tier 1 data.

22. Systems for measuring and monitoring progress in addressing the drivers and impacts of climate change across sectors in Afghanistan are underdeveloped. Reasons for this include the difficulty and cost associated with coordinating and monitoring a large number of small-scale agricultural producers across the country's large geographic area. Constraints in institutional knowledge, coordination and capacity at all levels create additional barriers that undermine priority setting for adaptation and mitigation. The low number of researchers, academic institutions and outreach centres specializing in these issues is another limiting factor. Finally, civil unrest and low institutional capacity prevent the geographical and intra-institutional coordination needed to design and implement effective adaptation and mitigation actions. Afghanistan has only started to access the technology-transfer opportunities derived from the UNFCCC. It needs to build national capacity to take advantage of these opportunities and play a more active role in international negotiations.[75]⁷⁴

23. Afghanistan's NDC. As a party to the UNFCCC, Afghanistan's Government is committed to supporting international efforts to fulfil the Paris Agreement objectives. To this end, it submitted its Intended Nationally Determined Contribution to the UNFCCC on 21 September 2015, which later became the country's first Nationally Determined Contribution (NDC) when the country ratified the Paris Agreement on 23 November 2016. To address the drivers and impacts of climate change, the country highlighted priority actions in its NDC covering both climate change adaptation (CCA) and climate change mitigation (CCM) across sectors like agriculture (sub-sectors such as livestock and crops), land-use change from forestry, energy, mining, and waste. The NDC establishes a conditional target to reduce national GHG emissions by 13.6 percent below the business-as-usual level by 2030 through (i) natural resources management (e.g. afforestation, reforestation, rangeland rehabilitation); (ii) improved agriculture practices like manure, land management, irrigation and cropping systems; (iii) improved energy management like increased energy production from renewables and natural gas, energy efficiency, efficient transport vehicles and fuels shift; (iv) improved waste management like composing of biodegradable waste instead of landfill, and methane recovery from landfill; and (v) resource recovery from mining like gas recovery in coal mines. The country's NDC also highlighted that this target can be reached with financial, capacity-building, technology

and legal assistance. The NDC highlighted that AFOLU is the major contributor to national GHG emissions and that further attention should therefore be focused on GHG mitigation measures within the AFOLU sector. The priorities, limitations and gaps in the NDC Enhanced Transparency Framework (ETF) baseline are shown in Table 1.[76]⁷⁵

Table 1: Summary of Afghanistan NDC CCA/CCM priorities and related limitations/gaps.

Category	Short description of priority actions adapted from Afghanistan's NDC	Limitations in NDC ETF baseline

Category	Short description of priority actions adapted from Afghanistan's NDC	Limitations in NDC ETF baseline
Mitigation		E-llowing limitations are identified by the SNC[77] ⁷⁶ and
Miligation	AFOLU Afforestation and reforestation natural forests fuelwood from	NDC[78] ⁷⁷ of Afghanistan covering all the GHG inventory sectors:
	forest and orchards, rangelands rehabilitation.	The time-series data required for the estimation of
	• Better manure management and regulations on land use change	GHG inventories, as well as measuring the progress of mitigation
	for agriculture are needed.	and adaptation activities are not available for all key sectors, in
	· Irrigation infrastructure and cropping systems need to be	particular for agriculture, forestry, and land use change
	improved to make better use of limited water.	The accuracy of the existing data is uncertain
	Mitigation measures for N2O include reduced fertilizer	import data reported in central statistics organization (CSO) trade
	application; optimal timing of fertilizer application; nitrification inhibitors,	statistics is different than the reported diesel uses data of transport,
	Pice raddies: modified rice strains	energy, agriculture and other sectors.
	F normy	· In addition, the non-accessibility of data is a
	Energy Production needs to focus on hydronower, solar	significant limitation because data is often treated as proprietary.
	systems, wind and biomass, clean cook stoves and fuels, and solar energy	There is need to sensitize data owners and curators related to GHG
	· Improving energy efficiency in households, transport, industry,	Non availability of CHC inventory data in electronic
	services, mining, and agriculture.	device-useable format is another major limitation, which hinderers
	• Power plants: fuel shift to natural gas and renewables.	collection, organizational sharing, archiving, and analysis of data.
	Transport: more efficient vehicles, clean fuels, and alternative	Lack of institutional and human capacity of sectoral
	fuels.	ministries to monitor the progress of emission reduction from
	Mining	priority NDC actions. Different institutions use different formats
	Industrial processes and extractive industries (mining and	develop a harmonized GHG inventory data-collection and update
	fuel shifts	framework aligned with IPCC guidelines.
	Coal mines: gas recovery in coal mines	• Regular sectoral inventory data collection,
	Waste Management	compilation and update for GHG inventory reporting is absent. This
	Solid waste management: Composing of biodegradable waste	is particularly due to lack of technical skills, coordination
	instead of landfill, and methane recovery from landfill.	and framework from national to provincial level
	· Wastewater recycling	Emission-reduction measures for AFOLU are not yet
		sufficiently understood nor accurately estimated due to the lack of
		available baseline land use change data, information, and emission
		factors. In particular there has been slow technical skills
		development focusing on methodologies and nation-specific
		reporting in relation to AFOLU key sectors
		· LULUCF mitigation actions are not vet sufficiently
		considered nor incorporated within Afghanistan's mitigation
		contributions.
		• Despite its importance to the country, LULUCF
		mitigation activities are considered 'ambitious' commitments

Category	Short description of priority actions adapted from Afghanistan's NDC	Limitations in NDC ETF baseline
Adaptation	 Development and adoption of the Afghanistan Climate Change Strategy and Action Plan (ACCSAP). Development of a system to monitor and assess vulnerability and adaptation to climate change Identification and mainstreaming of climate change adaptation technologies into the sectoral policies, strategies and development plans Promotion of regional and international cooperation and coordination for adaptation technology transfer Strengthening and expansion of meteorological and hydrological monitoring networks and services, including a national database to archive and store meteorological and hydrological data Development of water resources through rehabilitation and reconstruction of small-, medium- and large-scale infrastructure Planning for proper watershed management and promoted through community-based natural resources management Increase irrigated agricultural land to 3.14 million ha, through restoration and development of Afghanistan's land area and the habitat of selected species is under a system of conservation Behavioral change and opportunities for provision and development of at least 40 percent of existing degraded forests and rangeland areas (232,050 ha of forests; and 5.35 million ha of rangelands) 	 Institutional capacity is limited to rigorously analyse expected impacts, potential solutions, challenges, and synergies between CCA and CCM. Currently there is insufficient monitoring of CCA measures, a lack of nationally agreed indicators, and limited ability to integrate adaption measures into existing and planned national programmes and institutional mandates. Baselines and targets for indicators need to be established and assessed quantitatively and qualitatively throughout all agriculture and land use NDC actions and implementation phases. Best practices for adaptation and mitigation need to be systematically investigated to improve investment, decision making, policy making and planning. AFOLU ETF reporting best practices, systems and capacity need to be shared with all national sectors and inform broader CCA/CCM planning and investment prioritization. There is limited research or technological capacity in Afghanistan to design appropriate new technologies. Adaptation measures specific to Afghanistan, such as drought-resistant crops that are adapted to Afghanistan's soils, domestic clean energy technologies that would meet Afghanistan's heating and cooking needs, and systems of watershed management that consider Afghanistan's varied cultural norms and terrains are underdeveloped. Improved communication modalities are needed in order to raise awareness about environmental issues and ease the way for improved monitoring and evaluation. Differing mandates, lines of funding, and political differences between line ministries prevents timely, transparent and continuing coordination at the national and lower levels. Donor and government funding have to date been limited when it comes to broad multi-sectoral environmental programmes. Instead, the focus has often been on developing certain sectors (i.e. water, livestock, and high value crops) without paying attention to the underlying environmental

24. In order to successfully implement the above mentioned NDC actions, there are three broad areas of limitations that need to overcome. These three broad areas of limitations are: (i) data limitations, (ii) lack of technical capacity, and (iii) lack of institutional coordination. The proposed CBIT project will overcome these three broad areas of limitations with specific activities. For example, GHG inventory data related limitations will be overcome by activities under component 1 and 2 such as: (a) designing consistent GHG inventory data-reporting formats; (b) GHG inventory data-collection framework and guidelines from the national to the provincial levels focusing on AFOLU and other sectors; (c) developing country-specific activity data and emission factors focused on AFOLU sectors. The capacity related limitations will be resolved with activities under component 1 and 2 including: (a) instrumentation (hardware & software) support; (b) technical skills and capacity development of GHG Inventory National Study Team and GHG data Compiling Team through training on spatial analysis, GHG inventory and reporting, statistical and modelling tools for mitigation scenarios analysis. Institutional coordination limitation will be resolved under this project through activities of component 1 including establishing coordination mechanism between newly established NEPA Climate Change Division and other relevant ministries, government agencies, and academia. Such coordination mechanism will focus on (a) capacity and needs, agreeing to milestones and timelines, (c) establishing the protocols, budgetary allocation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for

25. There is significant potential to advance the monitoring of adaptation and mitigation activities in support of Afghanistan's NDC by employing advances in information and mobile technologies. Information technology is rapidly being introduced throughout Afghanistan and considerable progress has been made in building upon its information infrastructure, such as extending the reach of basic cellular services and broadening television access. There has also been progress in assessing relevant sectors' climate change impacts, vulnerabilities and risks, and reporting using low-to-mid-tier national GHG inventories. However, it is critical that higher-tier data on AFOLU and other sectors' emissions – and data on CCA/CCM and related activities – be collected regularly systematically, and reported on. Only when a harmonized system of data collection, monitoring and reporting is available can Afghanistan contribute meaningfully to global GHG emissions reduction and CCA/CCM activities.

26. The improved ETF systems supported by this project will lay the foundations for improved national prioritization, policies and investments to address Afghanistan's most pressing climate change adaptation and mitigation challenges within the agriculture, rural development and other related sectors. Through an NDC lens, this CBIT project will improve baseline monitoring, reporting and cross-sector coordination so that Afghanistan can transparently reach its emissions and climate resilience targets.

1) The baseline scenario and associated baseline projects.

27. The Government has already begun preparations to measure the implementation of some NDC contributions. For example, an **Afghanistan Climate Finance Unit** (ACFU) has been established and operationalized within the Climate Change Division of NEPA through the United Kingdom Department of International Development (DFID)-funded Action Climate Today project. The ACFU has been collaborating with other government ministries to identify gaps and potential synergies in CCA and CCM planning. As a result, it is expected to be able to assist other ministries and stakeholders in mainstreaming climate change planning. With support from donors such as GEF, DFID and others, the ACFU has also provided training on climate finance and hosted dialogues on climate change in Afghanistan. The Government has actively worked to identify opportunities for implementing NDC priority activities through the **Green Climate Fund (GCF)** by preparing and submitting proposals. A few of them are being considered by the GCF Board.

28. NEPA, the proposed project's key executing partner, was established in 2005 and is the primary agency for environmental management and mainstreaming climate change in Afghanistan. As an independent institutional entity, it is responsible for coordinating and monitoring environmental conservation and rehabilitation, and for implementing the country's Environmental Law. The Afghanistan Climate Finance Unit (AFCU) has also been tasked with resource mobilization, coordinating with stakeholders in national ministries and building capacity and awareness on climate-change issues.

29. Another institution mandated to address the impacts of climate change is the **Afghanistan National Disaster Management Authority (ANDMA)**, which coordinates disaster risk reduction, post-disaster risk management and the development of a disaster early warning system. One of ANDMA's main objectives is to raise communities' awareness of how to deal with disasters, including climatic disasters. The **National Disaster Management Council** is mirrored in the provinces by provincial disaster management committees, which also work to prepare communities for and respond to disasters.

30. The country finalized a National Capacity Needs Self-Assessment for Global Environmental Management (NCSA) and prepared National Adaptation Programme of Action for Climate Change (NAPA) in 2009. NCSA priorities include: (i) establishing effective mechanisms for inter- and intra-institutional coordination; (ii) developing human resource capacities; (iii) developing new legislation for natural resource management; (iv) improving education and public awareness on environmental topics; (v) strengthening environmental research; (vi) improving technical and managerial capacity for responding to international conventions and treaties; and (vii) participatory methodologies, monitoring and evaluation, and community-based natural resource management (CBNRM). NAPA also strived to integrate climate change considerations into the national planning processes. It identified 51 potential adaption actions in the areas of: (i) human health; (ii) water resources and renewable energy; (iii) agriculture and food security; (iv) animal husbandry and rangelands; (v) forests and biodiversity; (vi) natural disaster preparedness and infrastructure; and (vii) human capacity building.

31. Afghanistan submitted its **Initial National Communication** to the UNFCCC in 2012, highlighting technological, economic, financial and human resource constraints. This communication also highlighted the need to: (i) mainstream climate change mitigation and adaptation in national and sectoral policies, plans and programmes; and (ii) review existing institutional and coordinating mechanisms, as well as environment- and disaster-related policy and legal frameworks, with a focus on climate change. With financial support from GEF and technical assistance from UNEP, the Second National Communication (SNC) was submitted to the UNFCCC in 2017 by NEPA. GHG emissions were reported for the energy, industrial processes, agriculture, land-use change and forestry, and waste sectors. The data used for this inventory were primarily derived from the National Statistics and Information Authority (NSIA) Afghanistan Statistical Yearbook 2013-2014. A Tier 1 approach using IPCC default emission factors and revised 1996 IPCC guidelines was used to calculate GHG emissions. According to the SNC, the greatest challenges for the GHG inventory are related to the non-availability and non-accessibility of data, and a lack of technical skills and coordination mechanisms.[79]⁷⁸

32. The country's **Nationally Determined Contribution (NDC)** was submitted in 2015 with a conditional target of 13.6 percent GHG emissions reduction by 2030 compared to a business-as-usual scenario, and with external technical and financial support. This external financial support would cost USD 17.4 billion, of which two-thirds would be for adaptation and one third for mitigation. The NDC notes that Afghanistan faces specific challenges in climate change adaptation and mitigation such as funding gaps, a lack of expertise and reliable historical climate data, and low public awareness about environmental issues.

33. An updated **National Adaptation Plan (NAP)** was prepared for the country in 2016. This updated plan outlined implementation priorities in seven primary and two sub-primary areas: (i) food grains and management; (ii) an agriculture research institute; (iii) sustainable irrigation and water resource management; (iv) disaster preparedness; (v) disaster response and management; (vi) infrastructure; (vii) climate change and human health; (viii) gender and climate-resilient development; and (ix) training and capacity development. The 2016 NAP emphasized the need for developing institutional capacities in order to educate staff and communities about climate change, perform vulnerability assessments, access financing and assess adaptation costs.

34. **Nationally Appropriate Mitigation Actions (NAMAs)** for Afghanistan were prepared in 2016, emphasizing the importance of low-emission development strategies (LEDS). However, these strategies would require a database of climate and development information, technical and analytical capacity and engagement of relevant stakeholders. In addition, LEDS strategies would need to be linked with the Afghanistan National Development Strategy (ANDS) and integrated into all sectoral programming. While the ANDS mentions the need for more efficient transportation, lighting, energy use and urban waste management, it does not highlight agriculture – the nation's largest GHG-emitting industry – as a target sector. This omission highlights the need for better coordination between NEPA and key ministries, and greater awareness of environmental issues and agricultural activities, along with their impacts on climate change.

35. Afghanistan's Government has initiated several actions to promote sustainable development. Considerable effort has been put into addressing environmental challenges, reducing disaster risk, enhancing food and water security, protecting forests and rangelands, and conserving biodiversity. Such efforts reflect the country's aspiration for sustainable CCA and CCM. Several national development policies, plans and legal frameworks have explicitly integrated CCA/CCM; they are detailed further in section 7. In addition to these national policies, a number of past and ongoing donor-funded projects have addressed CCA/CCM directly. Ongoing projects that present an opportunity for collaboration with this CBIT-funded project are detailed in section 6 on *coordination with other ongoing initiatives*. Selected ongoing and completed projects related to CCA/CCM are presented in the table below.

Project title	Funding source	Implementing agency	Executing agency	Project period	Status
Combating land degradation and biodiversity loss by promoting sustainable rangeland management and biodiversity conservation in Afghanistan.	GEF	FAO	Ministry of Agriculture, Irrigation and Livestock (MAIL)		Concept Approved in 2019
Investing in energy efficiency to strengthen the cold value chain of small and medium enterprises	GEF	UNIDO	National Environmental Protection Agency (NEPA)		Concept Approved in 2019
Conservation of Snow Leopards and their Critical Ecosystem in Afghanistan	GEF	UNDP	Wildlife Conservation Society	3 years (2016-2018)	Completed

Project title	Funding source	Implementing agency	Executing agency	Project period	Status
Community-based Sustainable Land and Forest Management in Afghanistan	GEF	FAO	MAIL; Natural Resources Management Directorate (NRM) of MAIL; NEPA; Ministry of Rural Rehabilitation and Development (MRRD); Independent General Directorate of <i>Kuchi</i> (IGDK)	6 years	Project approved/endorsed by CEO in 2018, but not yet operationally active
Strengthening the Resilience of Afghanistan's Vulnerable Communities against Natural Disasters (SRACAD)	DFID	Afghanistan Resilience Consortium	Afghanistan National Disaster Management Authority (ANDMA), MAIL, Ministry of Education (MoEd), Ministry of Energy and Water (MEW), Ministry of Labour, Social Affairs, Martyrs, and the Disabled, MRRD,	4 years (2015-2019)	Ongoing and started in 2015
Building Environmental Resilience in Afghanistan	GEF	UNEP	NEPA, MAIL, MEW, MRRD, ANDMA.	4 years (2013-2017)	Completed
Adapting Afghan Communities to Climate-Induced Disaster Risks	GEF	UNDP	MAIL	3 years (2016-2018)	Completed
Building Resilience of Communities Living Around the Northern Pistachio Belt (NPB) and Eastern Forest Complex (EFC) of Afghanistan through an EbA Approach	GEF	UNEP	NEPA	4 years (2016-2020)	Project approved for implementation in 2016

Project title	Funding source	Implementing agency	Executing agency	Project period	Status
Reducing GHG Emissions Through Community Forests and Sustainable Biomass Energy in Afghanistan	GEF	FAO	NEPA, MAIL, MRRD, and Ministry of Energy and Water (MEW)	3 years (2016-2019)	Ongoing and started in 2016
Strengthening the Resilience of Rural Livelihood Options for Afghan Communities in Panjshir, Balkh, Uruzgan and Herat Provinces to Manage Climate Change-induced Disaster Risks	GEF	UNDP	MAIL and International Centre for Integrated Mountain Development (ICIMOD)	5 years (2014-2019)	Project approved for implementation in 2014
Building Adaptive Capacity and Resilience to Climate Change in Afghanistan	GEF	UNEP	NEPA	4 years (2013-2017)	Completed
National Capacity Needs Self-Assessment for Global Environment Management	GEF	UNEP	Ministry of Irrigation, Water Resources and Environment	2 years (2004-2005)	Completed

36. NEPA is preparing a Biennial Update Report (BUR) with technical assistance from UNEP in collaboration with IDLG, MAIL, MEW, MoMP, MRRD, Kabul University and other institutions; the report is nearly complete. A GHG inventory for 1990-2017 has also been prepared using the 2006 IPCC guidelines. Data was collected from NSIA and data from international sources was used for 1990-2007. Technical training was provided on compiling and updating the GHG inventory at the national level. IPCC 2006 guidelines were used based on a Tier 1 approach for the agriculture sector, but the LULUCF sub-sector was not included due to data limitations. However, the BUR addressed these limitations with an inventory improvement plan for the LULUCF sub-sector.

37. The proposed project will build on this baseline to further develop capacity on ETF requirements. As described earlier, a lack of institutional coordination, unavailability of data, and a lack of technical skills have led to major uncertainties in the estimation of GHG emissions and removals focused on AFOLU and other sectors. Without intervention by GEF through CBIT, the Government will continue to face challenges in achieving the enhanced transparency requirements for GHG emissions and
removals related to AFOLU and other sectors against the NDC mitigation and adaptation targets. Through the project's main executing partner NEPA and its Climate Change Division, government professionals in all relevant sectors will be targeted for ETF training. Without the proposed CBIT intervention, the measurement of emissions and removals from AFOLU and other sectors will continue to be inconsistent and unreliable, resulting in low accuracy and high uncertainty. Most importantly, progress on mitigation and adaptation priorities will be measured – and reported – without proper quality assurance and with high uncertainty. In short, institutional coordination and data inconsistency along with a lack of technical skills will result in poor monitoring and implementation of the NDC.

2) The proposed alternative scenario with a brief description of expected outcomes and components of the project and the project's Theory of Change

The theory of change (TOC) of this project (Figure 4) considered the fact that Afghanistan has committed to achieving climate change mitigation and adaptation goals of the NDC under the Paris Agreement in a cost-effective manner. In the process of achieving the climate change mitigation and adaptation goals national development goals and economic growth will continue along with political stability. Three interlinked components will address the barriers and challenges as highlighted here. Component 1 will focus on coordination and reporting issues to meet the Transparency, Accuracy, Consistency, Completeness, and Comparability principles for GHG reporting, which will help to achieve the ETF requirements of the Paris Agreement. Component 2 will build the technical capacity of NEPA and associated government agencies for measurement, reporting and verification (MRV) of climate-change mitigation activities. Component 3, will focus on measurement and tracking capacity development of NEPA and associated government agencies for financing related to NDC-priority climate-change adaptation activities.

38. The proposed CBIT project will strengthen capacity-building activities in Afghanistan by 2023 through three components and in three key areas related to climate change mitigation and adaptation. Component 1 will focus on coordination and reporting issues to meet the Transparency, Accuracy, Consistency, Completeness, and Comparability principles for GHG reporting, which will help to achieve the ETF requirements of the Paris Agreement. Component 2 will build technical capacity of NEPA and associated government agencies for measurement, reporting and verification (MRV) of climate-change mitigation activities. Component 3, will focus on measurement and track capacity development of NEPA and associated government agencies for financing related to NDC-priority climate-change adaptation activities. NEPA-ACFU already has a capacity-building programme around climate finance that has been active for several years; however, it requires additional assistance to refine and upgrade its curriculum and to recruit and train additional staff. This training is currently limited to accessing climate financing and donor reporting. The programme needs are expanded to include robust CCA and CCM reporting that adheres to UNFCCC guidelines.

39. The technical capabilities of NEPA-ACFU need to be expanded through training on mainstreaming climate change adaptation and mitigation targets into programmes, and on cross-sector partnerships. A plan is needed for determining how each ministry and programme will collect, analyse and store data so that climate change mitigation- and adaptation-related data are consistent, complete and easily accessible to government ministries. This data, coordinated by NEPA, will be entered into a centralized archive, which will be accessible to government ministries, development partners and other stakeholders. This scenario builds upon existing baselines, reporting and database information systems. Currently, coordination, training and reporting activities are sporadic, project-based and too limited to build capacity throughout national institutions. In addition, data accessibility, coordination and technical skills are too limited to graduate towards higher tiers of GHG emission and removal estimation focused on AFOLU. Finally, there is a limited focus on building the capacity of women. Considering this baseline, the alternative scenarios of the project are described below.



40. **Component 1. Enhancing institutional coordination for the preparation of ETF reports in all relevant sectors, with a particular focus on the agriculture, forestry and other land use (AFOLU) sector.** Activities under this component will address gaps in institutional coordination and inter-organizational relationships, which hinder the collection and cross-sector exchange of data that are consistent and integrated into national ETF processes and reports. Outcome 1.1 will improve institutional arrangements and capacities for GHG inventory data flow, focusing on AFOLU and other sectors in compliance with ETF processes. This will include the: (i) establishment of a NEPA Climate Change Division for coordination and data sharing for ETF reporting in collaboration with other relevant ministries and national agencies (*output 1.1.1*); (ii) establishment of a collaboration and coordination mechanism among stakeholders under the supervision of the newly established NEPA Climate Change Division for GHG inventory data collection, updates and inventory preparation. The collaboration and coordination mechanisms will be in the form of (a) capacity and need identification of the line agencies for inventory data collection, updates and inventory preparation, (b) defining role of the line agencies based on the identified capacity and needs, agreeing to milestones and timelines, (c) establishing the protocols, budgetary allocation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for data collection, updates and inventory preparation, and focal points of the line agencies for

41. Through Outcome 1.2, the proposed project will mainstream ETF best practices for reporting, information gathering, and system infrastructure throughout the AFOLU and other sectors in coordination with other regional CBIT programmes. Activities under the Outcome 1.2 specifically focus on establishing updated documentation, archiving and electronic database on mitigation, adaptation and climate financing (*output 1.2.1*). This activity will be built on ongoing efforts by NEPA, MAIL and UNEP to establish a database on mitigation actions for the BUR. Once fully established, the documentation, archiving and database system will be linked with the Afghanistan Environmental Data Centre (AEDC) (*output 1.2.2*). ETF best reporting practices for AFOLU and other sectors will be prepared and shared with national and provincial stakeholders, and the CBIT Global Coordination Platform (*output 1.2.3*). Ongoing efforts in the country related to reporting requirements of the Convention on Biological Diversity and the United Nations Convention to Combat Desertification will support *output 1.2.1*. – particularly regarding land use and land cover data, and soil organic carbon stock.

42. Component 2. Strengthening capacity for monitoring and reporting on mitigation targets in the AFOLU and other sectors. Activities in this component will address GHG emissions and removals data to ensure measurement, analyses, monitoring and reporting of NDC activities using higher-tier IPCC inventory reporting on GHG.

Mitigation options such as improving carbon sinks (e.g. through rehabilitating degraded rangelands, afforestation and reforestation) must be identified and reassessed using improved methods and country-specific emission factors. Activities implemented under this component will draw upon baseline projects and GHG inventory data used for the Initial National Communication, SNC, ongoing BUR and data from ongoing and completed projects related to climate change. Hence, component 2 will focus on minimizing data gaps by supporting data generation, management and technical capacity. Outcome 2.1 relates to increased capacity for assessing and reporting on emissions and removals in the AFOLU sectors and designing and monitoring emission-reduction activities defined in the NDC, so that other sectors will be able to learn from the process adopted at the sector level. Outcome 2.1 targets: (i) strengthening technical capacity for spatial change analysis within the NEPA Climate Change Division through IT hardware and software support (*output 2.1.1*) (ii) enhancing the technical capacity of NEPA and related agencies through gender specific training on spatial change analysis, GHG inventory data collection, inventory preparation and reporting focusing on AFOLU and other relevant sectors (*output 2.1.1*); (ii) establishing a GHG information management system (GIMS) (*output 2.1.2*); (iv) GHG inventory data collection (activity and emission factors) for AFOLU sectors, so that other sectors will be able to learn from the process adopted at the sector level (*output 2.1.3*).

Output 2.1.1 will strengthen capacity at for collection and analysis of activity data through provision of IT hardware and software for spatial analysis of AFOLU 43. sectors and gender-sensitive specific training programmes[80]⁷⁹ on spatial change analysis, GHG inventory data collection, inventory preparation and reporting focusing on AFOLU and other relevant sectors. *Output 2.1.1* will support participation in international and regional training programmes and other events. Initially, capacity-building programmes will focus on training NEPA Climate Change Division staff on ensuring quality, consistency, reliability and sustainability in all GHG inventory reporting using the latest (2006) IPCC guidelines and software. NEPA staff will then train and provide support to staff in other ministries, academia and other institutions. Technical capacity on GHG reporting will be enhanced through national and international training on compiling and generating the activity data for AFOLU sector focusing on land use change analysis using open source geospatial tools such as Open Foris, Collect Earth, and SEPAL. FAO expertise in this respect will be used to train the NEPA and line agency officials. Training on GHG emission inventory and reporting (covering all sector), statistical analysis, and modelling to develop BAU and mitigation scenarios through open source tools like long range energy alternatives planning system, (LEAP), EX-ACT, Greenhouse Gas Abatement Cost Model (GACMO) will be also provided. The project will ensure that women's needs and expectations are considered in the development of the training programme, and that both women and men benefit from the training. The participants of the training will be from NEPA and other line agencies covering Kabul and other provinces consisting of members of GHG Inventory National Study Team, and GHG data Compiling Team. Output 2.1.2 will create a link with the documentation, archiving and database system developed under output 1.2.1. Academia and national research institutions will be linked to this system in order to accelerate national GHG data collection efforts. To ensure the secure data storage, regular maintenance and update the established GIMS of Output 2.1.2 will be linked with the existing Afghanistan Environmental Data Centre (AEDC). The AEDC is a platform for pulling together national data and information, including geospatial data; which is a joint initiative by Kabul University, NEPA, UN Environment, and the Afghanistan Resilience Consortium. Linking the GIMS will also fall under the 'Environmental Data Networks' mandate of the AEDC. Output 2.1.3 will directly benefit the MRV for relevant sectors by building upon existing data-management platforms, tools and methodologies for GHG estimation and measurement such as SERVIR, the Famine Early Warning Systems Network (FEWSnet) and other national datasets; previous GHG inventory data will be also incorporated. The current data gaps by sectors are: (i) energy: fuel combustion data by industry and transportation category, (ii) industrial processes and product use (IPPPU): data on mineral products, chemical industry, metal production, production of halocarbons and SF6, consumption of halocarbons and SF6, (iii) agriculture, forestry and other land use (AFOLU): land use change data, enteric fermentation, manure management, rice cultivation, agricultural soils, burning of Savannahs, and agricultural residues; (iv) waste: solid waste disposal data, waste water data, waste incineration/burning, and composting. Under this CBIT project, country-specific activity and emission factors will be developed for AFOLU sectors, such as (i) rangeland and forest degradation/deforestation data, (ii) activity and emissions factors will be established for livestock enteric fermentation, manure management, rice cultivation, agriculture to develop activity and emission factors for other sectors utilizing the institutional capacity, as well as technical and human skills developed under this CBIT project. Under the current UNFCCC reporting requirement, developing country Parties are required to submit their national communications every four years, and biennial update reports (BURs) every two years. Hence, under this project, training, GHG inventory data collection, management, and archiving system will be developed in such a way that the beneficiaries can be able to update in every year after the implementation of the project.

44. *Component 3. Strengthening capacity for monitoring and reporting on adaptation targets in the AFOLU and other sectors.* This component will support the development of capacity to measure progress against NDC adaptation priorities, and set sector-specific adaptation targets, in particular, for agriculture, LULUCF, and energy sectors. Outcome 3.1 will focus on increasing capacity to monitor, report and communicate on adaptation – especially NDC priority adaptation actions – in the agriculture, LULUCF, and energy sectors. Activities under Outcome 3.1 will focus on: (i) assessing good practices for monitoring and reporting on priority NDC adaptation actions in the agriculture, LULUCF, and energy sectors (*output 3.1.1*); (ii) developing national, sector-appropriate, gender-sensitive indicators and a monitoring and reporting framework (*output 3.1.1*); (iii) establishing an Afghanistan Adaptation Information Management System (AAIMS) as an important component of the central data management system (*output 3.1.2*); (iv) developing and implementing a gender-sensitive training programme to monitor and report on NDC priority adaptation actions in the agriculture, LULUCF, and energy sectors consistent with the national framework for monitoring and reporting on priority NDC adaptation actions in the agriculture, LULUCF, and energy sectors and the requirements of ETF modalities, procedures and guidance for monitoring and reporting adaptation (*output 3.1.4*).

45. After the identification of good practices under *output 3.1.1*, the project will focus on establishing gender-sensitive adaptation indicators and a monitoring and reporting framework in consultation with national ministries such as MAIL, MEW, MRRD, and NEPA and other relevant stakeholders. AAIMS will be developed so that data related to each adaptation indicator and sector can be entered by designated users. All hardware and software needed to implement AAIMS will be installed in each designated national agency. With technical support from FAO, the NEPA Climate Change Division will provide training on data quality standards and the use of this system (*output 3.1.2*). NEPA requested FAO-GCF Readiness I team to develop the National Climate Change Information System (NCCIS) between May 2019 – May 2020 (https://nccis.org/). The

website will be further enhanced during the Readiness II starting in 2020 with a duration of 2 years which will overlap with the CBIT project. During project implementation of both projects, CBIT project aims to support the development of the database and reporting function to meet the ETF requirements as well as a repository of relevant documents and reports. GCF will continue to expand the existing website to add more functions such as to give data entry authorization to the line ministries and development partners, while NEPA maintains the quality assurance and consolidation responsibilities. The NCCIS will also be linked to NEPA's main website as part of the sustainability plan of NCCIS.

46. Such extensive website development may be beyond the scope of this CBIT project; however, the framework and methods for using and updating the system should be in place by the project end. Capacity-building activities in *output 3.1.3* will yield a gender-sensitive training programme on: national priority adaptation actions and indicators; good practices and methods for monitoring and reporting on these actions; and designing related adaptation activities. Technical staff from various AFOLU sector ministries and other institutions will participate in the training programme, which will involve participation in regional and international events.

47. As the implementing entity, FAO will draw upon its deep technical knowledge of the AFOLU sector along with existing tools and methods for developing emissions inventories, measuring and monitoring emissions from AFOLU, AFOLU MRV systems, quality assurance and adaptation planning and monitoring (see the *Innovativeness* section below). It will collaborate closely with UNEP and national institutions to ensure that the needs of all relevant sectors are addressed and that previous efforts and capacity-building initiatives are considered.

3) Alignment with GEF focal area and/or impact programme strategies

48. The proposed project is aligned with the Capacity Building Initiative for Transparency (CBIT) under the GEF-7 Climate Change Mitigation Focal Area Strategy to support projects that build institutional and technical capacity to meet the enhanced transparency requirements in the Paris Agreement. It will support Afghanistan in establishing an overarching structure for MRV of GHG mitigation focused on AFOLU across all sectors to ensure transparency according to the Paris Agreement's ETF requirement. CBIT is one of the key entry points of GEF-7 Climate Change Focal Area Objective 3: Foster enabling conditions for mainstreaming mitigation concerns into sustainable development

strategies. Finally, it will further the three aims of CBIT: (i) strengthening national institutions for transparency-related activities in line with national priorities; (ii) providing relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement; and (iii) providing assistance to improve transparency over time.[81]⁸⁰

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

49. Incremental/ additional cost reasoning remains unchanged from the Project Identification Form (PIF). NEPA and MAIL will provide needed co-financing in kind. This co-financing will be provided from the projects: South-South Cooperation Grant: Addressing Climate Change through Sustainable Energy and Ecosystems Management in North-east Region – Panj-Amu River Basin; National Environment Policy; and Capacity Building – Advisors Support. In-kind co-financing will also be provided from FAO. The sources of this co-financing will be the Strengthening NEPA through GCF Readiness and Preparatory Support Programme; and Further Strengthening Country Capacity for Engagement with GCF and Direct Access to Climate Finance (GCF Readiness II). The project interventions will help the government to address barriers. Under the Component 1, to facilitate the transition to ETF, NEPA's capacity and coordination mechanism will be strengthened. One of the tangible targets is the finalization of national ETF monitoring roadmap, which will be publicly available and adopted by key stakeholders. To increase technological and technical capacities for mitigation-related MRV, Component 2 includes project activities such as upgrading the GHG information management system (GIMS) for MRV of climate change mitigation exercises which will allow more systematic and periodic data analysis and reporting. Component 3 is designed to improve technological and technical capacities for adaptation-related measurement and reporting. The project will support the government to develop guidelines and evaluation systems for tracking the climate change adaptation measures identified in NDC, therefore, verification methods will become robust and standardized, and ultimately, reliable, accurate and credible reports available and used for tracking NDC priority actions and decision making. Additional information is captured in the Annex 1 Project's Results Framework.

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

50. The global environmental benefits targeted by this proposed project arise from the improved ability of Afghanistan's policy makers and national agency staff to understand CCA/CCM principles, standards and reporting. The country is not a major GHG emitter compared to others around the world; however, given the prominence of animal-based agriculture and the emissions produced from enteric fermentation and poor manure management, its GHG emissions are significant given its rating on the overall world development index. Further, as the country's population continues to grow and the industrial sector is reinvigorated, GHG emissions are likely to rise. Though the proposed

CBIT project will not directly reduce GHG emissions, but with the interventions like institutional coordination mechanism, harmonized GHG inventory data collection, update and management system, emission factors and activity data development, and relevant training will help the country to formulate, enhance, monitor, evaluate, and report the progress of the actions mentioned in the NDCs for GHG emissions reduction. With the proposed systematic documentation, archiving, and electronic database system, the existing GHG inventory data will be archived in electronic format, which is currently absent. In addition, it will also help to harmonized data use for the GHG inventory, because currently different sources have different data. Established institutional coordination mechanism under the NEPA Climate Change Division will be used to collect, generate, update and share the identified data regularly in a harmonized format and framework, which is currently absent. The technical support under this CBIT project will enhance the human and institutional capacity to generate activity data and emission factors in future to estimate the GHG emissions, and thus will help to track the progress of mitigation actions of NDC.

51. In the near term, the project will increase the ability of decision makers in Afghanistan to understand: (i) the basis of climate change; (ii) how to reduce emissions in their sectors and stay on a LEDS trajectory; (iii) what priority adaptation actions are needed for the country; and (iv) how to monitor and report on emissions and indicators according to global quality standards. The gains made by this project will not be immediate, but once the framework for monitoring, reporting, and training is in place, it will help decision-makers to design gender-sensitive interventions that address the drivers and impacts of climate change based upon a more complete understanding of what works. In the longer term, an improved understanding of CCA/CCM will enable the country to make advances in mitigation and adaptation actions through future NDC revisions. The country will also be more able to articulate the quantity and types of financial and technical support required to realize new national priorities.

52. The project directly supports the country as it begins a transformational shift towards LEDS strategies, more assertive and direct implementation of CCA/CCM programmes, and mainstreaming CCA/CCM into sectoral programmes. Adaptation actions that work in Afghanistan may also prove useful in other arid countries experiencing conflict such as Syria, Iraq, and Sudan. Given the complicated and interrelationship between natural resources and civil unrest, minimizing climate-related disasters, preserving environmental resources, and minimizing the number climate refugees could not only have profound effects on climate change, but on security worldwide.

6) Innovativeness, sustainability, potential for scaling up and capacity development[82]⁸¹

Innovativeness:

53. The project aims to develop structures, processes, tools and technical and human capacities for national climate change-related activities covering mitigation and adaptation. The proposed CBIT project will promote innovation by investing in human capacity, human systems and data and information flows that modernize MRV of CCA/CCM activities in Afghanistan. This entails: enabling the collection and assessment of robust data; data archiving; and establishing an inter-ministerial data-sharing platform, national GHG database and adaptation monitoring system that enables informed policy-related decision making. This process will be completely new and innovative with its focus on climate change. Innovations will first be applied in partner ministries, then through partnerships with local academic and research institutions. Ideally the new database and data portal will facilitate further donor, government and private-sector investments in technology and equipment at national universities and labs to measure and monitor emissions and implement mitigation and adaptation actions. Furthermore, the project will facilitate investment in dedicated knowledge management information systems and information hardware for more effective management and reporting of data and information on CCA/CCM activities. Field monitoring systems will be reviewed and improved by upgrading data collection processes and integrating mobile technologies, app-based data collection platforms and cloud-based data storage and transfer. Systems upgraded in NEPA, MAIL, the Ministry of Petroleum and Mining, MRRD, and MEW can be replicated in other ministries with reduced effort and cost. Capacity building related project interventions, such as Output 2.1.1, will include trainings for system administrators and agency focal points to enable staff to adhere to reporting protocols and data standards. In addition, LULUCF sector will use spatial images to strengthen data collection protocol for MAIL in particular. Furthermore, to ensure accuracy in data inpu

54. This project will not develop new tools for preparing the GHG inventory according to 2006 IPCC guidelines or the Modalities, Procedures and Guidelines.[83]⁸² Instead, innovation will involve adapting existing technologies to Afghanistan's climatic and social conditions. The inter-ministerial data sharing and GHG emission mitigation and adaptation monitoring platform will make knowledge broadly available to the public sector through an easy-to-access and -navigate digital platform on CCA/CCM activities. This initiative will be new and innovative in the country.

55. FAO and its partners have developed a suite of tools for standardizing emissions monitoring and reporting at the Tier 2 and 3 levels. For example, FAO has developed the Global Livestock Environmental Assessment Model (GLEAM), which establishes baselines and assesses the impacts of different CCA/CCM activities at the local and national levels. Based on the IPCC Tier 2 methodology and geographic information system (GIS)-based modelling of livestock distributions, GLEAM allows users to assess all major GHG emissions from livestock, as well as the impacts of emissions-reduction actions from the sector. The tool will be included in the training modules given to Afghan technical and policy experts through the CBIT project.

56. Another innovation that will be expanded under the CBIT project is the Ex-Ante Carbon-balance Tool (EX-ACT), which was developed by FAO to estimate GHG emission reductions or additions as a result of AFOLU projects and policies. A land-based accounting system, EX-ACT estimates carbon stock changes as well as GHG emissions per unit of land, expressed in equivalent tonnes of CO2 per hectare per year. This tool helps project designers to estimate and prioritize project activities with high economic and CCM benefits. Accurate predictions of GHG mitigation potential may also be used to attract additional donor funding. While EX-ACT is typically used at the project level, it can easily be scaled up to the sector level and also used for policy analysis. At the regional level, FAO has developed AGRI-MAP to enhance monitoring of GHG emissions in the agriculture and land-use sectors. This tool can also be used for decision making related to investments in mitigation and adaptation priorities.

57. Through the Mitigation of Climate Change in Agriculture (MICCA) programme (http://www.fao.org/in-action/micca/en/), FAO produced a suite of tools to assist countries in preparing national GHG inventories. These range from data-collection tools to emissions and removals estimators, tools to help users assess data quality and improve it for the next inventory cycle and e-learning courses on emissions estimations in the AFOLU sector. Numerous other tools for planning and estimating GHG reductions from CCA/CCM activities can be accessed on the FAO Climate Change website: http://www.fao.org/climate-change/en/ (see *Resources* tab). Finally, the FAO Sustainable Forest Management Toolbox contains many resources including teaching modules for use in forestry (http://www.fao.org/sustainable-forest-management/toolbox/en/).

58. With the application of GHG estimation tools such as GLEAM, EX-ACT, those developed through MICCA and others accessible through FAO websites, Afghanistan's national institutions will have enhanced capacity to measure progress toward NDC priorities. Tools, learning modules and techniques tested and modified in Afghanistan will improve the body of scientific knowledge about GHG emissions reduction potential from both the AFOLU and non-AFOLU sectors – increasing the knowledge base on estimating global environmental benefits. Modifications to existing innovations to the Afghan context will be especially useful for countries with similar climatic and social issues.

59. Finally, the CBIT project will build upon existing CCA/CCM technologies in the country such as FEWSnet and SERVIR (described further below). These satellitebased tools have already been used in the country for years, and while neither is specifically designed for MRV of GHG emissions, they both support better decision making around climate risks for the AFOLU (and other) sectors. SERVIR is already developing an integrated environmental database and portal for the Hindu Kush Himalayan region, along with an updated land use/land cover map for Afghanistan. It is anticipated that the CBIT project will allow a national CCA/CCM data portal to be directly linked with the SERVIR portal – each enhancing the capabilities of the other, improving efficiency in collecting and using climatic data, and expediting users' access to this data. As per the constitution and 2007 Environment Law, individuals and their associations in Afghanistan have the right to receive environmental information that is held by public authorities. This national ambition is also in line with CBIT. This project's proposed interventions will also contribute to capacity building in environmental data and information collection, archiving and dissemination.

Sustainability:

60. With CBIT support, Afghanistan will be able to articulate a clear plan of action for national reporting on its NDC mitigation and adaptation goals. The monitoring and reporting roadmap, coordination mechanisms and technical guidelines prepared by the project – if well documented and implemented by trained staff – will ensure the sustainability of the project's outputs. National stakeholders will be trained to access, archive, analyse and monitor CCA/CCM activities. Through this training, the capacities of technical and policy focal points from participating ministries and relevant institutions will be improved.

61. The online data portal will not only store CCA/CCM reporting data, but also information such as training materials and details on reporting mechanisms. During implementation, actions will be taken to sustain this central database in the long term by assigning clear roles and responsibilities for its use, updating and maintenance, and by linking it with the mandates of relevant stakeholders. NEPA's Climate Change Division includes a small number of highly motivated staff; the CBIT project will aim to build on this foundation to further develop institutional and individual capacity.

62. The primary goal of the project is to initiate an institutional coordination mechanism promoting greater collaboration among NEPA, MAIL, MEW, MRRD and other relevant institutions, as well as to ensure that staff from each institution are trained on ETF reporting requirements. Over the course of the project, at least one comprehensive report relevant to the NDC and the NAPA will be facilitated by the government following ETF guidelines, with technical guidance from FAO. This experience and new institutional capacity will prepare the Government to lead the reporting processes from 2023 onwards. Furthermore, the use of updated GHG measurement, estimation and adaptation technologies in AFOLU will help Afghanistan to reduce its GHG implement and CCA measures in non-AFOLU sectors. Once the institutional arrangement and workflows have been established, together with appropriate templates and guidelines developed and deployed, the government offices will be equipped and capacitated to continue their efforts in implementing ETF reporting, despite the potential staff turnover which is also common in Afghanistan. Development of sustainability plan is scheduled after the mid-term of the project implementation to allow sufficient time for planning and preparation prior to project completion.

Potential for scaling-up:

63. Because the CBIT project largely focuses on capacity building, there is great potential for scaling up, expanding the programme to include more staff and introducing more advanced material over time as new technologies for MRV and CCA/CCM emerge. The data portal can be scaled up over time as Afghanistan stabilizes, builds its economy and is able to focus more effort on issues like enhanced communication technologies. Given the importance of the AFOLU sector to the country's economy, the improvements in climate change mitigation, and adaptation in the AFOLU sectors made through this project can be replicated for other environmental issues and sectors. The /information management systems and infrastructure for monitoring and reporting on CCA/CCM in the AFOLU sector developed through this project will be designed for easy replication by – and linkage to – other sectors such as transportation, energy and industry.

64. The data portal, coordination systems and training modules introduced for national stakeholders will be developed in way that can be easily adapted to improve CCA/CCM data collection and analysis across all sectors. By strengthening institutional coordination mechanisms for transparency around CCA/CCM, all relevant institutions will be able to learn and adapt the project interventions. Ideally, NEPA and other line agencies will have sufficient well-trained staff in place by the end of CBIT; as well as guidelines, protocols and training manuals to be used later to scale up systems and processes introduced through the project for the new staffs of targeted organizations, and provincial governments. The data sharing mechanism and GIMS can be scaled-up after the initial case under this project, and will be eventually included and provide information on all GHG sectors. Sharing experience with regard to the data generation and processing and data-driven policy making efforts related to climate change supported by this CBIT project will also help to replicate such lessons for tracking other environmental and other sustainable development commitments. Over time, greater government capacity will lead to regular national reporting on actions to reduce the drivers and impacts of climate change as envisioned under Article 13 of the Paris Agreement.

65. Outcome 1 of the project will also improve the quality of Afghanistan's engagement in international transparency-related processes under the UNFCCC. With better engagement in these international processes, the Government will be able to identify investment and other partners that can help them plan scaled up CCA/CCM actions and improve transparency and coordination with regional partners. Climate change does not recognize international boundaries; climate change adaption and mitigation actions should extend beyond these boundaries as well.

66. The Government plans to ensure the expanded application and sustainability of the transparency systems and infrastructure by mobilizing international climate finance and combining its national budget and international support to fulfil its reporting requirements to the UNFCCC.

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- [76] See http://www4.unfccc.int/submissions/INDC/Published%20Documents/Mongolia/1/150924_INDCs%20of%20Mongolia.pdf.
- [77] Afghanistan's SNC to the UNFCCC (2017).

[78] Islamic Republic of Afghanistan Intended Nationally Determined Contribution Submission to the UNFCCC, 21 September 2015.

[79] Afghanistan's SNC to the UNFCCC (2017).

[80] Including participation in international and regional training, and other events.

[81] GEF. GEF-7 replenishment. programming directions (2018): https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Programming%20Directions%20-%20GEF_R.7_19.pdf.

[82] System-wide capacity development is essential to achieve more sustainable, country-driven and transformational results at scale, such as deepening country ownership, commitment and mutually accountability. Incorporating system-wide capacity development means empowering people, strengthening organizations and institutions, and establishing an enabling policy environment based on inclusive assessments of country needs and priorities.

[83] Decision 18/CMA.1: Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement. (FCCC/PA/CMA/2018/3/Add.2): https://unfccc.int/sites/default/files/resource/cma2018_3_add2_new_advance.pdf.

1b. Project Map and Coordinates

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

The project will work with central and provincial government offices and key stakeholders to build capacity and establish a mechanism for tracking, monitoring and reporting on mitigation and adaptation outputs and outcomes in line with the ETF. This project will aim for out of the 60 beneficiaries, 26 will be from Kabul and 34 will be from the rest of provinces, covering all recognized provinces.

×

Figure 4: Political map of the Islamic Republic of Afghanistan

1c. Child Project?

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

n/a

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

A range of stakeholders – including governmental agencies, academia and research institutions, international organizations, donor agencies and civil society organizations and NGOs – were extensively consulted during this project's development. These stakeholders (for more details of the stakeholders engagement plan, see Annex I2) were consulted during the preparation of the GEF Chief Executive Officer (CEO) endorsement document through inception and validation workshops. Annex I3 presents the summary report on the workshop conducted on 31 July 2019 for inception of the project preparation phase. The final design of this project was validated at a workshop on 27 October 2019 (see Annex I4 for the participant list and agenda). Stakeholders will also be extensively involved in implementing the project through execution partnerships, co-financed activities, representation on project steering committee, knowledge sharing, workshops and other activities.

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.

1. The project will require the support of several stakeholders at the national, provincial and district levels of the key government offices in order to ensure successful implementation. The following actors have been identified as key stakeholders in the project:

National Environmental Protection Agency (NEPA) Afghanistan Climate Finance Unit (AFCU)	National lead executing agency and will ensure a smooth and effective implementation. In charge of: NDC ETF; coordination of gap analysis; policy guidance on climate change; CBIT ETF implementation in collaboration and coordination with other ministries. NEPA also hosts the GEF Operational focal point and will be the chair of the Project Steering Committee (PSC).
Ministry of Agriculture, Irrigation and Livestock (MAIL)	MAIL will be one of the key initial stakeholders of this project, and is responsible for agriculture, forest and land use data collection; CCA/CCM decision making and investments; engaged to improve data and information collection for coordinated GHG monitoring. MAIL implements projects and other activities related to AFOLU sector through their provincial directorates. PSC member.
Ministry of Rural Rehabilitation and Development (MRRD)	Rural development data collection; CCA/CCM decision-making and investments; engaged to improve data and information collection for coordinated GHG monitoring; MRRD implements projects and other activities to promote responsible social and financial growth in rural areas through their provincial directorates and through Community Development Committees. PSC member.
Ministry of Energy and Water (MEW) Ministry of Petroleum and Mining (MoPM)	Water use, energy and mining data collection; MEW is responsible for all policies, regulations, development projects and coordination for water and energy sectors and implements projects and other activities through their provincial directorates; MoMP is responsible for policies, regulations, development projects and coordination for mines and hydrocarbon sectors; the ministry is implementing ongoing reform to privatize operational departments such as gas, fertilizer and electricity plant, coal-based power plant while keeping the regulatory function at the ministry; CCA/CCM decision-making and investments; engaged to improve data and information collection for coordinated GHG monitoring. PSC members.
National Statistics and Information Authority (NSIA)	Data collection; archiving; publishing. NSIA is an independent statistical organization managing the data registration system including statistical information within all sectors. NSIA works with their provincial offices for data collection. PSC member.
Kabul Municipality (waste sector)	Waste data collection; CCA/CCM decision-making and investments; engaged to improve data and information collection for coordinated GHG monitoring. PSC member.
Independent General Directorate of Kuchi (IGDK)	Data collection, especially on the livestock headcounts of the Kuchi people, and sharing. PSC member.
Ministry of Transport and Civil Aviation (MoT)	Transport data collection, including aviation and public transportation; CCA/CCM decision-making and investments; engaged to improve data and information collection for coordinated GHG monitoring. PSC member.

Ministry of Commerce and Industry (MoCI)	Data collection and coordination with the private sector; CCA/CCM decision-making and investments; engaged to improve data and information collection for coordinated GHG monitoring. PSC member.
Ministry of Finance (MoF)	Financial data collection on adaptation support received and expensed for different sectors; will be engaged to improve data and information collection for funding and support received and expensed on NDC adaptation priorities.
Ministry of Women's Affairs	Will be engaged to promote the integration of gender rights and equality into the roadmap, guideline and indicators.
Kabul University and other academia	Applied research supporting country-specific methodologies, monitoring and indicators for climate change impacts and CCA/CCM activities. PSC member.
Donors, leaders of other CBIT-related initiatives	Collaborate to maximize use of expertise and minimize spending (e.g. in database development), avoiding duplication, and improving awareness and collaboration throughout AFOLU and relevant sectors.
Private sector/CSO	The project will coordinate with GCF Readiness team to establish and strengthen project activities with the CSO, such as Climate Action Network South Asia – Afghanistan (CANSA) and Group for the Environment, Renewable Energy and Solidarity (GERES), and gender-related stakeholder engagement to avoid overlap and duplication of efforts. Both CBIT and GCF will jointly work with the Ministry of Women's Affairs and gender team/unit of the line ministries on the gender-related stakeholders and beneficiaries.
	The project will engage with AFOLU sectors formal and informal association to develop country specific emission factors such as Water, Forest and Rangeland Management Associations, Farmers Association (without registration), Dairy Unions in Kabul, Khatiz, and Herat, Afghanistan Almond Industry Development Organization (AAIDO), and Afghanistan National Horticulture Development Organization (ANHDO) through MAIL.
	The non-AFOLU private sector, the energy and mining companies will be coordinated through MoMP. More detailed coordination modality will be established at the beginning of the project inception. These initiatives will also be consulted with the MoWA on gender-related activities. The CBIT project will contribute to the public awareness efforts on climate change issues and Afghanistan's continuous work on NDC and ETF. Also, the project will lay foundation for other ongoing and future projects to build stronger partnerships with companies from different sectors. Further consultations and coordination, including operational departments of MoMP, will be conducted at the project inception.

2. Relevant ministries and sectors will be engaged in improved data collection and coordination according to the priorities outlined in Afghanistan's NDC. Civilsociety organizations and research institutions will be engaged in the design and implementation of project, including in: baseline assessments; stocktaking of existing activities and systems; and developing pathways for coordination or consolidation of those systems. Dissemination strategies for effective data management and reporting will also be developed; ideally these will be eventually linked to a national climate change communication strategy.

3. Stakeholders will be involved in project activities such as training, institutional collaboration and strengthening. They will also be involved in establishing datasharing arrangements, data collection, and analysis. Their views on how to share data will be incorporated into project implementation through regular consultations. Government agencies, academia and research organizations will be asked to identify a focal person within their organizations for establishing institutional arrangements. In supporting the preparation of a national GHG inventory system, the project will aim to engage other relevant stakeholders in transparency-related actions. This participation could include contributions to the development of country-specific emission factors or activity datasets to improve the accuracy and completeness of GHG emissions estimations from AFOLU and other sectors.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The project's beneficiaries are estimated to be approximately 75 percent men and 25 percent women. Currently women's participation in activities related to UNFCCC reporting in Afghanistan is approximately 10 percent and there is limited emphasis on building the capacity of women. The project will set a target of at least 25 percent women in coordination, training and reporting activities in order to strengthen women's capacity and participation in ETF reporting. For all stakeholder meetings, the project will ensure 25 percent women's participation, seeking considerable representation in project activities – or at least proportional representation. The project will also ensure that women's needs and expectations are considered in the development of all training programmes. As reflected in the project's logical framework, not less than 25 percent women's participation will be ensured for all training implemented through this project. During the training, consideration will be given to both women and men benefitting from capacity-building training activities. Training content related to the design of mitigation and adaptation activities will include gender considerations to ensure that future projects and programmes are gender sensitive and responsive. For more details see Annex K: Gender action plan.

Gender considerations must be included in the ETF. Gender differentiation, equity and related issues will be evaluated further during project planning and mainstreamed during project design and implementation. The project will be developed in line with the GEF Gender Equality Action Plan, the Afghanistan National Strategy on Women in Agriculture (2015-2020) and Afghan policies and strategies that support gender mainstreaming through improved transparency systems. In line with established FAO practices, gender equality will be guaranteed in coordination panels, project outreach events and project activities (to the greatest extent possible given Afghanistan's social norms).

Women are key players in the AFOLU sector: they are the primary caretakers of the country's livestock and the primary wood and water gatherers. As a result, they are severely impacted when these resources are depleted. Women's participation in the agricultural processing sector is also on the rise. As noted previously, women account for 32.8 percent of Afghanistan's agricultural workforce and 58.6 percent of the workforce in the livestock production sub-sector. In all, 70 percent of rural women are involved in farming, processing or livestock raising, and women make up 90 percent of the agriculturally derived textile industry. Given these numbers, it is indisputable that women's empowerment will lead to increased productivity and ecological improvements. Including data on women and the impacts of their participation in CCA/CCM activities in ETF-compliant reports will generate multiple social, economic and environmental co-benefits.

Annex K: Gender action plan

K. 1. Gender situation in Afghanistan

The estimated population of Afghanistan was 29.72 million[1] in 2017. Of this, 15.2 million are men (51 percent of total population) and 14.5 million women (49 percent of the total population). About 22 percent of the total population live in urban area, and the remaining 78 percent live in rural areas. As indicated by the Afghanistan Living Conditions Survey (ALCS) 2016-2017,[2] there are on average 7.8 members per household in the country, and 3.7 children each under the age of 15. Households are usually headed by men while only about 1 percent are headed by women. Among 100,000 live births, 396 women die from pregnancy related causes, and the adolescent birth rate is 74 births per 1,000 women, with the age range 15-19 years. Women's participation in the labor market is 19.5 percent compared to 86.7 percent of men in 2017.[3] Women hold 27.4 percent of parliamentary seats and 8.8 percent of adult women have secondary education compared with 35.4 percent of their male counterparts.

The current gender situation is a critical challenge for human development in the country. The Human Development Index value for woman is 0.348 compared with 0.572 for men. This disparity has resulted in a Gender Development Index value of 0.609, lower than Nepal (0.925) and Pakistan (0.742).[4] The Gender Inequality Index (GII) represents gender-based inequalities in three dimensions: reproductive health, empowerment, and economic activity. The higher the GII value the more unequal the country from gender perspective. Afghanistan ranked 154 out of 159 countries with GII value of 0.667 in 2015, which is higher than neighboring Nepal (0.497) and Pakistan (0.546).[5]

Based on previous experience with past projects/programs on climate change, it could be noted that participation of women in climate change related initiatives (e.g. training, data collection, update and analysis, GHG inventory preparation, interagency collaboration) in the country is suboptimal. In particular, participation of women in the context of institutional arrangement and capacity building focusing on climate change mitigation and adaptation is low.

K.2. Gender in key national policies and programmes

The Ministry of Women's Affairs (MoWA) is the lead agency promoting gender equality and the advancement of women's rights. The country has made over 2,300 explicit commitments in relation women's rights and gender equality in a number of national laws, policies, and strategic documents since 2001. Particularly notable is the National Action Plan for Women in Afghanistan (NAPWA), which is approved in 2008 after a three-year long process of consultation with civil society, government entities and development partners. This is a ten-year action plan to mainstream gender in all government sectors and institutions. The action plan will implement constitutional commitments to women as reflected in the national constitution and international treaties, including the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW). The NAPWA is based on three pillars: (i) security, (ii) governance, rule of law and human rights, and (iii) economic and social development. Focus areas of the action plan include: (i) security, legal protection and human rights; (ii) leadership and political participation; (iii) economy, work and poverty; (iv) health; and (v) education. The key gender considerations in national policy and strategy documents are mentioned below:

Issues covered related to gender

Afghan National Development Strategy (ANDS)	 Gender equality is the number four cross cutting issue out of six issues identified. The ANDS goal for gender equality is an Afghanistan where women and men enjoy security, equal rights and equal opportunities in all spheres of life. Include gender in the terms of reference of the monitoring and evaluation unit and job description of its chiefs. Provide training on gender sensitive monitoring and reporting. Adopt gender sensitive indicators. Highlight gender achievements in ministry and sector reports.
National Action Plan for the Women in Afghanistan (NAPWA)	 There are three key outcomes: Government entities embracing 'gender equality' in their employment, promotion, policy making and budgetary allocations. Measurable improvements in women's status as evidenced by reduced illiteracy; higher net enrollment ratio in educational and training programs; equal wages for equal work; lower maternal mortality; increasing leadership and participation in all spheres of life; greater economic opportunities and access to and control over productive assets and income; adequate access to equal justice; reduced vulnerability to violence in public and domestic spheres. Greater social acceptance of gender equality as evidenced by increased participation by women in public affairs and policy discussions.
National Priority Programmes (NPP)	 Women's Economic Empowerment Program is one of the ten national priority programmes. The Objective is to advance women's agency, autonomy, and well-being by expanding women's access to economic resources. The six components are: (i) increasing the availability and analysis of gender statistics, (ii) removing legal barriers to participation, (iii) training in literacy, business management and labor skills, (iv) ensuring inclusive access to finance, (v) improving access to agricultural inputs, extension services, and markets, and (vi) promoting access to creative economy markets.
National Agricultural Development Framework (NADF)	Four key programmes are identified: Natural Resource Management, Agriculture Production and Productivity, Economic Regeneration and Programme Support, and Change Management. All of program focus on areas where rural women's contribution is key.
Afghanistan Food and Security Nutrition Agenda (AFSANA)	Improving food security and nutrition of households through the empowerment of women is one of its strategic objectives.

Social-sector ministries such as Education, Public Heath, Rural Rehabilitation, Water and Energy and Labor, Social Affairs, Martyrs and Disabled People have developed their own gender policies. Some ministries such as MRRD have also developed comprehensive strategic implementation plans to complement their gender policies. As per the constitution and the Environment Law, both Afghan women and men have the right to participate in environmental decision making. The Government has also recognized the need to facilitate the involvement of women in decision making on resources and services. This includes women's involvement in community-based structures such as *shuras*,

K.3. Gender mainstreaming of the project

MoWA is responsible for promoting the integration of gender rights and equality into the policies and programmes of public institutions, civil society, and the private sector in Afghanistan. MoWA acts as a coordinator and facilitator for gender mainstreaming across government activities. The proposed GEF-CBIT project will establish close cooperation with the MoWA to integrate project activities with its work and the Gender Mainstreaming Policy and Strategy, with a view to advancing the rights and participation of women throughout the project period.

The project will include gender-sensitive and disaggregated data and information in all documents and publications. Gender concepts and equity will be mainstreamed during the implementation of the project, which will confirm better and more effective participation of women in the project activities, including workshops and other training. To ensure the effective participation of the women in project formulation and implementation, the voice of women will be considered sincerely in different project activities, and their concerns addressed appropriately. Through cooperation with government partners, the project interventions will be aligned with the GEF Gender Equality Action Plan, Gender Equality Policy (SD/PL/02), Guidelines on Gender Equality (SD/GN/02), and the NAPWA. For example, based on Gender Equality Policy (SD/PL/02), and Guidelines on Gender Equality (SD/GN/02) the project will ensure on priority based to overcome the existing gap on balanced participation and decision making in institutional arrangement, capacity building activity focusing on climate change mitigation and adaptation. Indeed, with its focus on transparency, shedding light on how women and men participate in climate changerelated decision-making, the project will contribute to women's balanced engagement in, and benefit from, climate change mitigation and adaptation activities. Following the Gender Equality Policy (SD/PL/02), and Guidelines on Gender Equality (SD/GN/02), gender analyses will be conducted for all workshops, institutional arrangement like identifying agency focal points, and seminars. Following the Gender Equality Policy (SD/PL/02), and Guidelines on Gender Equality (SD/GN/02), the project has developed a gender-responsive results-based framework. Following the Gender Equality Policy (SD/PL/02), and Guidelines on Gender Equality (SD/GN/02), the activities of component 2 and 3 of this project will ensure that data and information contained within the system developed (e.g. GIMS and AAIMS) will be gender disaggregated. Also, the GIMS and AAIMS will be gender sensitive and all the data and information stored in this system will be gender disaggregated. Also, it will provide specific guidelines and tools on how to prepare gender sensitive climate change policies and measures, based on the data and information produced under the GIMS and AAIMS. Women participation will be a key criterion in the context of capacity building events (e.g. training, data collection, update and analysis, GHG inventory preparation, interagency collaboration), and all relevant stakeholders will be made aware of this requirement.

The project will provide gender-disaggregated reporting for capacity-development activities such as training. The project will also report on gender-related issues as followed by FAO. The project itself has benefitted from extensive engagement from various stakeholders during inception and validation workshop, including substantial representation by women. A gender-specific indicator was mentioned in the project description in Annex A1 of this project document. FAO, the PSC and the PMU will ensure that: the project addresses all gender-specific needs; women have equal access to the project's governance and activities; and women benefit equitably from the project.

K.4. Proposed gender action plan

Activity	Strategy	Performance/target Indicators	Responsibility		
Component 1: Enhancing institutional coordination for the preparation of ETF reports in all relevant sectors, with a particular focus on the Agriculture, Forestry and Other Land Use (AFOLU) sector.					

Increase the institutional awareness on a gender responsive project's design and implementation and how to support women to participate during project implementation/in project's activities	 (i) Development of a gender working group (GWG) as well as participation plan. at the beginning of the project. (ii) Involving GWG with all discussion on gender issues/challenges and methods of gender inclusion/ how to address them. (iii) Conducting/meeting the women beneficiaries to hear their voice and involve them in the projects activities. (iv) Ensure appropriate social inclusion in decisionmaking at all levels. (v) Staff involved in the project should be provided with awareness on gender equality to improve their understanding of gender concerns and increase their capacity to implement the Project's gender action plan. (vi)Ensure that payment terms for all staff involved in the project are not discriminated based on their gender. (vi) The PMU is given the responsibility of monitoring and reviewing the gender action plan targets regularly and produce progress reports. 	 (i) Developed stakeholder list & working plan at the beginning of the project. Data shall be collected through GWG meetings with beneficiaries in the field. (ii) Target to have at least 75:25 male and female ratio in all decision-making forums. (iii) Conduct training on gender mainstreaming to all staff involved in the project. (iv) Number of women and men involved in the project implementation team as per the FAO recruitment policy. (v) The PMU will be staffed by qualified staff and who have knowledge in transparency and the Paris Agreement. The composition of the staff will be consistent with the project gender target ratio of 75:25 male and female. 	GWG will be responsible for producing report on implementation of activities they planned and M&E officer/ focal point will be responsible to report on the actions taken by the group. Participating agencies, i.e. member institutions of PSC, will be responsible to take action.
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Component 2: Strengthening capacity for monitoring and reporting on mitigation targets in the AFOLU and other sectors.						
Training	Make deliberate efforts to train women on data capture and reporting. Make sure that women capacity on data collection, data analysis is developed based on their needs, experience and skills. Assign more women in spatial change and GHG inventory data analysis and reporting.	Establish a network and gender focal points in all relevant organisations. Produce training packages for all trainers Participant ratio male and female (75:25) will be maintained for all the training. All the trainer shall be provided with the updated training package based on the gender needs. GWG/PMU shall make sure the 25% participation of females.	PMU – national M&E, gender and communications specialist Participating agencies, i.e. member institutions of PSC, will be responsible to meet 75:25 target. GWG shall be responsible for the implementation of the planned activities. And M&E is to report all the related activities.			
Awareness	Both women and men benefit equally and have equal participation and involvement in engagement and monitoring process.	At least 25% women represented in general meetings and decision making.	PMU, GFPs and M&E shall be responsible to follow up the issue.			
Component 3: Strengthening ca	apacity for monitoring and reporting on adaptation targets in	the AFOLU and other sectors.				
Reporting	Ensuring women are given more roles in coordination Establishing capacity through training on data sharing, project management, monitoring and evaluation.	Number of women in leadership roles and decision making. The composition will be at the ratio of 75:25 male and female.	PMU will consolidate report based on the information collected from the member institutions of PSC.			
	Ensuring there is constant liaison between various government entities. Ensuring that the reporting is able to reflect all the gender related issue.	Tanning needs identified and number of people trained on coordination desegregated by sex.				

Data collection related to	Ensuring that selection of reporting gives preference to	Reporting tool segregates on adaptation support	PMU will consolidate report
adaptation	projects that specifically bring improvement of women's	received which initiated development/increased of	based on the information
	livelihoods through adaptation support.	women's livelihoods.	collected from the member
			institutions of PSC.
			GFPs network shall be
			responsible to endure the
			implementation as well as
			M&E and PMU.

- [1] Afghanistan Population Estimates for 2017-2018, Central Statistics Organisation, Islamic Republic of Afghanistan.
- [2] Central Statistics Organization, Islamic Republic of Afghanistan.
- [3] World Bank database 2017. See https://data.worldbank.org/indicator/SL.TLF.CACT.MA.ZS?locations=AF.
- [4] Afghanistan Human Development Report 2016. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/fr/AFG.pdf.
- [5] Afghanistan Human Development Report 2016. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/fr/AFG.pdf.
- 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 representatives will be consulted and involved in project design and implementation. The project will derive lessons from private-sector experience with CCA/CCM actions and engage the nascent AFOLU private sector at an early stage. In addition, the new data portal will aim to facilitate private-sector investment in updated technologies for adaptation and mitigation actions across all relevant sectors. The project will engage AFOLU and non-AFOLU private sectors such as Dairy Unions, Farmers Association through MAIL; Energy and Mining companies, which will be coordinated through MoMP.

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):

This project will employ a structured, methodical approach to identifying and managing risks to 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.

Section A: Risks to the project

No.	Description of risk	Impact[1]	Probability of occurance3	Mitigation actions	Responsible party
1	Lack of political will to support the project activities due to change in government	Н	М	Awareness-raising of key ministries and decision-makers combined with a clear stakeholder involvement plan.	PSC and PMU
2	Lack of coordination among concerned ministries and local government authorities	М	М	Clear project institutional arrangements that specify roles and responsibilities.	PSC, PMU, and NEPA
3	Limited cooperation on data and information sharing among stakeholders	Н	М	Work to obtain buy-in and/or signed agreements from stakeholders to collect and share required data and information with the NEPA central portal.	PMU, and NEPA

4	Inability of the Government to fund the ETF-related activities beyond the project cycle	М	М	The project will be closely linked to related national activities and budgets and a continuity plan will be developed assigning clear roles and responsibilities for capacity-building activities and the use, updating and maintenance of the database.	PSC, PMU, and NEPA
5	Gender mainstreaming hindered by cultural norms in which women are expected to stay at home or be unpaid labourers	М	L	There will be clear communication on gender equality as a key monitoring element of the project, and information on the value of women to the economy, especially the AFOLU sector will be frequently disseminated.	PMU, and NEPA
6	Lack of will to work on climate-change issues given other major civil instability concerns in the country	М	М	Afghanistan is fully committed to the Paris Agreement. The value of climate adaptation as a foundation for social, cultural, and environmental resilience will be emphasized regularly.	PSC, PMU, and NEPA
7	Insecurity preventing accurate data collection in many areas	М	Н	In all projects in Afghanistan, FAO and government partners work in both secure and less secure areas to the greatest extent possible. Agreements with local political leaders and talented national staff ensure largely successful results.	PSC, PMU, and NEPA
8	Limited capacity of decision-makers to understand the depth/ breadth of climate change issues	М	L	With CBIT funding, AFCU will strengthen and expand its existing climate change training programme, including through partnerships with academic institutions.	PSC, PMU, and NEPA
9	Security preventing intensive/necessary training by international experts	М	М	A number of foreign staff of United Nations and donor agencies are currently working in Afghanistan with appropriate security measures. A similar level of security will be provided to the international experts in this project who provide necessary training.	PMU, and NEPA
10	Participation of Afghan nationals in international training may be difficult	М	М	Communications with the organizing authority will take place well in advance to ensure wide participation in international training, with a special focus on women's participation.	PMU, and NEPA

11	Organizational risks related to high staff rotation during and after the project cycle	M	M	Training programmes developed by the project will be made available in various forms, manual and online, to ensure accessibility to new members. In addition, such training will be adopted by the relevant government offices and institutionalized for future use.	PMU, all participating ministries and agencies' management
12	Reduced financial support from co-financiers due to limited overall funding availability resulting from the COVID-19-related economic downturn, and/or the reorientation of available funding to actions directly related to COVID-19	M	M	If there are negative changes in co-financing, in consultation with the government, seek alternative options for and ensure continuity of resource allocation to support the ongoing initiatives.	PSC, PMU, and NEPA
13	Closure of offices, transport etc. will delay the launch of the project and its implementation.	M	M	It is likely that periodic closures of transport and offices as well as restrictions on organizing meetings/training with a large number of people will impact project implementation. Therefore, the project will institute mechanisms such as virtual meetings and holding training with smaller participants at a time to ensure that some work can continue. Detailed planning will be done with the government and stakeholders, and the project will ensure that all recommended safe practices are followed by the project team and by stakeholders.	PSC, PMU, and NEPA

[1] H: High; M: Moderate; L: Low.

6. Institutional Arrangement and Coordination

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

6.a Institutional arrangements for project implementation

1. As requested by NEPA and Afghanistan's GEF Operational Focal Point (OFP), FAO will play a minor role as one of the executing agencies, together with NEPA and Welthungerhilfe (WHH), as well as the implementing agency for this project. As the GEF implementing agency, FAO will act as a trustee of GEF resources, applying a fiduciary standard to ensure efficient delivery of global environmental benefits. FAO will disburse funds as approved and requested by the PSC and the PMU, and provide technical, operational, and financial oversight throughout the project cycle, and will fulfill annual reporting obligations to GEF Secretariat on the project's status.

2. These implementation arrangements have been established to strengthen government capacity for sustainably managing a national ETF framework and monitoring system for GHG emissions in AFOLU and related sectors. Through its involvement in the project, FAO will transfer its knowledge, experience and best practices in data collection, analysis, management and coordination of ETF-compliant reporting across sectors, with the aim of independent government implementation and coordination of these actions in the future.

3. The project organization structure is as follows:

Figure 5: CBIT Project implementation structure in Afghanistan (please see separate uploaded PPT)

4. The Government will designate a National Project Director within NEPA, who will be responsible for coordinating activities in all project components with all national bodies and project partners. The National Project Director will also be responsible for supervising and guiding the National Project Coordinator regarding government policies and priorities. The National Project Director (or designee) will chair the project steering committee (PSC) which will be the project's main governing body. The PSC will approve annual workplans and budgets, and will provide strategic guidance to the Project Management Unit (PMU) and all executing partners. The PSC will be comprised of representatives from NEPA (chair), MAIL, NSIA, MEW, IDLG, IGDK, MRRD, MoMP, MoT, MoCI, Kabul University and FAO (secretary). The members will each assure the role of project focal point within their respective agencies. As agency-wide focal point in their agencies, the PSC members will: (i) oversee technical activities in their sectors; (ii) ensure a fluid two-way exchange of information and knowledge between their agencies and the project; (iii) facilitate coordination and links between the project activities and their agencies' workplans; and (iv) facilitate the provision of co-financing to the project.

5. The National Project Coordinator will be the secretary to the PSC. A list of potential PSC members will be prepared and shared with NEPA for feedback, which will inform the membership roster. The PSC will meet at least twice per year to ensure: (i) oversight and quality assurance of project outputs; (ii) close linkages between the project and other ongoing projects and programmes in relevant sectors; (iii) timely availability and effectiveness of co-financing support; (iv) the sustainability of project outcomes, including scaling up and replication; (v) effective coordination of government partnerships in support of the project; (vi) approval of the six-monthly project progress and financial reports, annual workplans and budgets; and (vii) consensus on management decisions when the steering committee's guidance is required by the National Project Coordinator.

6. The PMU will be established within NEPA and co-funded by GEF. Following the guidance of the PSC, its main functions will be to ensure efficient management, coordination, implementation and monitoring of the project through the implementation of the annual workplans and budgets. The PMU will be composed of the National Project Coordinator, GHG Inventory Reporting and MRV Officer, Data Management and Information Technology Officer and Institutional Arrangement Officer. In addition, finance/administration/operations associates will work over the project lifetime. One international GHG inventory and MRV specialist will also assist the PMU in executing the project.

7. The National Project Coordinator (NPC) will be in charge of daily implementation, management, administration and technical supervision on behalf of the operational partner and within the framework delineated by the PSC. This person will be responsible for:

- · Coordination with relevant initiatives;
- Ensuring a high level of collaboration among participating institutions and other organizations at the national and local levels;
- · Coordination and close monitoring of project activities;
- Tracking the project's progress and ensuring timely delivery of inputs and outputs;
- Providing technical support and assessing the outputs of national consultants hired with GEF funds, as well as the products generated through project implementation;
- Monitoring financial resources and accounting to ensure the accuracy and reliability of financial reports;
- · Implementing and managing the project's monitoring and communications plans;

- · Organizing workshops and meetings to monitor progress, and preparing annual workplans and budgets;
- Preparing and submitting the six-monthly project progress reports to the PSC and FAO (in January and July of each year);
- Preparing the first draft of the Project Implementation Review;
- · Draft terminal report two months before the project NTE;
- · Supporting the preparation of mid-term review and final evaluation; and
- · Informing the PSC and FAO of any delays or difficulties as they arise during implementation to ensure timely corrective action.

7. The Welthungerhilfe (WHH) will be a co-executing partner who will manage a large portion of budget as well as organizing all planned training under the project. The agency has been providing capacity building to empower sectors such as agriculture and civil societies under the principle of help to self-help in Afghanistan and beyond. Their expertise in natural resource management and energy sector assessment are relevant for CBIT project activities. WHH is one of the largest private aid organizations in Germany, without political affiliation, which started its operations in Afghanistan in 1980. Though it is an international NGO, the country office is highly localized which is operated by ca. 50 staff. In addition, during the implementation of the GEF-5 climate change project, WHH delivered on the site assessment and implementation of bio-digester as well as capacity building of the local communities how to operate the bio-digester in a long-term. The WHH is also a member of the national food security cluster which is chaired by the minister of MAIL.

8. **FAO** will be the GEF implementing agency for the project, providing project-cycle management and support services as established in the GEF Policy. As the GEF implementing agency, FAO holds overall accountability and responsibility to GEF for delivery of the results. In this role, FAO will utilize GEF funds to deploy three actors from within the organization to support the project: (i) the Budget Holder – usually from the most decentralized FAO office – who will provide oversight of daily project execution; (ii) the Lead Technical Officer, who will provide oversight and support the project's technical work in coordination with government representatives from the Project Steering Committee; and (iii) the Funding Liaison Officer, who will monitor the project cycle to ensure that the project is being implemented on schedule and that reporting is in accordance with agreed standards and requirements.

9. FAO's responsibilities, as the GEF implementing agency, will include:

Administrating funds from GEF in accordance with the rules and procedures of FAO;
- · Participating in PSC as a member;
- Overseeing project implementation in line with the project document, workplans, budgets, agreements with co-financiers, operational partner agreements and FAO's rules and procedures;
- Providing technical guidance to ensure the highest technical quality within all activities;
- · Conducting at least one supervision mission per year;
- Reporting to the GEF Secretariat and Evaluation Office on project progress through the annual Project Implementation Review, the Mid-Term Review, the Final Evaluation and the Project Closure Report; and
- · Financial reporting to the GEF Trustee.

10. Part-time Finance/Admin/Operations Associates will be recruited with project funds. This specialist will be responsible for: (i) delivering training for NEPA in areas in which the operational needs improvement (as identified by the capacity assessment); (ii) supporting review activities such as mid-term review and final evaluation (including contacts with the operational partner, logistics, travel, and other administrative support); (iii) supporting vacancy announcement issuance and candidate selection, processing of contracts; and (iv) supporting processing purchases, contracts and other necessary inputs as required. The Finance/Admin/Operations Associate will work in close consultation with the executing agencies and the PMU especially the National Project Coordinator.

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

11. The project's coordination with other relevant GEF-financed projects and other initiatives is summarized below. Though some of the projects have been completed, NEPA and MAIL have institutionalized some of the project activities that can be built upon by the CBIT project. That includes providing platform for systematic recording and sharing of data on adaptation and mitigation, inter-ministerial coordination arrangement, and standardized methodologies for data collection. More detailed coordination mechanism will be established at the beginning of the project implementation.

Project title	Project overview	Agency, budget and time period	Areas of complementarity with this CBIT Project
1.Establishing Integrated Models of Protected Areas in Afghanistan (EIMPA)	This project is supporting NEPA and MAIL through the Wildlife Conservation Society to manage and expand protected areas in Afghanistan. The project works with government and other stakeholders to develop and test regulations protecting forests, and provide economic incentives to preserve soil fertility, watershed stability and forage productivity for local communities. It will scale up successful approaches in communities outside these areas.	GEF-TF/UNDP and co-financing: USD 61.7 million (2013-2018).	Adaptation and mitigation criteria defined through CBIT can be merged with existing measures of success in this project in order to expand protected areas while quantifying the CCA/CCM benefits they accrue. The CBIT project will improve adaptive capacity and is expected to inform pilots of future CCA/CCM projects.
2.Adapting Afghan Communities to Climate- Induced Disaster Risks	This project is aimed at insulating vulnerable Afghan communities from the worst impacts of climate change by promoting community-based preparedness and adaptation in the highly vulnerable provinces of Jawzjan and Nangarhar. MAIL is leading implementation of its four pillars: gender- sensitive disaster risk reduction; establishing community- based early warning systems; promoting climate-resilient agricultural practices and livelihoods; and working with national to district institutions to integrate climate change into planning.	GEF-LDCF, GoIRA, ADB, WB, UNDP: USD 71 million (2017-2022).	The CBIT project will work with MAIL to ensure that: suitable adaptation targets are set; reporting on these targets is consistent across the project areas; and reporting is shared and used to improve reporting consistency nationwide. The CBIT project will provide a platform for systematic recording and sharing of data on adaptation collected from this project.

 3.Strengthening the Resilience of Rural Livelihood Options for Afghan communities In Panjshir, Balkh, Uruzgan and Herat provinces to Manage Climate Change induced Disaster Risks 	The project is targeted to strengthen the resilience of rural livelihoods for Afghan communities in Panjshir, Balkh, Uruzgan and Herat Provinces to manage climate change- induced disaster risks. The project is supporting climate responsive local development planning by developing the technical skills of MAIL officials, farmers and, pastoralists on climate risk information and appropriate response measures. It is also working to enhance rural livelihoods by providing training to women on alternative livelihoods to farming.	GEF-LDCF, MAIL, ICIMOD, UNDP, USD 9 million (2014- 2019)	The CBIT project will provide a platform for systematic recording and sharing of data on adaptation collected from this project.
4.Climate Change Adaptation Project (CCAP)	This project is building government capacity to integrate risk and impact assessments into development plans at the local level. The Government is learning to study climate change scenarios and assess alternatives for the agriculture sector; community development councils are being trained to integrate climate change risk into planning; climate- resilient livelihoods are being developed for women; and land-use issues are being addressed through rangeland rehabilitation, reforestation, improved water storage, and transport infrastructure.	GEF-LDCF, UNDP, USAID: USD 112 million (2016-2019).	The aim of this project is directly in line with CBIT priorities. The project is working to improve government capacity to integrate risk and impacts assessments into planning. CBIT funding will allow NEPA to work with this project to ensure that their assessments follow consistent methodologies for these types of assessments. CBIT funding will support the development of consistent methodologies for integrating assessments into plans. The CBIT project will also provide a platform for systematic recording and sharing of data on adaptation collected from this project.

• 5. Developing Core Capacity for Decentralized MEA Implementation and Natural Resources Management in Afghanistan.	The aim of this project was to strengthen Afghanistan's capacity to implement the Rio Conventions and other multilateral environmental agreements (MEAs). UNEP, NEPA and other partners collaborated to: improve inter- ministerial coordination on MEA objectives; build stakeholder participation in MEA implementation; support institutions in translating MEA commitments into practice; and strengthening national financial and execution mechanisms for the Rio Conventions.	GEF-TF/UNEP (2014-2018).	The proposed CBIT project will build on several mechanisms established under this project, especially the national MEA taskforce and capacity building on ecosystem management, biodiversity monitoring, environmental valuation, gender, and MEA implementation.		
 6.Biennial Update Report to the UNFCCC 	The project is providing financial and technical support to 35 least developed countries and small island developing states, including Afghanistan, to prepare and submit initial biennial update reports to the UNFCCC	GEF-EA/UNEP, NEPA, USD 1,393,400 (2017- 2019)	The CBIT project will work with this project to ensure that data on emissions estimation are collected in a standardized manner and archived in a central database, that project staff are aware of and able to meet ETF reporting requirements, and that lessons learned from this project are scaled up to other projects.		
 7.Building Resilience of Communities Living Around the Northern Pistachio Belt (NPB) and Eastern Forest Complex (EFC) of Afghanistan 	The project aims to reduce the vulnerability of local communities living around the Northern Pistachio Belt and Eastern Forest Complex to the effects of climate change by improving watershed functioning through ecosystem-based adaptation approaches.	GEF-LDCF/UNEP, MAIL, USD 6,900,000 (2016- 2022)	The CBIT project will provide a platform for systematic recording and sharing of data on adaptation collected from this project.		
8.Strengthening Afghanistan Institutions' Capacity for the Assessment of Agriculture Production and Scenario Development	This project, implemented by FAO and MAIL, is building MAIL's capacity to: monitor and analyse agriculture production systems; and assess land suitability and water use options through establishing National Agro Ecological Zones and a Land Resource Information Management System. It is also building institutional capacity to develop and operate agriculture monitoring systems using satellite- derived remote-sensing data.	European Union: EUR 2.5 million (2016-2020)	This project aims to help policy makers make evidence-based decisions on planning and management in the AFOLU sector. It aims to strengthen the Government's capacity for developing evidence-based policies these sectors. This is directly in line with CBIT aims: through CBIT funding, NEPA will work with this project to scale up successful methodologies, improve data collection and reporting transparency, and use successful methodologies to define nationwide monitoring and reporting criteria.		

9.Afghanistan Sustainable Energy for Rural Development (ASERD)	This project, implemented by the United Nations Development Programme (UNDP), is establishing sustainable rural energy services in almost 200 rural communities to provide both electric and thermal energy. Village-level sustainable energy grids, biogas digesters and thermal energy services have been established, and the project is piloting innovative financing and delivery models for eventual mainstreaming. It will bring sustainable energy to over 50,000 households.	Government of Korea: USD 7.8 million (2015-2019)	The CBIT project will work with this project to ensure that: data on emissions reduction are collected in a standardized manner and shared on a central database; project staff are aware of and able to meet ETF reporting requirements; and lessons learned from this project are scaled up to other similar projects.
10.Famine Early Warning Systems Network (FEWSnet)	FEWSnet is a leading provider of early warning and analysis on food insecurity. It was created to help decision makers plan for humanitarian crises and uses satellite-based data and teams of experts to estimate food availability based on crop coverage patterns and reported local needs. FEWSnet supports the yearly Integrated Food Security Phase Classification (IPC) assessments in Afghanistan, which inform food disaster response actions.	United States: funding data unavailable (2004-ongoing)	FEWSnet is already producing high-quality data relevant to the AFOLU sector. However, these data are not systematically used by stakeholders outside of the Food Security Cluster or stored in a centrally accessible database. CBIT funding will enable NEPA and partners to work with FEWSnet to ensure that: their systems are accessible to those who need them; FEWSnet data are integrated into a central CCA/CCM database; and users are trained in how to use the data to report on land cover change and GHG reductions or emissions estimations.
11.Hindu Kush Karakorum Pamir Landscape Initiative	This project works in the area of Afghanistan that lies between Tajikistan, Pakistan and China, which is an important habitat for many unique endemic central and south Asian species. The goal is to preserve biodiversity in this landscape by helping policy makers to develop theories of change, impact pathway analyses and monitoring and evaluation plans for identifying priority biodiversity preservation activities.	ICIMOD: funding data unavailable (ongoing)	The CBIT project will share data from its central portal with this project to support its planning processes. It will also coordinate with the project to ensure that monitoring of and CCA/CCM indicators is consistent with other indicators and incorporated into national adaptation, mitigation and biodiversity preservation plans.

12.SERVIR Hindu Kush- Himalaya	SERVIR is part of a worldwide programme to build capacity for analysis of satellite data for various AFOLU needs. In Afghanistan, SERVIR: helps decision makers to identify supply and demand requirements of watersheds and river basins; disseminates this knowledge to stakeholders; is developing tools and training stakeholders to improve their capacity for data analysis; and is establishing a data management unit within the Government to sustain a data management portal.	United States Agency for International Development (USAID): USD 3.1 million (2015-2020)	SERVIR is already producing high-quality data relevant to the AFOLU sector. However, these data are not systematically used by stakeholders outside of SERVIR or stored in a centrally accessible database. CBIT funding will enable NEPA and partners to work with SERVIR CBIT funding will enable NEPA and partners to work with SERVIR to ensure that data are integrated into a central CCA/CCM database; and users are trained in how to use the data to report on land cover change and GHG reductions or emissions estimations. The CBIT project can also build upon best practices from SERVIR in data management and analysis and ensure that it conforms to ETF requirements.
13.Community-based Sustainable Land and Forest Management in Afghanistan	This project is supporting integrated, sustainable community-based AFOLU approaches for promoting biodiversity conservation, climate change mitigation and rangeland productivity. To achieve this, it will: build capacity of government institutions for sustainable AFOLU approaches; help communities to develop community-based natural resource management plans; improve management of forests and degraded rangelands in order to reduce land degradation; conserve biodiversity and sequester CO2e; and improve knowledge to inform sustainable AFOLU practices. Through this project, a fine-scale inventory of forest and rangeland resources will be undertaken in Badghis, Bamyan, Ghazni, Kunar and Paktya Provinces. The inventory will make use of remote sensing and GIS data – including that available through MAIL's GIS section and other initiatives. The project will also formulate a national REDD+ Readiness Roadmap – including provisions for a national MRV system.	GEF-TF/FAO and co-financing: USD 64.7 million (2018-2024)	The CBIT project will work with this project to ensure that data on emissions reductions are collected in a standardized manner and shared on a central database; that project staff are aware of and able to meet ETF reporting requirements, and that lessons learned from this project are scaled up to other projects.

14.Reducing GHG Emissions by Promoting Community Forestry, Removing Barriers to Sustainable Biomass Energy, and Laying the Groundwork for Climate Change Mitigation in Afghanistan (MSP)	This project has two main goals: promoting the use of low emissions cooking and heating technologies (biogas digesters, solar cook stoves, etc.); and training communities in community-based natural resource management principles in two forest districts. The project has already introduced FAO's EX-ACT GHG accounting tool to assist government partners in estimating emissions reductions from this and future GHG-reduction projects.	GEF-TF/FAO: USD 1.7 million (2016-2019)	The CBIT project will work with this project to ensure that data on emissions reductions are collected in a standardized manner and shared on a central database, that project staff are aware of and able to meet ETF reporting requirements, and that lessons learned from this project are scaled up to other projects.
15.Household Food and Livelihood Security and Support to the Development of an Effective Extension System	This project, implemented by FAO in collaboration with MAIL, is improving household food security and nutrition by: improving the information base, capacity and coordination among district institutions on household food security; building the productive assets of the most vulnerable and resource-poor households; linking smallholders and livelihood groups to markets; rolling out a new MAIL extension strategy focused on "farmers-first"; and rehabilitating water, forests and rangelands.	Swiss Agency for Development and Cooperation (SDC): USD 7 million (2017-2021)	This project does not explicitly aim to reduce GHGs or improve CCA; however, project interventions will achieve both. The CBIT project will train the FAO implementation team of this project on CCA/CCM indicators and ETF reporting practices. Information on land area rehabilitated and associated GHG sinks will be incorporated into the central database according to ETF principles.
16.Strengthening NEPA through GCF Readiness and Preparatory Support Programme	The proposed GCF readiness project will support the country by: (i) establishing institutional arrangements to manage the country's engagement with the GCF and ensure the country can take the lead in shaping its pipeline of GCF projects; and (ii) developing a clear and inclusive strategic framework for engagement, which includes a pipeline of potential projects aligned with country objectives and GCF investment criteria.	GCF/FAO: USD 300,000 (2019 - 2020)	The CBIT project will support this project with data on mitigation and adaptation to ensure that the country's engagements with the GCF is guided by the NDC priorities on climate change mitigation and adaptation. NEPA and FAO are currently preparing the second phase of Readiness programme for about USD 1 million budget to be implemented for 2 years from late 2020.

7. Consistency with National Priorities

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

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

This project directly assists Afghanistan in fulfilling its commitments under the Paris Agreement and UNFCCC by supporting the preparation of national communications and BURs. In addition, its objective and outcomes will directly support several domestic priorities and initiatives, including:

National Adaptation Programme of Action (NAPA) 2009: The NAPA vision for Afghanistan is to increase awareness amongst all stakeholders of the effects of climate change and climate variability on their lives and to develop specific activities that build capacity to respond to current and future climate change threats. The proposed CBIT project will contributes towards the aim of NAPA (2009) by (1) identifying priority projects and activities for community adaptation to adverse effects of climate change; (2) coordinating different initiatives under NEPA and other line agencies; and (3) integrating climate change considerations into the national planning processes.

Afghanistan Climate Change Strategy and Action Plan (ACCSAP) (draft): This climate change related planning document focuses on strategies and plans to address the challenges posed by climate change, to harmonize the existing developmental realities, and seeks to mainstream climate change concerns with the development planning processes. The proposed CBIT project can contributes towards ACCSAP (2009) mitigation and adaptation actions. For example, ACCSAP (2009) provided the climate change mitigation action plan on promoting renewable energy, energy efficiency in industry, efficient transport, and waste management. The interventions under the component 1 and 2, will help to monitor and evaluate the progress of climate change mitigation initiatives taken under the said sectoral action plan.

National Adaptation Plan (draft): The National Adaptation Plan (NAP) for Afghanistan proposes a course of action on adaptation from a medium- to long-term perspective. The proposed CBIT project through component 3 can contribute towards two of the identified four components of NAP, such as laying the groundwork and identifying/addressing gaps, and reporting, monitoring and review.

Nationally Determined Contribution (NDC) 2015: The NDC (2015) committed to reduce 13.6 percent of GHG emissions by 2030 compared to a business as usual (BAU) based on external support covering energy, natural resource management, agriculture, waste management and mining. The interventions under the component 1 and 2 of this CBIT project, will help to monitor and evaluate the progress of climate change mitigation actions mentioned under the natural resource management, agriculture, waste management and mining sector.

• Afghanistan National Development Strategy (ANDS) 2008: The ANDS reflects the government's vision, principles and goals for Afghanistan which builds on its commitment to achieve the Millennium Development Goals. The proposed CBIT project interventions can contribute towards critical cross-cutting issues identified by ANDS having potential to impact all sectors, such capacity building and environmental management.

• Afghanistan Rural Renewable Energy Policy (2013): It focuses on the promotion of renewable energy technologies through utilization of available local resources in the rural area and off-grid locations. The interventions under the component 1 and 2 of this CBIT project, will help to evaluate the GHG emissions reduction benefits of proposed renewable energy development under this policy.

Strategic National Action Plan for Disaster Risk Reduction (2011): Through improved institutional and human capacity proposed CBIT project can contribute towards the goal of this action plan for minimizing losses caused by disasters and climate change impacts by developing linkages among the relevant line agencies of disaster risk reduction, and climate change adaptation.

• National Biodiversity Strategy and Action Plan (NBSAP) 2014: Some of the goals of NBSAP (2014) where this CBIT project can contribute through improved institutional and human capacity building are: reduce pressures from habitat loss, land use change and degradation, address changes to biodiversity from climate change; and maintain capacity of ecosystems to deliver goods and services and to support livelihoods.

• National Environment Strategy (NES): The National Environment Strategy (NES) aims to improve the quality of life of the people of Afghanistan through conservation, protection and improvement of the country's environment. The Strategy uses a mainstreaming approach to provide direction for the integration of environmental issues and policies into Afghanistan s development priorities in order contribute to increased economic growth and poverty reduction. The proposed CBIT project con contribute towards training and capacity building priority programme of NES.

• National Priority Programmes: National Priority Programs refer to a set of 22 priority programs announced at the Kabul Conference of 2010. While Afghanistan National Development Strategy (ANDS) provides an overall strategy, the NPPs represent a prioritization and further focusing of the ANDS including specific deliverables and costings. The proposed CBIT project through improved institutional and human capacity building contribute towards Goal 13. Climate Change.

•Nationally Appropriate Mitigation Actions for Afghanistan (NAMAs) (draft): In accordance with the Low Emissions Development Strategies (LEDS) outlined in the ACCSAP, NAMAs represent the appropriate mitigation actions in Afghanistan. Through the development of coordination mechanism, technical capacity and coherent GHG inventory data collection, update and archiving system the proposed CBIT project can contribute towards proper monitoring, reporting and verification (MRV) of mitigation actions in Afghanistan under NAMAs.

Biennial Update Report (BUR): In the initial Biennial Update Report (BUR) of Afghanistan (July, 2019) same limitations as mentioned in the Table 1 as per second national communication was mentioned. As per the UNFCCC requirement, developing country parties require two submit BUR in every two year. Through the development of coordination mechanism, technical capacity and coherent GHG inventory data collection, update and archiving system the proposed CBIT project will contribute to the preparation of regular BUR.

Biennial transparency report (BTR): Reporting of the BUR under the UNFCCC convention will be superseded by reporting of the biennial transparency report (BTR) for PA Parties. According to 18/CMA. 1, para. 3, the first BTR must be submitted by all Parties no later than 31 December 2024. So, it can be expected that through improved institutional, technical and human capacity of this CBIT project Afghanistan can submit the BTR report on due time.

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.

89. The project aims to promote a knowledge-sharing culture and coordination on data collection and analysis in Afghanistan, the region, and globally via the CBIT Global Coordination Platform. This will include coordination among government ministries' existing databases, local governments, donor-funded projects and local actors; it will also include joint training on ETF principles so that various actors can learn and collaborate towards improved transparency in climate change-related data. Knowledge products will be designed and targeted at specific audiences using communication channels designed to reach those audiences, and translated into local languages.

90. A gender-sensitive/responsive knowledge management and communications strategy will be developed at the start of the project, building on the existing GEF5 and GEF6 strategy, to support implementation and replication of project activities. The strategy will include recommended products for public awareness and other knowledge management, including training material and manuals, and communication materials. These products will be disseminated within the country and beyond through NEPA, Global AFOLU CBIT project as well as the CBIT Platform project.

91. Institutional mechanisms for UNFCCC reporting coordinated by NEPA's Climate Change Division will build on existing national structures and political processes rather than create new systems. Institutional and technical capacities developed through the project will build upon existing capacity assessments to avoid overlaps. Existing online platforms and information systems will be linked to a central portal rather than redesigned from scratch. While data will be uploaded to a central portal, it is expected that full data integration will take many years. CBIT support will begin this process by establishing the framework, systems and capacity for a fully integrated central CCA/CCM information portal in the long term.

92. As highlighted above, numerous past and ongoing programmes in Afghanistan have aimed to increase institutional capacity for producing, analyzing and reporting on data. However, best practices are not commonly shared among government ministries, donors and implementing agencies. With CBIT support, NEPA's Climate Change Division will consolidate these best practices into a central hub and build upon them to design better training programmes on data collection, analysis and reporting nationwide. These best practices will be shared on the central portal in the form of videos, training manuals and other materials, helping to standardize these practices. This coordination will not only leverage donor funding more effectively, but will promote cooperation among different sectors and regions of the country, contributing to nation-wide collaboration and harmonization.

As highlighted in the project's logical framework, outreach activities will be used to communicate mitigation and adaptation measures, policies and their impacts. This will include documentation of results in a user-friendly digital platform, online access to the knowledge generated by the project, training programmes and workshops. Knowledge products will be publicly accessible on web-based platforms and the global CBIT platform to disseminate best practices and lessons learned.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project will ensure transparency in the preparation, implementation, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information and consultation with major stakeholder groups and local community representatives. Information will be disclosed on websites and findings disseminated through knowledge products and events. Project reports will be broadly and freely shared, and findings and lessons learned made widely available.

The table below summarizes the monitoring and evaluation (M&E) activities:

M&E activity			Budget
Inception workshop	PMU in consultation with the NEPA and PSC	Within three month following project start-up	USD 10,000
Joint supervision missions	Government, FAO	Annual	FAO's costs from GEF Agency fees (others via project's travel budget as needed)

M&E activity	Responsible party(ies)	Schedule or Deadline	Budget
Project progress reports (PPRs)	PMU	No later than one month after each biannual reporting period (Jan-Jun and Jul-Dec)	USD 22,200 (PMU staff time)
Project Implementation Review (PIR)	FAO, in its role as the implementation agency	1 August of each reporting year	GEF Agency fees
GEF tracking tools	Lead Technical Officer with PMU	Mid-point and end-of-project	GEF Agency fees
Final workshop	PMU	At the end of the project	USD 10,000
Mid-term review	FAO	During the 2nd year of the project	USD 40,000
Final evaluation	FAO	Six months prior to the actual project completion date	USD 40,000
Total project budget for M&E			USD 122,200

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)?

As a signatory to the Paris agreement, Afghanistan is committed to carrying out both adaptation and mitigation activities by maintaining ETF, with a view to advancing climate action in the country. The CBIT project will advance efficient tracking, monitoring, reporting of climate change adaptation and mitigation in the AFOLU and other sectors with durable and robust interventions on coordination, and technical capacity building in adaptation and mitigation. Currently, the country has no reliable database or data-management system for GHG inventories of AFOLU and other sectors, and has limited technical capacity to assess GHG removals and emissions for complex sectors like AFOLU. Hence, it is anticipated the CBIT project will benefit the country's social and environmental sectors by building the capacity of government officials and tracking progress against NDC priority mitigations and adaptation in the country.

Apart from the NDC, the project will also advance the goals and targets of the national plans and policies such as NAPA (2009), ACCSAP (draft), ANDS (2008), NEAP (2009), NBSAP (2013), NAMA and BUR (ongoing). Therefore, the major goals and activities of the GEF-funded CBIT project are highly aligned with national environment and climate change-related national action plans. This project will provide access to data and information used for multi-sector GHG inventories that contribute to climate change mitigation and adaptation. National stakeholders will have access to the data used for national and sub-national GHG monitoring, and will be able to monitor their performance using robust data and information. GHG data archiving and sharing with other national platforms will enhance the consistency of the data used for national climate change mitigation and adaptation, and contribute to integrated approaches and solutions.

An appropriate transparency framework will generate multiple social, economic and environmental co-benefits, including human capacity, local and national institutional strengthening, cost-effective national budgeting and planning, reduced vulnerability of food systems, and resilient natural resources and ecosystems on which food systems depend. Through improved and more transparent data, the project will also support increased local, regional and national investments, and improved decision making. Activities and institutional arrangements such as required NGO and civil society representation on the PSC will ensure that the project directly benefits all stakeholders by improving the quality of information related to climate change in the AFOLU and other relevant sectors. Timely, accessible, high-quality information will enable better decision making and planning, and increase transparency to improve governance and accountability.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Low		
Measures to address identified risks and i	mpacts		

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.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Environmental and Social Risk Identification – Screening Checklist	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).

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: By 20 sectors; and 2) is	Description: By 2023, Afghanistan has: 1) developed a national monitoring and reporting system for greenhouse gas (GHG) emissions in the agriculture, forestry and land-use sectors; and 2) is able to track, monitor and report on mitigation and adaptation outputs and outcomes in line with the Enhanced Transparency Framework (ETF).						
Component 1: En (AFOLU) sector	hancing institutional coordina	tion for the preparati	ion of ETF reports in	all relevant sectors, with	a particular focus on the ag	griculture, forestry and	other land use
Outcome 1.1: Improved institutional arrangements and capacities to integrate AFOLU and other sectors' data to comply with ETF processes and reporting.	A(i): Qualitative and gap assessment report of institutional capacity for transparency-related activities to demonstrate NEPA's capacity for coordinating ETF reporting, ensuring the participation of women (25 percent). A(ii): Designated unit under NEPA to coordinate and collaborate GHG inventory reporting, ETF reporting and track the progress of CCA/CCM activities of NDC. (Tracking Tool Indicator 5)	Designated transparency institution exists, but with limited staff and capacity to support implementation of transparency activities under Article 13 of Paris Agreement; Activities are not integrated into national planning or budgeting activities.	Designated transparency institution exists, with adequate staff and capacity to support and coordinate implementation of transparency activities under Article 13 of Paris Agreement; Activities are being integrated into national planning or budgeting activities.	Designated transparency institution has an organizational unit with dedicated staff that have capacity to coordinate and implement transparency activities under Article 13 of the Paris Agreement; Activities are integrated into national planning or budgeting activities.	 (i) Status of gap assessment report containing summary/result of field visits, interviews and surveys with relevant line minsitry/government agency staff. (ii) Operatioal designated unit under NEPA. 	Sufficient political and institutional support are received to implement recommendations.	NEPA, PMU

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible
							for data
	B(i): MoUs/contracts/data sharing agreement between newly established Climate Change Division of NEPA and relevant institutions focusing on agriculture, LULUCF, energy, waste, and transport for data collection, sharing and archiving to show NEPA's capacity to coordinate ETF reporting, ensuring the participation of women (25 percent). B(ii): Number of collaborating inter- ministerial agencies (agriculture, LULUCF, energy, waste, and transport) with formally established focal points (number of men and women: 25 percent women).	No systematic data collection, sharing and archiving of data on AFOLU and other relevant sectors among government institutions, NSIA and the private sector.	Inter-ministerial agencies and other institutions identified for data collection, sharing, and archiving, and MoU/contracts formalized on a priority basis.	Formalized and operational MoUs/contracts with inter-ministerial agencies and other institutions identified for data collection, sharing and archiving along with designated focal points.	(i) Number and status of MoUs/contracts/data sharing agreement with NEPA and inter- ministerial agencies/other institutions (agriculture, LULUCF, energy, waste, and transport). (ii) Status and number of collaborating inter- ministerial agencies (agriculture, LULUCF, energy, waste, and transport) focal points with their designation and contact address.	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	collection NEPA, PMU
	C: National ETF monitoring and reporting roadmap focusing on agriculture, LULUCF, energy, waste, and transport with specific guideline for participation of women (25 percent women) is prepared and adopted. (Tracking Tool Indicator 5)	No national ETF monitoring roadmap endorsed by relevant ministries.	National ETF monitoring roadmap, ensuring the participation of women, drafted and shared for consultation with key stakeholders.	National ETF monitoring roadmap, ensuring the participation of women, finalized, publicly available and adopted by key stakeholders.	Status of ETF monitoring roadmap preparation and adoption.	Sufficient political and institutional support provided to prepare and adopt national ETF monitoring roadmap.	NEPA, PMU

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible
							collection
Outcome 1.2: ETF reporting best practices, information gathering, and system infrastructure shared throughout the AFOLU and other sectors and coordinated with other regional CBIT programs.	A(i): A fully functional platform for documentation, referencing and archiving focusing on agriculture, LULUCF, energy, waste, and transport. A(ii): Number of GHG data on AFOLU and other relevant sectors (agriculture, LULUCF, energy, waste, and transport) archived and shared and archived.	Data, information, and analyses from AFOLU and other relevant sectors are not being produced, archived or shared in a timely and coordinated manner; No agreed protocols for data sharing exist.	Data- provision/sharing protocols established, with gender considerations; Primary mechanisms identified and are being strengthened for improved data sharing and analysis; Data-archiving protocols and functional platform established.	ETF-relevant data, and analyses on AFOLU and other relevant sectors are shared in line with adopted protocols, with gender considerations; Data- archiving protocol and platform established and functional.	 (i) A fully operational documentation, referencing and archiving system focusing on agriculture, LULUCF, energy, waste, and transport. (ii)Status and number of data and metadata of AFOLU, and other sectors (energy, waste, and transport) archived, documented and final report is prepared and data made accessible therough designated platform. 	Stakeholders have sufficient intrinsic and extrinsic motivations to archive the existing data and metadata related to GHG inventory of AFOLU, and other sectors.	NEPA, PMU
	B: Arrangements for linking the documentation and archiving system with the existing Afghanistan Environmental Data Centre (AEDC) with inter- ministerial coordination are established.	Limited engagement of AFOLU and other sectors' stakeholders for archiving and documenting data and metadata with the AEDC.	Coordination mechanisms established for linking the documentation and archiving system of GHG data with AEDC focusing on AFOLU and other sectors.	Systematic engagement of stakeholders focusing on relevant sectors through established coordination mechanisms for data collection, archiving and update in AEDC.	A fully functional system with number of inter-ministerial agencies, academia and research organization engaged in documentation and archiving system linked with AEDC for data- sharing.	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	NEPA, PMU

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	C(i): Staff from inter- ministerial agencies and IDLG trained in monitoring, reporting and verification (MRV) systems and ETF reporting on GHG emissions and removal (number of men and women: at least 25 percent women; 49 will be from NEPA and 11 will be from line agencies; 26 will be from Kabul and 34 will be from other provinces).	Weak knowledge among stakeholders of MRV systems and ETF requirements of GHG emissions and removal reporting.	Increased number of staffs from inter-ministerial agencies and municipalties trained in MRV systems and ETF reporting processes.	Government agencies (AFOLU, energy, transport industry and product use, and waste sectors) engaging with, benefitting from and contributing to the ETF capacities of non-AFOLU sectors.	Number of staffs demonstrating sufficient knowledge of MRV systems and ETF reporting processes.	Stakeholders have sufficient intrinsic and extrinsic motivation to engage and share the knowledge acquired from training.	NEPA, PMU
	(Tracking Tool Indicator 5) C(ii) Number of documents prepared on lessons learned and shared from each sectors (agriculture, LULUCF, energy, waste, and transport) to disseminate lesson on best practices.	No systematic knowledge sharing of lessons learned on the GHG inventory.	At least 1 formal document detailing best practices and lessons learned shared.	At least 3 summaries/case studies detailing lessons learned shared; Regular articles on the GHG inventory published on the platform.	Number of documents prepared and shared.	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data
							collection
Component 2: St	rengthening capacity for monit	toring and reporting	on mitigation targets	in the AFOLU and other	sectors.		
Outcome 2.1: Increased capacity to assess and report emissions and removals in the AFOLU and other sectors, and to design and monitor related emission reduction activities as defined in the NDC.	A(i): Strengthened NEPA Climate Change Division with spatial change analysis capability. A (ii): Number of staff from NEPA Climate Change Division (number of men and women: at least 25 percent women; 49 will be from NEPA and 11 will be from line agencies; 26 will be from Kabul and 34 will be from other provinces) trained and applying the knowledge for spatial change analysis focusing on AFOLU sector.	No designated division/unit with human skills, hardware and software capacity on spatial change analysis.	The procurement process of Hardware and software for the spatial change analysis for NEPA Climate Change Division initiated. 30 beneficiaries trained with the operation of spatial change analysis skills.	Hardware and software are procured and strengthened NEPA Climate Change Division to manage spatial change related data for ETF requirements with designated manpower. This includes the management of info for mitigation and adaptation. 60 beneficiaries trained with the operation of spatial change analysis skills.	Strengthened NEPA Climate Change Division to manage spatial change related data for ETF requirements. Number of training and the number of trained staff/beneficiaries.	Staff turnover will not undercut capacity development; post- project funding will support further training of new staff, and replication of the spatial change analysis training after the project period.	NEPA, PMU

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible
							for data collection
	B(i): A fully functional and quality GHG information management system (GIMS) for MRV of climate change mitigation activities to demonstrate increased capacity for assessing and reporting on emissions and removal. (Tracking Tool Indicator 3)	Measurement systems are not in place, data is of poor quality and methodologies are not very robust; Reporting is only upon request, partial or to a limited audience; No verification system is in place.	Measurement systems are in place and data quality has improved; reporting is upon request, partial or to a limited audience; No verification is in place.	Measurement systems are strong in a limited set of activities, however analyses still needs improvement; Periodic monitoring and reporting occur although they are not yet cost/time efficient; Verification is provided upon request and is limited (verification is expected to be the main constraint at this stage).	A fully functional and quality GHG information management system (GIMS).	Staff turnover will not undercut capacity development; post- project funding will support the maintenance of the resources procured during the project, and operation after the project period.	NEPA/NSIA to consolidate; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoWA, MoUDL, MoCI, ANDMA, and National Study team.

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	C(i): Number of trainings organized. C(ii): Number of staff from NEPA and other relevant inter- ministerial agencies (number of men and women: at least 25 percent women; 49 will be from NEPA and 11 will be from line agencies; 26 will be from Kabul and 34 will be from other provinces) trained and applying the knowledge. C(iii): Number of training materials and training proceedings.	Very low capacity exists, particularly in decentralized locations; women's participation is low.	Technology needs determined based on drafted protocols; Materials developed for capacity strengthening, reflecting gender- sensitive training methodologies.	Significant capacity exists among all stakeholders directly relevant to NCCMF and NAMA protocols.	 (i) Number of trainings organized. (ii) Number of staff trained. (iii) Training records; participants' evaluation, training proceedings and exercise booklet with country-specific data. 	Staff turnover will not undermine capacity development; Post- project funding will support operation and maintenance.	NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoWA, MoUDL, MoCI, ANDMA, National Study team, and Kabul University.
	D: Number of Activity data and Emission factors data and metadata with quality assurance and control protocols for AFOLU and non-AFOLU sectors (energy, wastes and transport). (Tracking Tool Indicator 3)	No formal data and metadata parameters or quality-control protocols exist for AFOLU and non-AFOLU sectors.	Data and Metadata parameters and quality-control protocols drafted by NEPA in consultation with stakeholders.	Data and Metadata parameters and quality-control protocols adopted and endorsed by stakeholders.	 (i) Number of Activity data and Emission factors data and metadata, and publication of protocols. (ii) Stakeholder formal endorsements of Activity data and Emission factors data and metadata, and protocols. 	Stakeholders assured of sufficient, reliable support for meeting their obligations under the protocols.	NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoWA, MoUDL, MoCI, ANDMA, National Study Team, and Kabul University.

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data
							collection
Component 3: St	rengthening capacity for monit	oring and reporting	on adaptation targets	in the AFOLU and other	sectors.		
Outcome 3.1: Increased capacity to monitor, report and communicate on adaptation, in particular on NDC priority adaptation actions, in the AFOLU and other relevant sectors	A: Guidelines and evaluation systems developed for tracking the climate change adaptation measures identified in NDC. (Tracking Tool Indicator 3)	Very little measurement is done; Reporting is partial and irregular; No verification is conducted.	Measurement systems are in place for 50% of all activities, resulting in improved data quality and methodologies, but the systems not cost or time efficient; Wider access to reporting remains limited and information is partial; Verification is rudimentary and non-standardized.	Measurement systems are in place for 80% of all activities, resulting in improved data quality and methodologies, cost and time efficiency; reporting is systematic and regular, yielding useful information; Verification methods are robust and standardized.	Publication of tracking, monitoring and evaluation tools, and formal endorsements of NEPA and other relevant stakeholders.		NEPA/NSIA to consolidate; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoF, MoWA, MoUDL, MoCI and ANDMA.
	B: Existence of nationally appropriate metrics and indicators for reporting in place for NDC priority adaptation activities.	No formal metrics and indicators exist for NDC priority adaptation activities reporting.	Inter-ministerial and inter-agency data needs to be determined based on drafted metrics and indicators; materials developed for data collection protocols in line with developed metrics and indicators.	Metrics and indicators eendorsed and adopted by relevant stakeholders.	Drafted metrics and indicators; formal endorsements of NEPA and other relevant stakeholders.	Stakeholders assured of sufficient, reliable support to develop the metrics and indicators.	NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoF, MoWA, MoUDL, MoCI, ANDMA and Kabul University.

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible
							for data
	C(i): Number of collaborating inter- ministerial agencies with formally established focal points providing data and information on adaptation support received and progress (number of men and women: at least 25 percent women; 49 will be from NEPA and 11 will be from line agencies; 26 will be from Kabul and 34 will be from other provinces). (Tracking Tool Indicator 3) C(ii): Arrangement for inter-ministerial coordination (agriculture, LULUCF, energy, wastes, transport) of adaptation support and finance data collection and sharing officially established and working. C(iii): Operational web- based system with publicly available data and information on adaptation support received and progress. (Tracking Tool Indicator 3)	None	Increased number of focal points engage with NEPA for the establishment of inter-ministerial collaboration mechanism focusing on data and information on adaptation support received and progress.	All the relevant stakeholders engaging with, benefitting from, and contributing to national capacities to collect and inter- agency share of data and information on adaptation support received and progress.	(i) Number of collaborating inter- ministerial agencies; data and information source identified on adaptation support received and progress. (ii) Number of inter- ministerial MoU and letter of agreement for data and information sharing on adaptation support received and progress. (iii) Operational web- based platform; archived data and information on adaptation support received and progress.	Staff turnover will not undercut capacity development; post- project funding will support operation and maintenance.	collection NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoF, MoWA, MoUDL, MoCI, ANDMA and Kabul University.

Result	Indicator	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible
							collection
	D(i): Number of staffs from NEPA and other relevant inter-ministerial agencies (number of men and women: at least 25 percent women; 49 will be from NEPA and 11 will be from line agencies; 26 will be from Kabul and 34 will be from other provinces) trained and applying the guidelines and tools developed. D(ii): Number of training materials and training proceedings on guidelines, frameworks, tools for monitoring of support received on adaptation measures.	Very low capacity exists, particularly in decentralized locations; women's participation is low	Increased number of staffs of inter- ministerial agencies trained with the guidelines and tools developed for monitoring of support received and adaptation measures.	Significant capacity exists among all stakeholders directly relevant to NCCAF and NAP protocols. Inter-ministerial agencies engaging with, benefitting from, and contributing to monitoring of support received and adaptation measures.	(i)Number of staffs capacitated. (ii) Number of staffs trained and training materials/proceedings.	Staff turnover will not undermine capacity development; Post- project funding will support operation and maintenance.	NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoF, MoWA, MoUDL, MoCI, ANDMA and Kabul University.
	E: Reliable, accurate and credible reports available and used for tracking NDC priority actions and decision making. (Tracking Tool Indicator 3)	None	Report on national adaptation support received drafted in line with UNFCCC guideline and shared for consultation with stakeholders.	National adaptation support received endorsed, and regularly updated.	Drafted and endorsed the report.	Sufficient political and institutional support to prepare and adopt national reports on priority adaptation activities consistent with latest UNFCCC guideline.	NEPA to lead; PMU to coordinate: MAIL, MEW, Municipalities, MoMP, MoT, MoF, MoWA, MoUDL, MoCI, ANDMA and Kabul University.

[1] The greatest contributor of GHG emissions in Afghanistan, AFOLU comprises agriculture, forestry and other land use.

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).

Questions	Secretariat comment at PIF	Agency Response

Questions	Secretariat comment at PIF	Agency Response
2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?	No. The project as presented in Table B is lacking a consistent focus and the Theory of Change is not clear. The project is currently composed of a mix of activities that do not appear very coherent but instead trying to work on many issues (resilience, land use, pasture management, restoration, SLM, biodiversity mainstreaming, value chains, etc.) at the same time. Please redesign the project with a clear focus, based on a simple theory of change.	Thank you for the feedback. We have streamlined outcomes and outputs in Table B with a clearer focus on sustainable rangeland management to address land degradation and biodiversity conservation. The four components have been reduced to three with a more focused Theory of Change.
	Further, table B indicates only Technical Assistance (TA). Please design component 2 as an investment component. Outline how the target group will benefit through this investment. A solid on the ground component is necessary that makes sure that GEF grant funding reaches local resource managers and communities, which needs to be adequately funded and mechanisms described that will ensure that the target group will benefit from the project.	Component 2 is corrected as investment and activities have been strengthened to deliver impacts on the ground. Funding for this component has been increased.
	It is not fully clear how the knowledge management activities and the LADA and WOCAT related outputs all contribute to the projects objective. They also appear over-funded while the actual implementation appears to be under-funded.	LADA and WOCAT information will be used for planning and decision making purposes by the ministries including agriculture and environment (detailed under the section alternative scenario).
	Finally, please consult the LDN TPP checklist of the UNCCD (also available on the GEF website) to bring the project design better in line with the LDN concept.	
	04/29/2019 UA: Addressed in the resubmission.	Alignment with the LDN TPP checklist of the UNCCD and the LDN concept has been increased.
	Cleared	

Questions	Secretariat comment at PIF	Agency Response
3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co- financing was identified and meets the definition of investment mobilized?	04/29/2019: The description field describes the process whereby investment mobilized was identified. In addition, please describe the definition/ approach used to differentiate between "investment mobilized" and "recurrent expenditures". For further details, please refer to the Co-Financing Guidelines (http://www.thegef.org/sites/default/files/documents/Cofinancing_Guidelines.pdf).	An explanation has been added in the description field. Recurrent expenditure refers to operating expenditures and applies to all indicated in-kind co-financing. Investment mobilized is used for grant co-financing that is mobilized during project preparation or implementation and excludes recurrent expenditures. Two funding sources that are identified as "investment mobilized" will not include recurrent expenditures. Green Climate Fund (GCF) project on Integrated Climate-resilient Watershed Management in the Kabul River Basin is being developed by FAO and MAIL, which will be implemented in 10 selected districts of Kunar, Kabul, Logar, and Khost Provinces. GCF project will address climate change stresses in the water and agriculture sectors in one of the most stressed river basins in the country. The GCF project will work closely with this GEF project to further promote the integrated landscape management approach and scaling interventions for sustainable production systems and restoration. The private sector's co-financing will be their involvement in value chain development for sustainable food production systems. In particular, private sector partners will play an important role for developing capacity for processing and value-adding of sustainable rangeland products in the target landscapes.

Questions	Secretariat comment at PIF	Agency Response
6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)	 Project has selected Rio Marker "0" for CCM and doesn't provide carbon benefits estimates in Table F. Will the restoration component of the project generate carbon benefits? 04/29/2019 UA: Addressed in the resubmission. Cleared 	Thank you for your feedback – Table F has been updated to include draft GHG reduction data, to be fine-tuned during PPG phase. The Rio Marker has been corrected to show CCM 1 in the Portal.
3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?	Not fully. The project design needs to be brought better into a logically coherent theory of change that better explains why the set of outputs is proposed to address the identified barriers. 04/29/2019 UA: Addressed in the resubmission - a theory of change has been developed and uploaded as a spearate document in the portal. Cleared	Thank you for your feedback – this has been addressed in the Table B and section 3 Proposed alternative scenario.
4. Is the project/program aligned with focal area and/or Impact Program strategies?	Not fully. The alignment with BD FA objectives give the impression of a rather generic alignment. What, exactly, are the BD benefits that the project wants to create? Further, alignment with LDN concept needs to be improved. 04/29/2019 UA: Addressed in the resubmission. Cleared	This point has been addressed – please see section 3 alternative scenario and 4 alignment with GEF focal area.

Questions	Secretariat comment at PIF	Agency Response
7. Is there potential for innovation, sustainability and scaling up in this project?	Not fully. Please improve demonstration of the potential for replication, and scaling up for achieving large-scale change. The project as presented also doesn't appear innovative. 04/29/2019 UA: Addressed in the resubmission. Cleared	Thank you for your comment – this has been addressed in the section 7 innovation, sustainability and potential for scaling up.
Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?	04/29/2019: Please clarify whether FAO expects to be remunerated from the technical support services that they may provide to the executing agency as mentioned in the PIF If yes, the documentation must include an explicit request signed by the GEF OFP indicating the specific roles and responsibilities of all partners, including any execution activities provided by a GEF Agency. The request should provide a sound justification for the execution activities that the GEF Agency may perform. Hence, the Agency needs to get such letter, in which case you need to assess the justification and consult with GPU Management on whether to approve it. Otherwise, the intent of FAO to execute some of the project activities has to be removed from the PIF.	The Ministry of Agriculture, Irrigation and Livestock (MAIL) will act as the main executing agency of the project with the technical support of national, provincial and district level government offices. A Project Steering Committee (PSC) chaired by MAIL will be established to ensure coordination and provide guidance to the project. Roles and responsibilities will be further defined at the early stages of the project formulation once the fiduciary risk assessments of MAIL will be completed as per FAO's policy.

Questions	Secretariat comment at PIF	Agency Response
Has the project/program cited alignment with any of the recipient country's national	Not fully. Needs better articulation for UNCCD and CBD.	Thank you – this point has been addressed in Table B and throughout the PIF, as well as in section 7. Consistency with National Priorities.
strategies and plans or reports and assessments under relevant conventions?	04/29/2019 UA: Addressed in the resubmission.	

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: 50,000					
Duciest Ducnanation Activities Implemented	GEF/LDCF/SCCF Amount (\$)				
Project Preparation Activities Implemented	Budgeted Amount	Amount Spent To date	Amount Committed		
Salaries Professional	2,380	0	2,380		
Consultants	34,500	10,043	24,457		
Contracts	0	0	0		
Travel	8,000	3,356	4,644		
Training	5,120	0	5,120		
General Operating Expenses	0	0	0		
Total	50,000	<u>13,399</u>	<u>36,601</u>		

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.

n/a

ANNEX F: Project Budget Table

Please attach a project budget table.