



PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: LDCF

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title:	Support for Integrated Water Resources Management to Ensure Water Access and Disaster Reduction for Somalia's Pastoralists		
Country(ies):	Somalia	GEF Project ID: ¹	8028
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5464
Other Executing Partner(s):	Ministry of Energy and Water Resources	Submission Date:	18 Dec 2014
		Resubmission Date:	24 July 2017
GEF Focal Area(s):	Climate Change	Project Duration (Months)	48
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	N/A	Agency Fee (\$)	838,945

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) CCA-1 (select) Outcome 1.3: Climate-resilient technologies and practices adopted and scaled up	LDCF	1,517,400	3,633,787
(select) CCA-2 (select) Outcome 2.4: Institutional and technical capacities and human skills strengthened to identify, prioritize, implement monitor and evaluate adaptation strategies and measures	LDCF	4,156,800	9,954,480
(select) CCA-3 (select) Outcome 3.2: Policies, plans and associated processes developed and strengthened to identify, prioritize and integrate adaptation strategies and measures	LDCF	3,156,800	7,559,733
Total Project Cost		8,831,000	21,148,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To build the climate resilience of pastoralists in Somalia by reinforcing technical and operational capacities to manage water resources sustainably						
Project Component	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Water resource management policies establishing clear national and district responsibilities	TA	a. Policy, legislative and institutional reform for improved water governance and management in the context of climate change b. Strengthened government capacities at national and district levels to oversee sustainable water resources management	1.1 Capacity development and awareness-raising on climate induced impacts on water resources and Integrated Water Resource Management (IWRM) principles for policy makers and planners at national and district levels 1.2 Development and endorsement of a national, multi-sectorial IWRM policy 1.3 Endorsement of traditional pastoral leaders involved in resource conflict management and peace-keeping at local levels	LDCF	1,413,000	3,383,776

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the GEF Website, [Focal Area Results Framework](#) which is an Excerpt from [GEF-6 Programming Directions](#).

³ Financing type can be either investment or technical assistance.

			<p>1.4 Support to legitimise existing water policies and acts and any traditional water laws at the district level</p> <p>1.5 Enhanced curricula and programmes established at educational and vocational institutes on water resources management.</p> <p>1.6 Storage of educational materials in a Water Resources Knowledge Management database (WARKM DB) to be created</p>			
2. Transfer of technologies for enhanced climate risk monitoring and reporting on water resources in drought and flood prone areas	TA INV	<p>a. Improved drought / flood indicator monitoring networks in Somalia's Arid and Semi-Arid Lands (ASALs)</p> <p>b. Strengthened technical personnel from the National Hydro-Meteorological Services in IWRM and flood and drought forecasting</p>	<p>2.1 Procurement and installation of river gauges, flow meters and rain gauges to improve groundwater and surface water data collection in the ASALs with documentation of monitoring infrastructure locations and details stored in the WARKM DB</p> <p>2.2 Capacity development for the National Hydrological and Meteorological Services (NHMS) at national and district levels to support timely drought/flood forecasting and information dissemination for pastoralists</p> <p>2.3 NHMS capacity to make and use climate forecasts is strengthened by training at least 6 forecasters with regionally and internationally available forecasting technologies⁴</p>	LDCF	3,000,000	7,184,237
3. Improved water management and livelihood diversification for pastoralists	TA INV	<p>a. Reduced vulnerability for pastoralists to water resource variability through investment in water resource management infrastructure and training on the livestock value chain</p>	<p>3.1 Awareness raising on water conservation and water management measures including storage of awareness materials in the WARKM DB</p> <p>3.2 Physical investment in water resource retention infrastructure and water extraction technologies with documentation of infrastructure development and technology transfer in the WARKM DB</p> <p>3.3 Re-seeding of pastures and re-fertilization of pasture soils to increase productivity</p>	LDCF	4,000,000	9,578,983

⁴ (e.g., Kenya's space-based climate surveillance system,⁴ the freely available CFS forecasting tool by NOAA in addition to tools and regional trainings developed through IGAD, UNDP's Global Climate Risk Management Programme, RIMES and EWS-Africa)

			3.4 Support for vocational training for pastoralists on operation and maintenance of water resource infrastructure including storage of training materials in the WARKM DB			
			3.5 On-the-pasture training for pastoralists on how to enhance the local value chain of livestock products including storage of training materials in the WARKM DB			
Sub-Total					8,413,000	20,146,996
Project Management Cost (PMC) ⁵				LDCF	418,000	1,001,004
Total project costs					8,831,000	21,148,000

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Government	Government of Somalia National Development Plan	Grant	15,000,000
Multilateral Agency	UNDP (JPLG)	Grant	2,500,000
Multilateral Agency	UNDP (TRAC resources)	Grant	1,000,000
Multilateral Agency	Joint Programme on Charcoal	Grant	1,400,000
Multilateral Agency	Global Water Partnership (IDMP HOA)	Grant	248,000
Multilateral Agency	Red Cross / Red Crescent Climate Centre	Grant	1,000,000
Total Co-financing			21,148,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	LDCF	Somalia	Climate Change		8,831,000	838,945	9,669,945
Total GEF Resources					8,831,000	838,945	9,669,945

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

b) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁶

⁵ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

⁶ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁷ (b)	Total c = a + b
UNDP	LDCF	Somalia	Climate Change	200,000	19,000	219,000	
Total PPG Amount				200,000	19,000	219,000	

F. PROJECT’S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁸

Provide the expected project targets as appropriate.

N/A

PART II: PROJECT JUSTIFICATION

1. Project Description

II.1.1) Problem, root causes and barriers

1. Fresh water is one of the most valued and scarce resources in Somalia. Over 80% of the country’s landmass, particularly in the north, is classified as Arid and Semi-Arid Land (ASAL), making it relatively unproductive for agriculture, with nomadic pastoralism the only potential livelihood option. Somalia’s ASALs house the greatest national proportion of pastoralists in Africa.⁸ At the same time, recharge of aquifers is relatively small in the ASALs and rainwater run-off often cannot be captured. The recent drought following consecutive seasons of poor rainfall and low river water levels reduced average harvests by 70%, caused significant livestock deaths, contributed to drought-related stress migration and has caused over 360,000 children to be acutely malnourished.⁹ Storage is another issue because the annual evapotranspiration rate can range from 1.5 to 6 times the amount of annual rainfall.¹⁰

2. Throughout Somalia, trends of reduced surface water availability, reduced groundwater reserves, and increased occurrences of drought and flood events have been observed. NAPA related consultations in 2013 revealed that flash flooding has created significant erosion and loss of fertile topsoil into the sea while extensive dry seasons have adversely impacted food security.¹¹ In recent years, gully erosion has destroyed important valleys creating deep gorges that often restrict mobility of both pastoralists and their animals.

3. Issues with water scarcity and flooding for pastoralists are expected to be aggravated by the impacts of climate change; future scenarios project an increase in the variability of rainfall patterns which is likely to result in delayed onsets of extreme rainfall and less rainfall at certain critical times of the year.⁷ Rising temperatures and changes in run-off patterns are also expected to influence the yield of groundwater and shallow water reservoirs.¹²

4. Pastoralists are highly vulnerable to such extreme rainfall conditions because they are dependent upon rain-fed rangeland grazing for their livestock and tend to have very few fixed assets.⁸ Similarly, water supply has become an issue in many parts of the country due to an increase in mineralization and salinization that has caused declining water quality.

5. Stresses of climate change on scarce water resources are expected to exacerbate resource conflicts within communities at the household and clan levels. Conflicts between farmers and pastoralists are common due to the lack of policies on land tenure and water rights.¹² Shifting rainfall patterns, spreading desertification and decreasing land fertility are likely to undermine pastoral livelihoods, worsen job prospects in rural areas and accelerate migration to urban areas.¹³

⁷ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁸ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

⁹ FSNAU and FEWSNET Technical Release 2 Feb 2017. Risk of Famine Increases in Somalia.

¹⁰ SWALIM. Oct 2007. Water Resources of Somalia: Project Report No. W-11.

¹¹ Somalia Ministry of National Resources 2013. National Adaptation Programme of Action on Climate Change for Somalia (NAPA 2013)

¹² According to predictions by the IGAD Climate Prediction and Application Centre, 2013

¹³ See Osman-Elasha B. 2008. Climate Variability and Change/ Impacts on Peace and Stability in Sudan and the Region, Nils Development forum – Khartoum – January 2008.

6. With the concentration of population and economic activity also located in the water-scarce, flood prone and conflict-ridden ASAL areas, climate-induced resource scarcity has adversely impacted the economy and could escalate violence and political instability. Already, the multi-dimensional poverty index (MPI) ranks Somalia 94 out of 104 countries and Somalia's rural and nomadic poverty rates are 94% and 99% respectively.¹⁴ In the case of Puntland where 90% of the rural populations are pastoralists, Puntland's economy is losing at least USD 15m annually as a result of losses in the condition and services of ecosystems, most notably water resources.¹⁵ With livestock contributing approximately 40% to Somalia's GDP and accounting for more than 50% of export earnings,¹¹ Somali's economy is very much dependent on sustainable natural resource management.

7. Among all the aforementioned issues, the principal **problem** which this project seeks to address is Somali's limited technical and operational capacities on national and local levels to support an efficient, equitable and integrated approach to water resources management which emphasizes pastoralist's needs and builds their resilience to the impacts of climate change. This problem is also compounded by several human-induced root **causes** such as:

- Marginalization of rural and nomadic populations rights to use water since they are often linked with land tenure;
- Limited physical, human and financial resources to cope with water issues;
- Significant population growth, causing rural water points to become stressed and serve as a source of conflict.

The problem is also exacerbated by a number of institutional, financial, technological and informational **barriers** including:

- a) Lack of water governance frameworks and fragmented water resources management and planning;
- b) Unsustainable water management practices;¹⁶
- c) Limited climate monitoring and weak flood and drought warning capacities;
- d) Limited empowerment of local populations, including youth and regional governments to assist with water provision;
- e) Limited socio-economic development and diversification of livelihoods for Somalia's pastoralists.

8. *II.1.2) Baseline scenario and associated baseline projects*

9. Under a new stable government where elections occurred as recently as February 2017 with the addition of 2 states in 2015 and 2016 (now 6 in total including Jubbaland, Hirshabele, Galmudug, South West, Puntland States and Somaliland), the Government of Somalia is now well-positioned to more coherently address the numerous challenges associated with widespread poverty and natural resource shortages. The Government has outlined priorities for dealing with the aforementioned water resource issues during NAPA consultations as recently as 2013. The NAPA process indicated that there is an urgent need for protection and management of water resources through an integrated and strategic approach that accounts for climate change (NAPA priority number 2). Adaptive water governance is required to reduce poverty and vulnerability as well as to protect environmental resources. Water planning, taking into account nomadic and sedentary rural population needs as well as population growth and climate change, is required. Any construction or rehabilitation of community level infrastructure must ensure that water sources are protected and monitored and that a mechanism for maintenance of the schemes is in place.

10. The Government of Somalia has also recently developed a *National Development Plan (NDP, 2017-2020)* that aims to support Natural Resources Management, more productive water and livestock systems as well as land use planning. The NPD states that in the livestock sector there is "weak institutional capacity, lack of central coordination and enforcement of regulations, codes and standards as well as limited qualified human resources..." The LDCF-financed project will address this by using sustainable means to increase livestock productivity and by improving capacities for natural resources management, disaster management and food security.

11. A number of other projects and programmes are also currently under implementation in Somalia that support the government's attempts to address the country's socio-economic challenges. Further details on these baseline projects are provided below:

12. The *Integrated Drought Management Program in the Horn of Africa (IDMP HOA)* (EUR 200,000, funded by DANIDA and the Global Water Partnership (GWP), to be implemented by IGAD in Somalia, 2014 – 2018) is focused on enhancing capacities and partnership for drought management in the countries of Eritrea, Ethiopia, Kenya, Sudan, Uganda, Djibouti and Somalia. It aims to enhance partnership and collaboration/coordination for drought management and influence policies by integrating IWRM as a tool for drought management. The Program will support the water-focused ministries in each zone including the Ministry of Energy and Water (MEW) in South Central, the Ministry of Mining, Energy and Water Resources (MMEWR) in

¹⁴ African Research Initiative for Somalia 2013, Country Report on the Millennium Development Goals (MDG Report)

¹⁵ African Development Solutions, Care International, and the Ministry of Environment, Puntland. Dec 2013, *Your Environment, Your Life, Baseline Survey report for Puntland on Natural Resources Management*

¹⁶ Ministry of Water. May 2012. Background Paper on Water: Preparing Somalia's Future: Goals for 2015. Second Istanbul Conference, Turkey

Somaliland and the Puntland State Agency of Water, Energy and Natural Resources (PSAWEN). Coordination between the projects will be facilitated based on a MoU between UNDP and GWP which ensures cooperation between the projects.

13. The **Joint Programme on Local Governance and Decentralized Service Delivery (JPLG)** (USD 4m, funded by ILO, UNDP, UNHABITAT, UNICEF and UNCDF, 2008 – 2020) supports regional institutions in Somalia, ensuring local governance contributes to fair delivery of services (water included). The districts being covered include Somaliland (Hargeisa, Burao, Odweine, Sheikh, Berbera, Borama, Gabiley, Zeylac), Puntland (Garowe, Bosasso, Eyl, Jariiban, Benderbeyla, Galkacayo, Gardo), the Interim South West Administration (Baidoa, Merka), the Municipality of Mogadishu and other districts including Beletweyen, Jowhar and Adado. JPLG conducted sector studies in water and natural resource management to assess opportunities and capacities of key sector ministries. JPLG also developed a manual for a water sector feasibility study and a guide for public private participation.

14. **UN Joint Programme on Charcoal Reduction and Alternative Livelihoods** (USD 1.4m, funded by EU, Sweden and Italy implemented by UNDP, FAO and UNEP, 2016 - 2019): The Joint Programme is an integrated response to address the challenges surrounding charcoal production, trade and use in Somalia. The Joint Programme objectives support the realization of NDP Pillars 3 (Sustainable Economic Development) and 4 (Social Capital) and align with the Sustainable Development Goals 1 (No Poverty), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), 12 (Responsible Consumption and Production), and 13 (Climate Action). With a national coverage, the Joint Programme is designed as a comprehensive response to address the root causes of environment degradation in Somalia that are critical for building Somalia's economic foundations in a sustainable manner.

15. **Red Cross/Red Crescent Climate Centre and the Hunger Resilience Partnership** (USD 1,000,000, Kenya Red Cross, Iranian Red Crescent, 2016 - 2020): The Climate Centre is at the forefront of improving forecasting for Somalia and other developing countries. Their role is to support the Ministry of Energy and Water at the federal level which has disbursed responsibilities in different institutions to work together with other professional weather and climate communities to increase the reliability of forecasts. The Red Cross is also implementing the Hunger Resilience Partnerships which aims to improve the resilience of vulnerable pastoralists and agro pastoralists in Puntland and Somaliland to food insecurity and environmental shocks. It will support 2,500 pastoralists and agro -pastoralists households in Puntland (Mudug Region) and in Somaliland (Sool and Marodijeh regions) to improve their food and nutrition. The project will target areas which have potential for irrigation utilizing seasonal flood waters and diverting water from seasonal rivers. By deploying Somali Red Crescent Society (SRCS) staff and volunteers to oversee implementation of activities, the project will combine a mixture of household level, and group or community level initiatives for sustainable vegetable, fruit and fodder production to tackle food insecurity, malnutrition as well as in the long run potentially provide alternative incomes from sale of fruits, vegetables and fodder, and contribute to environmental rehabilitation. In addition to food and fodder production, the project will support target communities to improve natural resource management as well as support in building new partnerships for resilience building especially with Kenya Red Cross and other resilience projects in Somaliland and Puntland.

16. Based on these baseline projects, there is limited targeted support to provide an enabling environment for sustainable water resources management for pastoralists in Somalia. The project requests additional funds from the LDCF to provide pastoralists the capacities to manage precious water resources and to enable them to adapt to the anticipated effects of climate change.

II.1.3) Proposed alternative scenario

17. The LDCF-financed project will have the unique focus of supporting solely pastoralists. As pastoralists encompass the majority of Somalia's population and account for the greatest proportion of the population living in extreme poverty, the project will provide them the tools to enhance their adaptation and resilience to climate change through improved water resources management.

18. LDCF funds are requested to address the current ad-hoc water management interventions in Component 1. Presently, interventions have limited coherency and require an integrated approach to balance water-related activities. To ensure equity, LDCF funds will be used to prioritise pastoralist's water rights and their traditional decision-making systems on natural resource management. Existing laws / policies for each state will be updated to be in alignment with a national IWRM strategy. Technical and planning ministries will be provided capacity reinforcement on IWRM principles.

19. In Component 2, LDCF funds will enable pastoralists to reap adaptation benefits because the climate and weather monitoring networks will be expanded to survey the Arid and Semi-Arid Lands to support drought and flood monitoring. Forecasting capacities will be reinforced to support the creation of timely drought and flood forecasts for pastoralists.

20. The project will, furthermore, build the capacities of the pastoralists on-the-ground to become more resilient to climate change by supporting pastoral focal points, traditional leaders, NGOs/CBOs to have the capacities to practice water conservation and management in Component 3. Water will be mobilized, stored and diverted to support pastoral economic and social

development. The project will build off of other donor interventions by integrating best practices and lessons learned on water infrastructure construction and erosion management. Also, as a SWALIM study has shown,¹⁷ the most appropriate technologies will be chosen according to the terrain and climatic state.

II.1.4) Additional cost reasoning

Component 1: Water resource management policies establishing clear national and district responsibilities

Baseline scenario:

21. To regulate the use of water resources, the Government of Somalia drafted a National Water Resources Law in 1984. The draft law, which was never formally endorsed by Parliament, addressed the issue of water rights. Remaining issues were addressed in the new draft Water Law of 1990. The enactment and implementation of this new Law was not complete when the old government collapsed in 1991. After 2004, international support was given to both Somaliland and Puntland to draft and enter into force water policies for their respective territories. The Water Policy of Somaliland was drafted in June 2004 by the Ministry of Water and Mineral Resources (MWMR) in collaboration with UNICEF and the Danish Government. Its purpose is to improve water availability and access in a sustainable and equitable way for all types of uses. Subsequently, Somaliland also drafted a Water Act aimed to guide water resources use and provision. Although both the Water Policy and Water Act are critical pieces of legislation for water resources, neither has been officially endorsed nor passed by Somaliland's Parliament. Similarly, the Puntland Water, Energy and Natural Resources Corporation (PSAWEN) has developed a Green Water Paper to establish a water policy. The Green Water Paper aims to guide water service development and delivery as well as institutional development. At this stage, the Green Water Paper and the input from a review process must be endorsed by parliament for it to be accepted as a white paper on Water Policy.

22. Existing water policies are required to be legitimized in Somalia. However, there is no clear and collaborative mapping for water policies, water acts and water quality standards which differ among the states. Developing a national strategic plan for IWRM which focuses on rainwater harvesting, groundwater and shallow wells was highlighted as an urgent need by SWALIM 2007.¹⁸ Somalia's NAPA (2013) also prioritised the development of IWRM as its second priority in order to ensure water access is provided to vulnerable populations and sectors. Within IWRM, there must be a link to livelihood generation and job creation in order to support Somalia's peaceful development.¹⁹

Additionality:

23. Under Component 1, LDCF funds will be used to strengthen water policy formulation in each state to provide a solid framework to conduct Integrated Water Resources Management (IWRM). IWRM's central objective is to promote efficient, equitable, and sustainable development of water resources using a strategic rather than project approach to water management. The project will support the development of a national, multi-sectoral IWRM policy to provide an enabling environment for a decentralized approach to water governance. It will act as the central mechanism to coordinate water management activities and to standardize best practices. It will also consolidate the current patchwork of sectoral water policies and plans for each state so that a prominent national strategy will be used to achieve programming coherency.

24. Due to the marginalization of pastoralist's water rights due to their lack of land tenure, pastoralist's water needs will be prioritized in this project. Pastoral water rights as defined by the traditional *Xeer* system will be updated and formalized. The role of traditional leaders who support resource conflict management will be legitimized in the appropriate decision-making structures as key actors for local governance.

25. Component 1 will also be used to enhance the curricula and programmes at vocational institutes and at universities to incorporate instruction and teachings on sustainable water resource management in the context of climate change. By improving the technical education for youth, they can serve as a pool of recruits for the understaffed ministries and district departments. A youth-focused Output expected under Component 1 will have various cross-sector benefits including increasing employment and reducing poverty.

Component 2: Transfer of technologies for enhanced climate risk monitoring and reporting on water resources in drought and flood prone areas

Baseline scenario:

¹⁷ SWALIM. Oct 2007. Water Resources of Somalia: Project Report No. W-11.

¹⁸ SWALIM, Oct 2007. Potential for Rainwater Harvesting for Somalia, Technical Report.

¹⁹ African Research Initiative for Somalia 2013, Country Report on the Millennium Development Goals (MDG Report)

26. The prolonged civil war in Somalia saw the collapse of the climate monitoring network, which had recorded data between 1963 and 1990. The data gap post 1991 makes accurate flood and drought forecasting challenging. For the past 5 years, the FAO SWALIM, IGAD ICPAC and USAID's FEWSNET initiatives have focused on improving regional forecasting for Somalia, making use of the rehabilitated network of monitoring stations in addition to stations abroad (Kenya, Djibouti). The network is still extremely sparse for the majority of Somalia with no functioning automatic weather stations (AWS) in South Central. (In contrast, 12 AWS are located in Puntland and Somaliland).

27. The Ministry of Energy and Water has the role of managing hydro-meteorological activities and monitoring at the federal level. The Ministries of Water Resources have similar roles for their respective states. None of these ministries are specialized in meteorology; however, new Climate Information / Early Warning Centres planned in the first LDCF-approved project²⁰ will aim to improve such capacities within all six states and on the national level. In terms of Disaster Risk Management (DRM), SDMA, NERAD and HADMA are the responsible agencies at the Federal level Somaliland and Puntland states respectively. SDMA has only been operational for one year. With limited institutional memory, there is limited means to promote and sustain monitoring and forecasting technologies. Furthermore, technical and operational flood and drought preparedness capacities are extremely weak in all 6 states of Somalia, with two newly formed in 2015 and 2016 respectively. The Ministries and DRM units require significant technical support to diffuse and adapt technologies. Currently, if early warning information is provided to communities, it is usually passed on in a very ad-hoc, uncoordinated manner by leaders to others through text messages or word of mouth. Due to their remoteness, the majority of pastoralists are rarely forewarned about and prepared for extreme events.

Additionality:

28. Under Component 2 weather and climate monitoring equipment will be procured and installed in Somalia's Arid and Semi-Arid Lands (ASALs). The project will provide training to technical personnel within Somalia's National Hydro-Meteorological Services (NHMS) so that they can perform required data analysis and interpretation for flood and drought forecasting purposes.

29. The project will also build strong links between the technical universities and the NHMS to support the weak government institutions working with DRM. Future graduates will be trained to operate and maintain the weather and climate monitoring networks and to perform data analysis. Collaborations between the universities and the Red Cross Climate Centre will enable monitoring and forecasting knowledge to be exchanged and technologies to be promoted. The on-going support by universities to the government-managed NHMS will facilitate knowledge and data transfer and the diffusion of technologies at scale.

30. The project will build off of FAO SWALIM's efforts in providing capacity reinforcement for the NHMS. LDCF funds will be used to improve Somalia's climate and weather services to target drought and flood forecasting products towards pastoralists. Regionally and internationally available forecasting technologies will be exploited.²¹ It will also collaborate with other projects to disseminate warnings and relevant climate / weather information to non-sedentary pastoralists such as by SMS or through traditional communication protocols.

Component 3: Improved water management and livelihood diversification for pastoralists

Baseline scenario:

31. In the context of scarce water and predicted climate change, there is a shortage of technical knowledge and capacity to apply groundwater capture and surface water mobilisation techniques in Somalia. The Water Departments have constructed numerous boreholes which have insufficient capacity and/or poor water quality and have been unable to capture wadis' periodic flows for the dry seasons.²² According to the Status of IWRM in the Arab region report, Somalia needs support in assessing its groundwater resources in addition to expanding other non-conventional water resources to meet its demand. Moreover, demand will undoubtedly increase because population growth is estimated to be at least 2.3%.²³ Water conservation measures such as water recycling and rainwater harvesting are limited in spite of technical studies demonstrating Somalia's good potential for water conservation and water harvesting.²⁴

32. In terms of Operation and Maintenance, at the local level, Water User Associations (WUAs) are involved in the management and operations of rural water supply and irrigation systems. They play an important role in conflict resolution,

²⁰ First LDCF-financed project in Somalia: Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia

²¹ IGAD's ICPAC, the Red Cross's Climate Centre, UNDP's Global Climate Risk Management Programme and regional water-related networks such as the Southern and Eastern Africa Rainwater Network (SearNet)

²² According to a survey conducted by the Ministry of Mining, Energy and Water Resources in 2012.

²³ Verner, Dorte, 2012. *Adaptation to a Changing Climate in the Arab Countries*, MENA Development Report, The World Bank

²⁴ SWALIM, Oct 2007. Potential for Rainwater Harvesting for Somalia, Technical Report.

mediation, user agreements, allocations, awareness creation, and community mobilisation. However, they suffer from poor capitalisation, limited technical skills, and skill migration to urban centres.

33. Vocational skills to ensure water sector service delivery are also almost entirely lacking in Somalia. Somalis do not have the technical knowledge to support understaffed ministries (Ministries of Water, Livestock).²⁵ As recommended by the Somaliland National Development Plan (2017 – 2021), there is a need to establish water technology institutes, water engineering faculties and water research in order to produce technical, water sector professionals.

Additionality:

34. Component 3 will focus on providing on-the-ground capacity reinforcement in addition to physical infrastructure, equipment and activities to support pastoralists to prioritise sustainable water management. Pastoral focal points and select CBOs will be tasked with assisting with small-scale infrastructure construction and rehabilitation (e.g., de-silting). Support for vocational training for pastoralists on operation and maintenance of water resource infrastructure will also be provided. Women will be targeted due to their role in water collection. In the cases where Water User Associations exist, they will be trained and tasked to decentralise training to pastoralists throughout Somalia.

35. Funds will furthermore be used to support select pastoral groups and CBOs to reseed pastures and re-fertilize pasture soils. Reseeding will prevent erosion such as gullyng and improve groundwater recharge. Re-fertilization of pasture soils with compost and locally-produced manure and organic material will increase productivity.

36. Finally, to support pastoralists to build climate resilience, on-the-pasture training on how to enhance the local value chain of livestock products will be provided. This will include demonstrating to pastoralists how to produce and store milk, yogurt, meat, cheeses and hides for personal and commercial use. By sharing expertise on the various Income Generating Activities provided through livestock rearing, the pastoralists will be able to diversify their livelihoods and build an asset base.

Building off the baseline:

37. Components 1, 2 and 3 will complement and build off of various regional and government programmes to address the above-mentioned limitations on water resources management in Somalia. Descriptions of the specific additional cost reasoning to be provided by the LDCF-financed project (to be referred to as the LDCF project) are provided below.

38. The DANIDA and GWP-funded *Integrated Drought Management Program in the Horn of Africa (IDMP HOA)*: The project will build off the innovative approaches of drought management as piloted by IDMP and will build on the capacity reinforcement for drought management. Specific adaptation benefits to be provided by the LDCF project will be the development of an overarching strategy for water resources interventions. Any drought management policies/programs to be developed by IDMP in the future will be integrated into the strategy so that water resources planning is more coherent and coordinated. Furthermore, the LDCF project will expand capacity reinforcement efforts by IDMP by providing the youth and women with technical expertise to manage and operate water systems.

39. The *Joint Programme on Local Governance and Decentralized Service Delivery (JPLG)*: The LDCF project will build on JPLG-supported findings by mobilizing and delivering water for pastoralists in a manner which optimizes the balance of central and sub-national roles to maximize water service delivery. Through Component 1 of the LDCF project, the water governance systems will be updated to legitimize the customary laws and traditional leaders involved in water management.

40. The *National Development Plan (NDP)*: The LDCF-financed project will support the NDP in developing a training strategy by 2018 for government institutions. Curriculum development on IWRM in Output 1 will enhance educational and vocational programmes. Also, the NDP will be able to build upon the training materials on rehabilitating, construction and maintaining and operating water infrastructure that will be developed through the LDCF-financed project for the Ministries of Water Resources in all states. The IWRM policy from the project will serve to coordinate any erosion and flood control plans by the NDP. Finally, the WAKM DB will store lessons learned on water resources management which will serve the NDP so that IWRM principals will be upheld for future water-related interventions. Similarly, Output 3 will support the NDP with on-the-ground activities that will improve natural resource management, resilience and pastoral production.

41. The *UN Joint Programme on Charcoal Reduction and Alternative Livelihoods*: The LDCF-financed project will support the Joint Programme by promoting sustainable planning and use of land and water resources for green economic development and by building the resilience of pastoral livelihoods so that they can exit the charcoal trade and exploit sustainable pastoral value chains to better adapt to climate change impacts. The LDCF project will reduce land and water degradation by promoting IWRM, water conservation and re-fertilization of pastoral soils. Interventions will continue after the project ends by supporting

²⁵ JPLG, April 2012. Study on Sector Functional Assessments within Education, Health and WASH in Somaliland.

community-based Water User Associations to conduct water infrastructure operation and maintenance and to learn and spread good practices via on-the-pasture training.

42. The **Red Cross / Red Crescent Climate Centre**: Updates to curricula on water management and monitoring will provide a new pool of technically-qualified graduates to populate the NHMS institutions. A Memorandum of Understanding between UNDP and the Climate Centre (CC) will be established before LDCF project implementation to support collaborations between the CC and Somali universities for educational and vocational development. The CC will work to train future graduates in data collection and forecasting. Also, the monitoring and equipment procurement as well as training will enhance regional forecasts to be developed by the Climate Centre. The LDCF project will also support the Red Cross / Red Crescent Hunger Resilience Partnership by mobilizing water with the installation of infrastructure such as sand dams and by developing forecasts that support pastoralists to adapt to climate-induced flood and dry period conditions.

II.1.5) Adaptation benefits

The LDCF-financed project will generate benefits for at least 200,000 pastoralists on the basis of providing them equitable water resources and the required capacities to manage them. Specific adaptation benefits include the following:

- Promotion of secured and equitable water resources with the development of an over-arching IWRM strategy;
- Endorsing subsidiary legal frameworks in each state to be in alignment with the national IWRM as core to adaptation strategy;
- Capacity reinforcement for the technical and planning ministries as well as relevant district departments on IWRM principles, including awareness-raising on the climate-induced impacts on water resources;
- Updating vocational training and university curricula to incorporate education on IWRM and weather data collection;
- Expansion of the climate and weather monitoring networks to survey the Arid and Semi-Arid Lands;
- Targeted training for forecasters on timely drought and flood forecasting and information dissemination for pastoralists;
- Massive awareness campaign on water conservation and management for pastoral focal points, NGOs/CBOs;
- Water mobilization, storage and diversion;
- Training for men and women on how to exploit the local value chain associated with livestock products.

II.1.6) Innovativeness, sustainability and potential for scaling up

Innovative aspects which the proposed project plans to deliver include:

- Creating an enabling environment for pastoralists to have fair water rights;
- Developing an over-arching gender-sensitive IWRM policy to achieve water resource programming coherency;
- Increasing employment opportunities for youth, including women, in water resources management;
- Building strong links between the technical universities and the NHMS to support the weak government institutions working with DRM
- Providing on-the-pasture training for pastoralists on water infrastructure / equipment Operation and Maintenance;

43. Component 1 will support the development of an IWRM policy that will guide prioritised and easily up-scaled adaptation options for water management. Through Components 1 and 3, LDCF resources will be used to provide training materials which will enable continual knowledge sharing on national and local levels. Furthermore, on the national level, funds will be used to formally educate youth, including women on IWRM and weather/climate data collection/treatment by updating academic curricula and training programmes. Trained youth can subsequently serve to provide technical support for understaffed ministries. Component 2 will similarly expand the monitoring network to enable drought and flood forecasts to be generated and targeted to pastoralists in the ASALs. Funds will also be used to build collaborations between the Somali forecasters and experienced regional forecasting units to ensure knowledge sharing. Finally, Component 3 will significantly enhance the resilience of pastoralists in the target regions of the ASALs now and in the future by providing water mobilisation. Building off the successes of the LDCF1 project, CBOs will be engaged in small-scale water and soil development activities so that best practices can be easily replicated in adjacent communities.

2. Stakeholders

Project design will include the participation of relevant stakeholders from civil society and indigenous people as described below.

Table 2.1

Stakeholder	Expected Role
-------------	---------------

Stakeholder	Expected Role
Office of Environment in the Office of the Prime Minister, Federal Republic of Somalia	The Office of Environment has the mandate to develop Somalia's natural resources in a responsible and sustainable manner. The Office of Environment acts as the focal point for the Global Environment Facility (GEF) and UN Convention on Climate Change. For the proposed project, the OE will be the national level lead agency for the project and will have the overall responsibility for achieving the project goal and objectives. It will have a joint role with UNDP for coordination and oversight.
Ministries of Water Resources in Federal Member States and Somaliland	The Ministries of Water Resources are responsible for water resources management, developing sector policies, implementing regulatory functions, coordinating sector activities and implementing an integrated water resources management plan. These ministries will be engaged to support the development of the National IWRM policy and to update existing Water Acts and Water Policies to be aligned with the overall strategy. They will also be responsible for all water resource development activities funded by LDCF.
Ministries of Health	The Ministries of Health in all states will be tasked to ensure that project interventions such as well abstraction support good water quality.
Ministries of Livestock	The Ministries of Livestock in each state will be heavily implicated in any decision-making on the placement of water points and other water management infrastructure for pastoralists.
Ministries of Planning	The Federal Ministry of Planning and International Cooperation, along with Ministries of Planning in Puntland and Somaliland will be responsible for mobilizing resources to support continual IWRM.
Ministries of Women	Women will be prioritized in the project due to their important role in collecting water in Somali society.
Disaster Management Agencies	The Somali Disaster Management Agency (SDMA) at the federal level will be provided technical support to produce drought and flood forecasts for pastoralists in Component 2. Similar support will be provided to the National Environment and Research and Disaster Preparedness and Management Authority (NERAD), Somaliland, and the Humanitarian Affairs and Disaster Management Agency (HADMA), Puntland.
Local Government: Governor and Councils	Local government representatives will coordinate and implement projects at the district level and will help to channel communication between communities and the project. Community based warning water management structures such as Water User Associations will be trained at the local level.
UN Agencies	Given their expertise FAO will support IWRM and the expansion of the climate / weather monitoring network in the ASALs.
Civil Society and Community Based Organizations	LDCF funds will be used to develop criteria for award of sub-contracts to CBOs for the implementation of small water infrastructure construction, rehabilitation, re-seeding and re-fertilization activities under Component 3.
Communities (traditional leaders, pastoralists, youth groups, CBOs)	For each selected pilot project, as well as for larger programmatic interventions, a comprehensive mapping of community stakeholders will be undertaken to ensure participation of all stakeholders at the grassroots level. As LDCF funds will be used to legitimize traditional leaders involved in water-management, these leaders will play a key part in resource conflict prevention and peace-building.
Educational Institutions	Universities, colleges and research institutes will be engaged for collaboration and knowledge generation to advocate for the inclusion of IWRM into their curricula.
Private sector	The private sector, particularly related to the livestock industry and water supply will play an important in creating opportunities for employment through value-chain improvements.
Media	Partnering with various media outlets will assist in Awareness Raising on IWRM, which is included as an activity in Components 1 and 3.

3. Gender considerations

44. Women play a crucial role in water provision in Somalia, as they are the ones who are responsible for fetching water. In particular, women traditionally play a strong role in water markets, and are active as shareholders in some of the water companies active in Puntland and Somaliland. Due to their importance, gender mainstreaming has been ensured in several aspects of this project. The National IWRM policy to be developed will be gender-sensitive. All training will be targeted to at least 30% women on national and local levels in accordance with UNDP's Somalia Gender Equality and Women's Empowerment Strategy (2015 – 2017) and UNDP's Gender Equality Strategy (GES) (2014 – 2017). Furthermore, training on water infrastructure Operation and Maintenance and the value chain of livestock products will be geared towards women.

45. Creating opportunities for Somalia's youth will also be a priority for the project. This is especially critical in Somalia because close to 70% of Somalia's youth are unemployed. Youth will become empowered with water management and

weather/climate data collection knowledge thanks to updates to educational curricula and vocational training programmes. The educational programmes will enable Somalia’s youth to be directly recruited to serve the understaffed ministries. Similarly, the youth will be trained to perform operation and maintenance on water infrastructure.

4. Risks

Table 4.1

Risk	Rating	Risk Mitigation Measure
Low level of cooperation between executing institutions due to political divisions and the existence of distinct states in Somalia	Medium	Management arrangements will be clear with the Ministry of Petroleum, Minerals and the Environment responsible for the Project Implementation Team. Each state will have a Project Officer who will be in charge of activity implementation on a day to day basis. Programme outcomes will be maximized by having three clear Regional Committees (led by the zonal Project Officer) which will include relevant government representatives, district officers and NGO/CBO representatives for each state. Furthermore, to unify water management responses, one federal IWRM policy will be generated.
Security risks	Medium	The target areas will be well chosen based on the criteria of having a stable security situation. To ensure security, the project will work through local NGOs/CBOs, who have experience in project implementation. Similar to the NAPA and LDCF1 preparation, project implementation will ensure that customary dispute resolution mechanisms are used to resolve any conflicts. Based on the successes of the LDCF1 project, project implementation will also ensure an inclusive, participatory approach involving all key stakeholders including women and youth.
Limited climate monitoring inhibits forecasting capabilities	Low	Since national forecasting capacities are absent in Somalia, regional forecasting products will be exploited. The drought and flood forecasts will be targeted to pastoralists in the ASALs through collaborations with FAO and the Red Cross Climate Centre.
Lack of nationally-available expertise and human resources	Medium	Universities will be supported to introduce IWRM into existing degree programmes so that students can be trained in the most up-to-date relevant water management practices relative to their respective discipline. The issue of the unavailability of requisite human resources will also be mitigated by recruitment of foremost national experts and subsequently international experts (with preference given to those of Somali origin) who will work closely with in-country counterparts.
Increase in the frequency of flood events and continued drought	Medium	The project will take into account region-specific current climatic variability in the selection of water management practices. Water storage will be provided in the event that additional drought events occur. Furthermore, the project will support pastoralists, including women, to build resilience by diversifying their livelihoods.
Targeted pastoralists are sceptical and unwilling to exploit livestock products	Low	In Component 3, LDCF funds will be used to provide on-the-pasture field demonstration sites. These sites will provide extensive training on how to exploit the value chain of livestock goods such as production of milk, yogurts and cheeses for both men and women.
Insufficient technical and operational capacity on all levels	Medium	In Component 1 an IWRM policy will be developed to guide water management activities. It will act as the overarching strategy to achieve programming coherency. LDCF funds will also be used to provide significant training for the ministries, district governments and local communities on IWRM.

5. Coordination

Various donors are actively supporting Somalia to improve drought management and water supply. Some regional initiatives also aim to improve food production and security. The LDCF-financed project will coordinate with all such initiatives described below:

- The first LDCF-financed project (LDCF1), *Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia* (USD 8 m, 2014 – 2018, financed by GEF, LDCF1): The LDCF-financed project will have a strong coordination with LDCF1 which has had many successes since the beginning of activity implementation in 2015. These successes will be incorporated into the design of the LDCF1 project such as with sand dam construction, training on CCA and with rangeland rehabilitation. To date, four Disaster Management and Contingency plans have been drafted for four Northwest regions of Somalia covering sixteen districts. District DRM committees were also established and trained, with a minimum of 30% women

participation in each target zone. Four workshops on climate change impacts and adaptation strategies were also conducted in Jowhar, Afgooye, Balanbale and Guriel districts in south and central Somalia in collaboration with local governments between 2 to 21 Dec 2015. A national curriculum for university level education on climate change adaptation has also been developed with the support of Hydroc GmbH. A total of 30 faculty members from different universities of Somalia in three locations of Somalia (Mogadishu, Garowe and Haregesia) have been trained on the curriculum. The curriculum has been developed at international standards and will be tested at the Somali National University (SNU) in 2017 and 2018. The curriculum updates will be critical to increasing the availability of fresh, technically-savvy graduates, knowledgeable on the field of climate change. In terms of capacity building under LDCF1, 57 Somali government officials were trained on Policies and Practices for Climate Change Adaptation (PP4CCA) to give them the capacities to address core issues and challenges in implementing adaptation response strategies at the national and local levels. The training was held following a South-South Cooperation at the Kenya Forestry Research Institute (KEFRI). Another 46 officials benefitted from in-country training on the concepts and approaches for adaptation to climate change. The project also helped Somalia's inclusion within the Intergovernmental Agency for Development's (IGAD) Regional Climate Change Strategy.

- On a local level, within the first years of LDCF1, a total of 160 women from local communities were trained on integrative farming techniques, water management and small-scale businesses on adaptive technologies. In terms of concrete measures financed by LDCF1, thus far one sub-surface dam (sand dam) was completed in Puntland state and three water diversions for sub-surface water storage were completed in three targeted districts (Gardho, Dangoryo, & Burtinle) of Puntland to mitigate the impacts of floods and droughts. Hundreds of check dams, soil and stone bunds were constructed in Somaliland for water and soil conservation with participation from the local communities and the Somaliland Ministry of Environment and Rural Development. Feasibility studies and detailed designs were also completed in 4 Districts (Afgoye, Jowhar, Guricel, & Balanbale) of Southern and Central regions of Somalia and an innovative sand dam was constructed (see Section 3.3). Furthermore, two grazing reserves were rehabilitated in Somaliland with the implementation of an integrated soil and water conservation measures, such as, small check dams, soil bunds and integrative farming/fodder production techniques.

- The *Drought Resilience and Sustainable Livelihoods Programme in the Horn of Africa (DRSLP II)*, (USD 22.5m, 2013-2021, funded by the AfDB) which is aimed at building resilience and sustainable livelihoods for pastoral and agro-pastoral communities in drought-prone areas of Somalia. The DRSLP project will take place in all states with specific districts and locations for water infrastructure to be determined. The proposed project will identify complimentary districts to those of DRSLP. Only 1 of the 3 objectives is focused on water. This Objective 1 will aim to increase water availability for agro-pastoralists. (The other 2 objectives focus on i) market access, animal health and livestock management and ii) building capacities in agro-pastoral production and for the Ministries of Agriculture and Livestock.) Capacity building from Component 1 of the LDCF-financed project will support the designs of surface water schemes and groundwater development so that they are in alignment with the overriding IWRM policy and IWRM plans for the country. Training materials on water resources management from Components 1 and 3 to be incorporated into a newly developed Water Resources Knowledge Management Database (WARKM DB) will be developed and shared with DRSLP to facilitate water and infrastructure operation and maintenance for complementary districts.

- The *Somalia Water and Land Information Management (SWALIM)* service (USD 1.8m, funded by EU, implemented by FAO, currently in Phase V, 2013-2018): This service manages meteorological monitoring stations and gathers weather and climate data as well as data on land and water resources throughout Somalia. FAO is responsible to act as a data centre supporting each ministry's mandate and to provide capacity development. Thus far, they have provided focalized support to the Ministry of Energy and Water (MEW), representing the interests of Federal Somalia, in South Central; the Ministry of Mining, Energy and Water Resources (MMEWR) in Somaliland; and the Puntland State Agency of Water, Energy and Natural Resources (PSAWEN). SWALIM also supports the DRM institutions in each state including SDMA (South Central), NERAD (Somaliland) and HADMA (Puntland). The LDCF-financed project will further extend the data collection networks in Somalia's ASALs. In collaboration with SWALIM's efforts, capacity building for the National Hydro-Meteorological Services (Ministries of Water, Disaster Risk Management Units) in each state will improve flood warning and drought management with an emphasis on getting warnings to pastoralists. The project will also enhance SWALIM's work by empowering youth, women and traditional leaders with technical water management knowledge so that they can serve to manage any data collection and flood – drought warning activities.

- The *MDG initiative for Somalia- Reducing hunger and food insecurity in the Puntland region through improved and sustainable use of rangeland resources* (USD 34m, 2013-2019, funded by the EU);

- IGAD's *Hydrological Cycle Observing System (HYCOS)* project under the *In-land Water Resource Management Programme (INWRMP)*;

- The *IGAD Climate Prediction and Applications Centre (ICPAC)*;

- The *International Labour Organization* which is promoting Soil and Water Conservation methods; and

- The *United Nation's Children Fund (UNICEF)* which promotes Water Supply, Sanitation and Hygiene (WASH).

6. Consistency of the project with national strategies and plans

46. The proposed project directly responds to the second priority identified in Somalia's *National Adaptation Plan of Action (NAPA)*, which identifies the need for the protection of water resources through integrated and strategic approaches. Specifically, the project aligns itself with Programme Area 2: Integrated Water Resources Management to Ensure Water Access is provided to Vulnerable Populations and Sectors. All project components are also aligned with the three broad NAPA programming areas including: a) Sustainable Land Management; b) Watershed Management and Development; and, c) Disasters Management.

47. The project will also satisfy UN conventions which Somalia recently took the step to ratify in 2012. The conventions, including the UNFCCC, the Convention on Biodiversity, the UNCCD and the Kyoto Protocol will be supported by providing sustainable water management, reforestation and re-seeding measures. Additionally, with UNDP acting as the Executing Agency, they will have a strong interest in aligning project interventions with the National Action Programme (NAP) on Desertification which they are currently drafting in collaboration with UNEP. A MoU between GWP and UNDP has also been signed to strengthen the NAP Global Support Program. Similarly, UNDP and FAO jointly support the national process for developing a National Biodiversity Strategy and Action Plan.

48. The project is highly aligned with the recent **National Development Plan (NDP) (2017 – 2020)**²⁶ developed by the Ministry of Planning and International Cooperation (MOPIC) with the support of UN agencies. The Plan aligns programs and projects that are related to Natural Resources Management, Water, Livestock, Planning and Land Use. The LDCF-financed project supports targets as defined in the NDP for increasing livestock productivity as well as improving natural resources management, disaster management and food security. As evidenced by the cofinancing provided by the NDP for this project, Somalia has been active in mobilizing internal and external funding resources to improve food security under the New Deal Compact and now the National Development Plan (2017 – 2020).

49. The project is also aligned with the *Somalia Integrated Strategic Framework (ISF)* (2014 – 2017) developed by UN Somalia. A key priority UN initiative with which the project is aligned includes developing water management programmes and plans for rural water supply. The ISF also emphasizes constructing, rehabilitating and maintaining flood control infrastructure. The project is furthermore aligned with the *Somaliland Food and Water Security Strategy* (FWSS) of 2012 which emphasizes supporting the productive sectors (in this case pastoralism) by broadening the economic base and creating employment.

50. The project is also aligned with all key country legal frameworks. It supports the new 2012 *Constitution* which places a strong emphasis on environment, land rights and natural resources. Similarly, the project is aligned with Somaliland's Constitution which emphasizes "*protection and safeguarding of the environment [and...] the care of natural resources*" as well as the Puntland's Constitution which enshrines the restoration and protection of the environment. Furthermore, the project is fully aligned with Somalia's '*Six Pillar Policy*' which mandates i) enacting laws that preserve and protect the environment and ii) incorporating environmental education in the formal and informal education systems in the country.

51. Another key national policy with which the proposed project is aligned is **Somaliland's National Development Plan (NDP)** (2017-2021) and **Puntland's 5-year Development Plan** (2014 – 2018) by focusing on improving climate-informed water management. The Somalia and Somaliland NDPs and the 5-year Development Plan are timely opportunities for the proposed project to make meaningful steps in building climate resilience for rural populations, in collaboration with humanitarian and peace-building interventions (see New Way of Working below).

52. The DRM aspects of the LDCF-financed project are also aligned with **Somalia's Guiding Framework for Disaster Management (2016-2018)** by aiming to "substantially [increase] the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030." The LDCF2 project will be in alignment via Component 2 by improving climate monitoring and seasonal forecast preparation and via Component 3 by rejuvenating water reservoirs and canals in drought-prone areas.

53. The Project furthermore supports the **Sustainable Development Goals (SDGs)**. In January 2016, the Ministry of Planning and International Cooperation (MOPIC) held an introductory consultation meeting in Mogadishu to discuss the SDGs. The meeting, supported by UNDP was held at the Jazeera hotel, which was badly damaged in a terrorist attack in 2016, demonstrating Somalia's resilience and dedication to development. Somalia is focusing on its role with the SDGs, and what the government at all levels can do to the meet the goals while supporting its people in the most effective manner.

54. Finally, the project supports Somalia in aligning with the **New Way of Working**. This collaborative agreement, led by the UN Somalia Country Office and Humanitarian teams, aims to strengthen the humanitarian-development nexus with the goal of ending needs while reducing risks and vulnerability to climate change. This is particularly critical after the devastating impacts of the recent drought that caused acute food insecurity for over 3 million rural Somalis.²⁷ In the **New Way of Thinking**, adaptation

²⁶ Federal Government of Somalia (FGS) National Development Plan (SNDP) – Towards Recovery, Democracy and Prosperity 2017 – 2019. October 2016

²⁷ FSNAU and FEWSNET Technical Release 2 Feb 2017. Risk of Famine Increases in Somalia.

priorities required to be scaled up have been identified by national counterparts and community representatives. These priorities have been integrated into the list of adaptation measures enumerated in this document. The **New Way of Working** approach links national priorities to advance the SDGs and supports flexible and predictable multi-year programming that aligns funding cycles between donors, humanitarian and development actors to enable long-term adaptation programmes to take place coherently with other short-term programmes.

7. Knowledge Management


55. Output 1.6 includes the development of Water Resources Knowledge Management database (WARKM DB) which will serve various purposes including storage of educational materials on water resources management for both vocational and university level studies. The database will also serve to document the locations and technical details of hydro-meteorological monitoring equipment and water infrastructure. Furthermore, the database will be used to store awareness and training material for pastoralists which can be recycled and applied to other agro-pastoral projects and planned water interventions. Material on water conservation and management measures and operation and maintenance of water resource infrastructure will be stored. The database will essentially be a platform to share experiences and expertise on IWRM with stakeholders and will act as a centralized collection of all technical water resource plans, designs, infrastructure and equipment. Future projects and initiatives will be able to build off the lessons learned provided by the database when upscaling and expanding IWRM throughout Somalia.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement²⁸ of GEF Operational Focal Point (S) on Behalf of the Government(s): (Attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Jabril Mahamud Geddi	Deputy Director General, Directorate of Environment/GEF OFP	OFFICE OF THE PRIME MINISTER	20 DECEMBER 2014

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies²⁹ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.					
Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu, Executive Coordinator, UNDP-GEF		07/24/2017	Tom Twining-Ward	+90 5396532807	tom.twining-ward@undp.org

²⁸ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

²⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF