



Part I: Project Information

GEF ID

11008

Project Type

FSP

Type of Trust Fund

LDCF

CBIT/NGI

CBIT **No**

NGI **No**

Project Title

African Climate Risk Insurance Facility-Derisking Adaptation to Climate Change in Africa

Countries

Regional

Agency(ies)

AfDB

Other Executing Partner(s)

Regional Components - African Development Bank Comoros - General Directorate of Civil Security Djibouti - Ministry of Finance Somalia - Somalia Disaster Management Agency South Sudan - Ministry of Humanitarian Affairs and Disaster Management

Executing Partner Type

Government

GEF Focal Area

Climate Change

Sector

Mixed & Others

Taxonomy

Focal Areas, Climate Change, Climate Change Adaptation, Least Developed Countries, Disaster risk management, National Adaptation Plan, Innovation, Climate information, Climate finance, Influencing models, Transform policy and regulatory environments, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Stakeholders, Type of Engagement, Information Dissemination, Local Communities, Communications, Awareness Raising, Beneficiaries, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Gender results areas, Knowledge Generation and Exchange, Access to benefits and services, Capacity, Knowledge and Research, Learning, Capacity Development, Knowledge Generation, Knowledge Exchange

Rio Markers**Climate Change Mitigation**

No Contribution 0

Climate Change Adaptation

Principal Objective 2

Biodiversity**Land Degradation****Submission Date**

6/22/2023

Expected Implementation Start

5/1/2024

Expected Completion Date

8/31/2023

Duration

60In Months

Agency Fee(\$)

840,432.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	Climate Change	LDCF	8,940,768.00	22,525,666.00
Total Project Cost(\$)			8,940,768.00	22,525,666.00

B. Project description summary

Project Objective

To establish the African Climate Risk Insurance Facility (ACRIF) to promote climate risk insurance as a viable instrument of improving climate risk management, strengthening adaptation, and addressing fragility on the African continent

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co- Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Setting the enabling environment for the adoption of climate risk financing instruments in African LDCs	Technical Assistance	<p>Outcome 1.1: Strengthen understanding of climate risk exposure of African LDCs and establishment of institutional climate risk management processes and frameworks needed to be put in place to facilitate enhanced recovery from climate shocks</p> <p>Outcome 1.2: Enhanced understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in African LDCs (Governments , insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)</p>	<p>Output 1.1.1: Gender sensitive climate risk profiles independently elaborated by each participating country every year</p> <p>Output 1.1.2: National climate risk response and contingency plans developed</p> <p>Output 1.1.3: Sex-disaggregated data on people affected by climate hazards produced</p> <p>Output 1.1.4: Estimates of the potential gender disaggregated social and financial impacts of climate hazards in each participating country</p>	LDC F	3,446,768.00	2,382,196.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
		Outcome 1.3: Enhanced capacity of African LDCs to mobilize sustainable financial resources for climate risk management and adaptation through the design and implementation of Disaster Risk Financing (DRF) strategies	<p>Output 1.1.5: National Capacity enhanced on climate data collection, processing and climate risk modelling</p> <p>Output 1.2.1: Regional Capacity on climate risk management strengthened through peer learning platforms</p> <p>Output 1.2.2: Mapping of and feasibility studies of private sector or participation in providing private climate risk insurance products at the national level</p> <p>Output 1.3.1: Gender sensitive disaster risk financing strategies developed and</p>			

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

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Improving uptake of climate and disaster risk financing in Africa	Investment	<p>Outcome 2.1: Strengthened participation of African LDCs in the Sovereign regional risk pool offered by the African Risk Capacity</p> <p>Outcome 2.2: Enhanced capacity of African LDCs to mobilize sustainable financial resources for climate risk management and adaptation through the design and implementation of Disaster Risk Financing (DRF) strategies</p> <p>Outcome 2.3: Exposure to climate risks for marginalized groups is reduced, and they benefit from recovery during extreme climate events</p>	<p>Output 2.1.1: Sovereign insurance Guarantee Facility established</p> <p>Output 2.1.2: At least one LDC supported through the Guarantee Facility every year</p> <p>Output 2.1.3: African Risk Capacity insurance Policies supported</p>	LDC F	4,000,000.00	13,040,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Strengthening Adaptation and Resilience of African LDCs against climate risks	Investment	Outcome 3.1: Enhanced capacity and skills of African LDCs in collecting and managing data that is critical for climate risk management, and improve communication and dissemination of climate risk management practices.	<p>Output 3.1.1: Stakeholders from national to regional and local levels informed, sensitized, and trained on the issue of adaptation and resilience, including insurance as a viable tool for adaptation.</p> <p>(Government, Parliament, Civil Society, Private Sector, Academics and Local community).</p> <p>Output 3.1.2: Weather stations constructed/rehabilitated in targeted countries</p>	LDCF	1,060,000.00	3,257,010.00
Sub Total (\$)					8,506,768.00	18,679,206.00
Project Management Cost (PMC)						
LDCF			434,000.00			3,846,460.00

Project Management Cost (PMC)

Sub Total(\$)	434,000.00	3,846,460.00
Total Project Cost(\$)	8,940,768.00	22,525,666.00

Please provide justification

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(\$)
GEF Agency	African Development Bank	Grant	Investment mobilized	6,800,000.00
GEF Agency	African Development Bank	Grant	Investment mobilized	14,551,965.00
Recipient Country Government	Somalia (Somalia Disaster Management Agency)	In-kind	Investment mobilized	429,550.00
Recipient Country Government	Djibouti (Ministry of Finance)	In-kind	Investment mobilized	429,550.00
Recipient Country Government	Comoros (General Directorate of Civil Security)	In-kind	Investment mobilized	204,601.00
Recipient Country Government	South Sudan (Ministry of Humanitarian Affairs and Disaster Management)	In-kind	Investment mobilized	110,000.00
Total Co-Financing(\$)				22,525,666.00

Describe how any "Investment Mobilized" was identified

The co-financing presented is from the baseline project of the African Development Bank, "Africa Disaster Risk Financing (ADRFi) Programme" and ADF-16: 1. \$6,800,000 from the ADRFi Multi-Donor Trust Fund (MDTF), capitalized by the governments of Switzerland, the United Kingdom, the United States of America, and Canada, which aims at fostering the adoption of sovereign risk transfer mechanisms as a viable solution to strengthen the financial resilience of African countries against climate-induced disasters. To date the ADRFi MDTF has been capitalized to the tune of \$50,000,000 and it is expected to increase as more donors join the trust fund or the existing donors make additional contributions. 2. UA 6,500,000 (equivalent to \$8, 755, 565) from the 16th replenishment of the African Development Fund (ADF-16). This is the contribution of the African Development Bank's contribution to the programme from its core resources. In addition, the African Development Bank is currently in the process of establishing a Climate Action Window (CAW) under the 16th replenishment of its African Development Fund (ADF), a climate change set aside currently being targeted to address the incremental costs of climate change in African countries. Climate risk management is viewed by the African Development Bank as an important window for investment and it is envisioned that additional resources will be mobilized for this project during the implementation phase. The amount of investment mobilized targeted from this source is currently

estimated at \$10,000,000. Additionally, the governments of Somalia, Djibouti, Comoros, and South Sudan are providing additional in-kind support required for ACRIF. This includes staff time, offices, etc.

Regional	Somalia	Djibouti	Comoros	South Sudan	Total (USD)	4,895,768	9,020,580	5,147,075	4,296,611
						2,310,000			

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
AfDB	LDC F	Regional	Climate Change	NA	8,940,768	840,432	9,781,200.00
Total Grant Resources(\$)					8,940,768.00	840,432.00	9,781,200.00

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 **true**

PPG Amount (\$)
200,000

PPG Agency Fee (\$)
18,800

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
AfDB	LDC F	Africa	Climate Change	NA	200,000	18,800	218,800.00
Total Project Costs(\$)					200,000.00	18,800.00	218,800.00

Meta Information - LDCF

LDCF true
SCCF-B (Window B) on technology transfer false
SCCF-A (Window-A) on climate Change adaptation false

Is this project LDCF SCCF challenge program?
false

This Project involves at least one small island developing State(SIDS). true

This Project involves at least one fragile and conflict affected state. true

This Project will provide direct adaptation benefits to the private sector. true

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs). false

This Project has an urban focus. false

This Project covers the following sector(s)[the total should be 100%]:*

Agriculture	0.00%
Natural resources management	0.00%
Climate information services	0.00%
Coastal zone management	0.00%
Water resources management	0.00%
Disaster risk management	100.00%
Other infrastructure	0.00%
Health	0.00%
Other (Please specify:)	0.00%
Total	100%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise true

Change in mean temperature true

Increased climatic variability true

Natural hazards false

Land degradation false

Coastal and/or Coral reef degradation true

Groundwater quality/quantity false

Core Indicators - LDCF

CORE INDICATOR 1

Total

Male

Female

% for Women

Total number of direct beneficiaries

0

0

0

0%

CORE INDICATOR 2

Area of land managed for climate resilience (ha)

0.00

CORE INDICATOR 3

Total no. of policies/plans that will mainstream climate resilience

8

CORE INDICATOR 4

Male

Female

% for Women

Total number of people trained

1,400

700

700

50.00%

To calculate the core indicators, please refer to [Results Guidance](#)

OBJECTIVE 1

Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaption

OUTCOME 1.1

Technologies and innovative solutions piloted or deployed to reduce climate-related risks and / or enhance resilience



[View](#)

OUTCOME 1.2

Innovative financial instruments and investment models enabled or introduced to enhance climate resilience

View

OBJECTIVE 2

Mainstream climate change adaption and resilience for systemic impact

OUTCOME 2.1

Strengthened cross-sectoral mechanisms to mainstream climate adaption and resilience

View

OUTCOME 2.2

Adaptation considerations mainstreamed into investments

View

OUTCOME 2.3

Institutional and human capacities strengthened to identify and implement adaptation measures

View

OBJECTIVE 3

Foster enabling conditions for effective and integrated climate change adaption

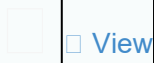
OUTCOME 3.1

Climate-resilient planning enabled by stronger climate information decision-support services, and other relevant analysis, as a support to NAP process and/or for enabling activities in response to COP guidance



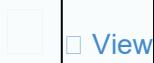
OUTCOME 3.2

Increased ability of country to access and/or manage climate finance or other relevant, largescale, pragmatic investment, as a support to NAP process and/or for enabling activities in response to COP guidance



OUTCOME 3.3

Institutional and human capacities strengthened to identify and implement adaptation measures as a support to NAP process and/or for enabling activities in response to COP guidance



Part II. Project Justification

1a. Project Description

he program has been slightly updated since the concept note / Project Identification Form (PIF). In particular:

1. **The PIF did not contain country selection.** During stakeholder consultations, four countries were selected based on needs, interest, and available co-financing. These are Comoros, Djibouti, Somalia, and South Sudan. The four countries are exposed severely to weather and natural events and have suffered a number of natural disasters and calamities. Comoros is vulnerable to flood often due to tropical cyclones (it was estimated in 2015 that flood and tropical cyclones represent 34% and 58% of Comoros' economic losses, respectively^[1]), and there is water scarcity that further affects the population and small farmers. Somalia has suffered a series of drought events and flooding, that coupled with war and terrorism, commodity prices and locusts, have resulted in famine and food crises. Djibouti is vulnerable to drought and flood, as well as South Sudan. This last also experiences significant difficulties due to the large number of refugees and Internally Displaced Persons(IDPs). Additionally, the four countries are priority for the African Development Bank and key countries for the ADRiFi programme and other interventions, such as the African Development Bank's regional Programme to Build Resilience for Food and Nutrition Security in the Horn of Africa (BREFONS).
 2. **Funding for adaptation and resilience (Component 3: Equipment and Facilities) has been reduced,** as stakeholders expressed the need for better coordination and capacity to manage the existing investments. The program emphasizes the institutional/ soft setup of disaster risk financing and disaster risk management, with reduced emphasis on investments. Furthermore, it is envisioned that in year 4, the portion of the grant invested in the establishing the guarantee facility will be made available to the participating countries for concrete adaptation activities, which will be identified and assessed during programme implementation, according to emerging needs.
 3. **Component 1 and 2 activities targeting the private sector insurance market has been scaled back,** as a reflection of immature or quasi-inexistent private sector insurance markets in the selected countries. Stakeholder consultations showed that direct interactions with private sector insurance stakeholders in the selected countries would be beneficial, so Component 1 still contains activities supporting insurance market policies at national level in some instances. The main activities to be undertaken involve mapping and feasibility studies of private sector markets in the respective countries, to examine what options are available.
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4. **The amounts and composition of available co-financing has been updated** to reflect the main beneficiary countries and their available financial resources at the time of this request. Estimates made at the PIF stage were only preliminary estimates, and this was made before specific countries were selected. Co-financing reflects the availability of resources for these specific countries.

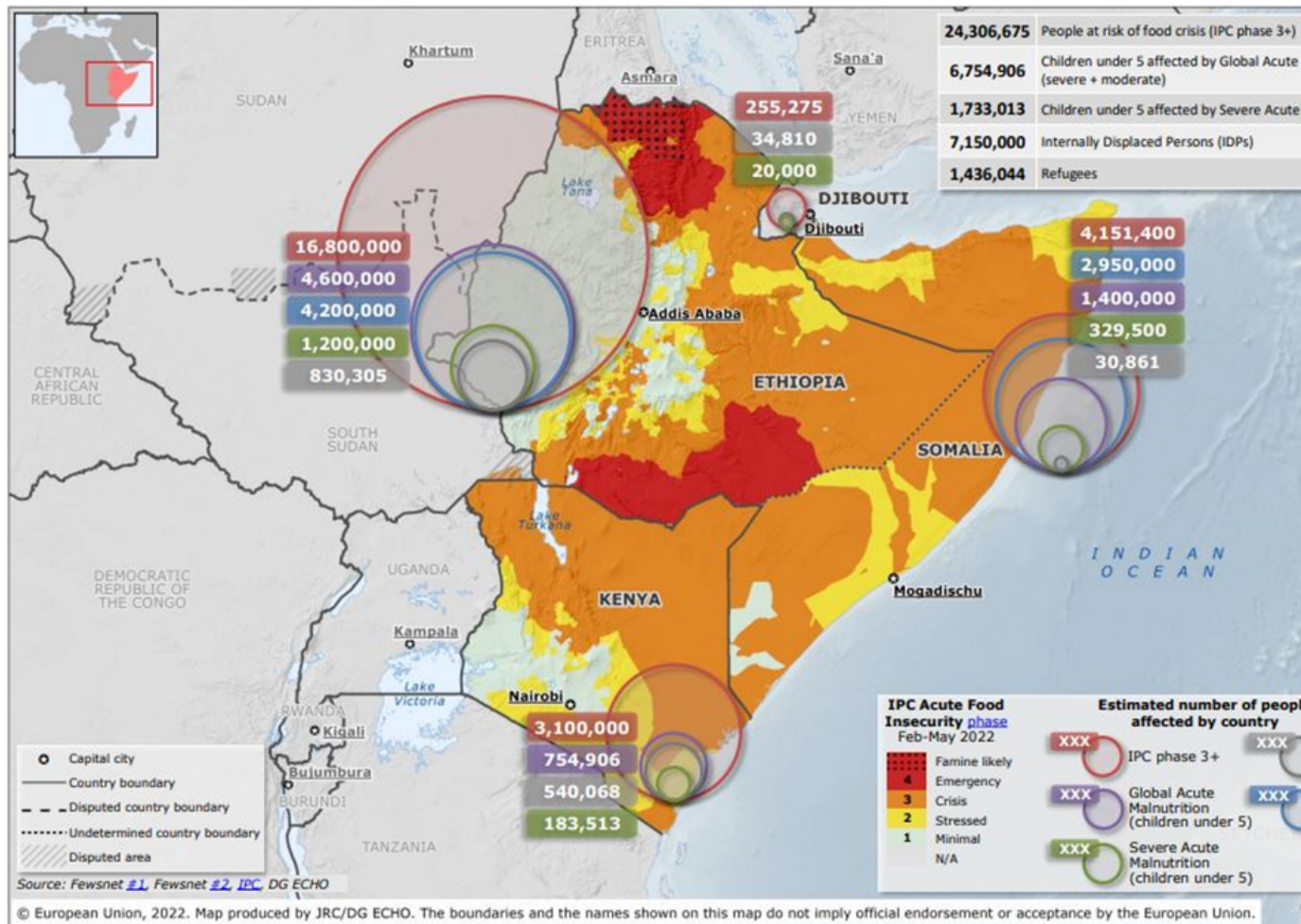
The internal composition of funding resources has been changed from the PIF to reflect the availability of resources. GEF funding is now focused on components 1 and 2. ADF-16 funding is allocated to specific countries, and so can only be used for activities in these countries, while ADRIFI MDTF funding is wholly allocated to Component 2. Component 3 funding has been reduced (see above), and most of the co-financing is now used for component 2. Some activities, such as gender sensitive

[1] <https://pure.iiasa.ac.at/id/eprint/11648/1/XO-15-008.pdf>

i) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

The Greater Horn of Africa (HoA) along with Comoros are among the poorest economies in Africa as the result of an extended sequence of both natural and human-induced events that resulted in a series of economic shocks. The Greater Horn of Africa is subject to severe droughts and other climate related events that are just exacerbating the situation and cause economic distress. Communities in the Horn of Africa are facing the threat of starvation following four consecutive failed rainy seasons in parts of Ethiopia, Kenya and Somalia, a climatic event not seen in at least 40 years. The October-December 2020, March-May 2021, October-December 2021 and March-May 2022 seasons were all marred by below-average rainfall, leaving large swathes of Somalia, southern and south-eastern Ethiopia, and northern and eastern Kenya facing the most prolonged drought in recent history. The March-May 2022 rainy season was the driest on record in the last 70 years?making the 2020-2022 surpass the horrific droughts in both 2010-2011 and 2016-2017 in duration and severity?and early forecasts indicate that the October-December 2023 rainy season is also likely to fail. At least 9.5 million livestock?which pastoralist families rely upon for sustenance and livelihoods?have died across the region including about 3 million in Somalia[1]. Comoros, on the other hand, is subject to flooding as a result of tropical cyclone.

[1] <https://www.fanabc.com/english/un-says-over-9-5mln-livestock-died-across-drought-affected-hoa-region/>



Map 1: Horn of Africa I Food insecurity and population displacement

Source: ECHO (16/03/2022)[1]

[1] 20230310_acaps_briefing_note_drought_in_djibouti_0.pdf

Historical data indicate that drought was the cause of most deaths and economic losses (with women being particularly exposed)[1]. Empirical data show that severe drought events cause about 3% GDP loss on average across sub-Saharan Africa. In 2017 alone, natural disasters cost over 712 million USD to sub-Saharan Africa. A 2017 report from the United Nations Development Program estimated that by 2040, the economic cost of climate change in Comoros could reach 1% of GDP annually, underlining the urgent need for effective disaster risk management strategies. And projections are not reassuring. Based on World Bank estimates, mean temperatures in the HOA are rising, as well the variability of extreme climate phenomena. All of these, coupled with exogenous or related events such as wars, epidemics, and pandemics, inflation, and food crises, can all lead to severe distress and further human and economic losses, as well as significant changes in the geography of HOA and Comoros. According to United Nations High Commission for Refugees (UNHCR), for example, an annual average of 21.5 million people have been forcibly displaced by weather-related events such as floods,

storms, wildfires and extreme temperatures ? since 2008. These numbers are expected to surge in coming decades with forecasts from international thinktank the Institute for Economics and Peace (IEP) predicting that 1.2 billion people could be displaced globally by 2050 due to climate change and natural disasters.

[1] Drought Day at UNCCD's 15th Conference of Parties (COP15, 9-20 May in Abidjan, Cote d'Ivoire)

In 2023, Somalia has been grappling with a series of interconnected crises. A severe drought, one of the worst in decades, has caused widespread displacement, livestock deaths, and a severe shortage of food and water. Simultaneously, heavy rains have led to flash floods and increased risk of riverine flooding, affecting both host communities and internally displaced persons (IDP) settlements. These natural disasters have exacerbated issues like malnutrition, livestock losses, cholera outbreaks, and infrastructure damage. The loss of livelihoods and assets has left people more vulnerable, hampering their recovery potential. An assessment of the Integrated Food Security Phase Classification (IPC) reveals that around 6.5 million Somalis face acute food insecurity, with up to 223,000 in catastrophe. Moreover, 1.8 million children are at risk of acute malnutrition, while over 100,000 individuals have been displaced due to recent flooding. Ongoing clashes in the Sool region and displacement due to natural hazards have reached a staggering total of 1.8 million by March 2023, with people seeking refuge in cities and neighboring countries, struggling with poor living conditions and limited access to essential services.

The existing predicament in Somalia underscores significant gaps in both pre-event (ex-ante) and post-event (ex-post) disaster management. While humanitarian efforts have curtailed the severity of the calamity, the absence of a comprehensive disaster risk financing and insurance strategies hinders effective mitigation and response to such catastrophes. Implementing measures such as enhanced disaster preparedness, robust early warning systems, and community resilience initiatives would play a pivotal role in bridging these gaps. These actions can enhance overall disaster resilience and facilitate a more proactive and efficient disaster response framework.

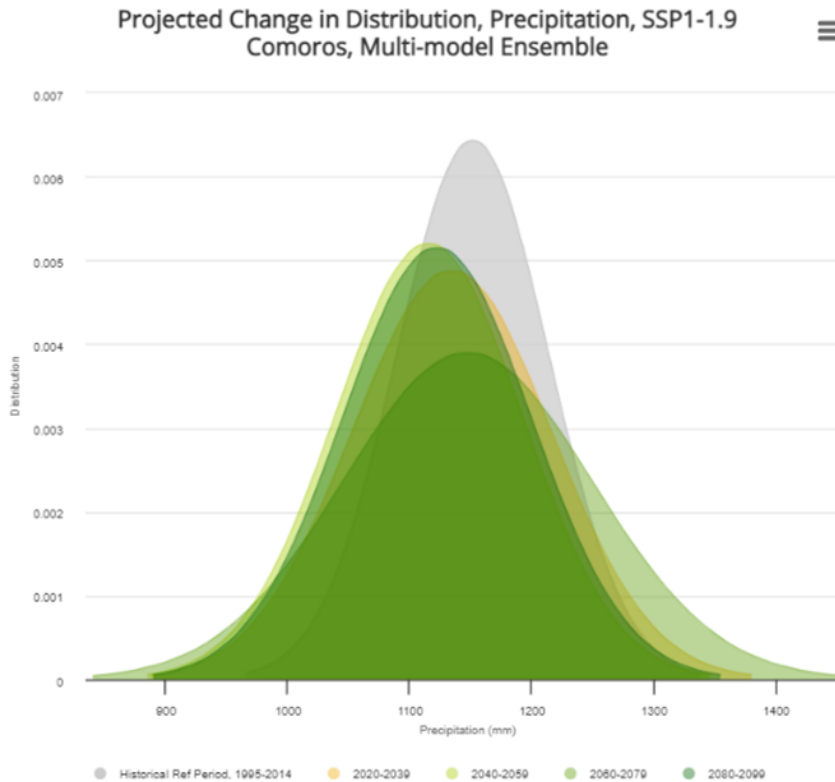
The predicament witnessed in Somalia resonates throughout the Greater Horn of Africa, with notable impact seen in Djibouti, South Sudan, and Comoros. Djibouti frequently encounters droughts that devastate agriculture and increase food scarcity, leading to malnutrition and water shortages. South Sudan is marred by conflicts and experiences flooding, displacing communities, and disrupting food production. Comoros grapples with cyclones and heavy rainfall, resulting in landslides and infrastructure damages, aggravating poverty and limiting access to essential services. In Djibouti, prolonged dry spells trigger livestock losses and hinder economic growth. In South Sudan, displacement due to both conflict and flooding exacerbates food insecurity and healthcare challenges. Comoros faces recurring cyclones that cripple infrastructure and impede development, causing long-term setbacks.

Table 1: Summary of Disaster Events in Comoros, Djibouti, Somalia and South Sudan since 2000

	GDP Per Capita	Rural Population	Pastoralists, Farmers and Fishing	Contribution to GDP	Internally Displaced People	Nr. of Natural Disasters Events since 2000	Total Affected People since 2000
Somalia	441	54 %	65 %	65 %	25 %	62,00	29 435 752
Djibouti	1 071	80 %	56 %	20 %	19 %	21,00	16 986 982
Comoros	3 150	22 %	1 %	4 %	0 %	11,00	1 299 657
South Sudan	1 577	70 %	50 %	40 %	2 %	12,00	719 901

Future climate projections indicate an increase in frequency and intensity of extreme weather events. This will have devastating consequences for human wellbeing and the livelihoods of rural people in HoA and Comoros. The economies are already fiscally constrained, fragile, dependent on imports, with underdeveloped manufacturing and industries and service sectors. These fragilities are coupled with weak infrastructure and capacity (human).

A resilient agriculture sector thus becomes key for Africa and the sub-Saharan. It is the major source of food and a primary source of livelihood. The sector employs more than half of the total labor force and accounts for roughly a third of the gross domestic product (GDP). Due to the fragmentation of land caused by population pressure in most rural areas, farm sizes are typically less than 2 hectares each. As a result, smallholder farms are dominant across the subcontinent. They make up 80% of the farms, which translates to approximately 33 million smallholder farms. Although the widely accepted view is that smallholder farmers produce the majority of the food, because they farmland very intensively resulting in high levels of productivity per unit of land, their farms are often too small to provide a sustainable income at the household level, let alone food security. In addition, smallholder farmers are known to face several challenges associated with missing markets for credit, insurance, information including economies of scale in marketing and transportation. Problematically, they are also reliant on non-drought tolerant crops and seed varieties, non-mechanized farming systems and subsistence rain-fed farming, factors which jointly contribute to the volatility of agriculture and the vulnerability of the smallholder farmers. Based on World Bank analysis, a major loss of about 50 percent of their animals during a severe drought typically requires between 5 years (herds of sheep/goats) and 10 years (herds of cattle) to rebuild, during which time they incur major losses of consumption of milk and meat and income from sales of live animals and animal products. The sector is therefore highly vulnerable to climate related events, such as droughts, floods, and tropical cyclones. Such events trigger destabilizing situations and cause extensive loss of livelihoods and property in many countries.



In this context, mainstreaming disaster risk management (DRM) into development processes has become crucial. DRM facilitates the reduction of underlying factors of risks as well as prepare and initiate immediate actions in the event of disaster. A comprehensive DRM strategy therefore focuses on policies, processes and actions aimed at avoiding the creation of new risks (risk avoidance) addressing existing risks (risk reduction and risk retention), and addressing the residual risks, through actions such as preparedness, risk transfer (insurance) and social safety nets.

The experience in the HOA and Sub-Saharan Africa in the development of coherent DRM policies has been mixed and slow in implementation. Based on the four priorities of the Sendai Framework governments and implementing partners involved in DRM, and specifically in its core functions, the disaster risk reduction (DRR) and climate change adaptation (CCA) at regional and national levels, shall follow a series of recommended actions including, among others:

- **Develop common grounds for understanding risks to inform policymaking, this means map available data for hazard and vulnerability assessments, identify gaps, and enhance data availability, sharing, and repositories, and promote the use of disaster loss databases and historical disaster trends analysis.** This may require fostering collaboration among disaster management agencies, climate change departments, meteorological services, scientific community, academia, and all other stakeholders:

• **Establish a strong governance system, mapping institutions, coordination mechanisms, legal frameworks, policies, strategies, and monitoring and evaluation frameworks.** This may require conducting multi-stakeholder peer-learning exchanges to review information and identify opportunities for harmonization. Critical is to raise awareness and understanding of true risks and vulnerabilities:

- **? Increase investment and budget support for DRM, Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA).** [AW1] The community and the governments shall conduct risk-sensitive budget and expenditure reviews, using them for advocacy towards investments and budget support for DRR and CCA. Last, enhance awareness of the private sector's role and potential contribution to DRR and CCA.

• **Promote preparedness and adaptation.** This requires active dialogue among meteorological services, CCA and DRR stakeholders to clarify roles and responsibilities in Early Warning Systems (EWS) and optimize interventions, including capacity building, data availability, standard operating procedures, and linkages to response and adaptation. It may also warrant the enhancement of coordination mechanisms for emergency response and a more coherent application of social protection, insurance, and risk transfer mechanisms for response and recovery.

Comoros

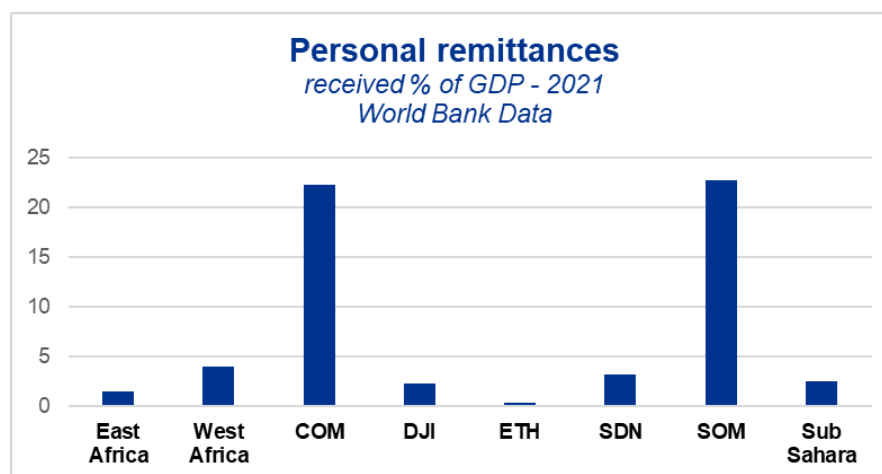
Background

The archipelago of Comoros consists of four volcanic islands (Grande Comore (also known as Ngazidja), Anjouan (also known as Ndzuwani), Moheli (also known as Mwali) and Moyette) in the middle of the southern waters of the horn of Africa. As a small island developing states (SIDS), the country is characterised by inter alia: i) geographical isolation; ii) a rapidly expanding population; iii) limited natural resources; iv) poor economic resilience; and v) vulnerability to sea level rise and natural disasters. The main risks come from tropical cyclones and excess rains and flooding associated with the cyclones. However, and importantly, the country is currently suffering from a prolonged drought, which is jeopardizing the already fragile economic situation when coupled with prices inflation. The population is concentrated, with 50 percent of the Comorans living in the Grandes Comoros. Population density in the Comoros is high at 467 inhabitants per km² with a total population of ~ 836,774 making it one of the most densely populated countries in Africa.[1] It is also a very young population, with 53 percent of the population below the age of 20. High rates of unemployment have contributed to frustration among the youth and helped to drive outward migration and reliance on the informal sector. In 2014, one in two young Comorians of working age were unemployed.

The economic situation of the country is complex with several fragilities given its small size. Fiscal deficit stood up to 3.9% in 2022, and the current account balance doubled to minus 6.1% of GDP, with reserve coverage decreasing to 7.6 months of imports at end-2022 from 9 months at end-2021. GDP at current prices is about USD 1.3 billion, making per capita GDP around USD 1.250.

Given the situation, there is little fiscal space for policy interventions until inflationary pressures continue to affect domestic consumption and import prices. Comoros CPI stood to 16 percent in 2021, eroding the purchasing power of the poorest (44 percent of the population is considered poor). On a positive side, migration has generated a significant flow of remittances, now about 22 percent of GDP. According to World Bank estimates, 38 percent of households receive remittances.

The country is mostly rural, with urbanization at 33 percent in 2021, and increasing. The agriculture sector, including fisheries, contributes 46 percent to GDP, with services at 41 percent. The level of development of the infrastructure is low: only 8 percent of the population uses internet. The greater vulnerability relies in the shortage of food and consumers' commodities, as agriculture output covers only 30 percent of the national needs. Some foods, such as poultry, imports are as high as 90 percent. To address this, the Government of Comoros has been working with some 400 farmers ? about half of them women, and nearly three quarters of them young people - to set up poultry groups and over 250 henhouses (FAO). To the same, the government has worked on the development of the agriculture and agribusiness sector, but problems remain with the implementation of these policy reforms and the ongoing drought as the rainy season has shortened to around three months per year from six months.



Climate and vulnerability

The Comoros is particularly vulnerable to weather and natural events, and to climate change. The main reasons are the geographic location, being an archipelago, and its dependence on agriculture and natural resources. Additionally, Comoros is going through a fast urbanization, largely unregulated, with limited fiscal ability to manage its infrastructures, limited capacity to manage disasters across the territory.

Event type	Location	Emergency Declaration	AID ('000 US\$)	Year	Total Deaths	People Affected
Volcanic activity	Grande Comore	No		1991		
Cholera	Grande Comore and Mayotte islands	No		1998	40	3.200
Cholera	Domoni, Anjouan Island	No		1999	14	140
Storm	Kavé-Hoani, Fomboni areas (Moheli province)			2003		
Volcanic activity	Dimani, Pidjani villages (Ngazidja province)		761	2005		39.000
Chikungunya virus disease	Moroni (Ngazidja)	No		2005		1.358
Volcanic activity	Ngazidja province		9	2005	1	245.000
Chikungunya virus disease		No		2006		924
Volcanic activity	Ngazidja province		105	2006		
Cholera	Moroni, Fombouni, Foubouni, Ouzioini, Mitsai	No		2007	29	1.490
Riverine flood	Ngazidja, Anjouan, Moheli provinces	Yes		2009	2	2.500
Riverine flood	Bambao, Hambou, Mbadjini East areas (Ngazid	Yes	6120	2012	4	64.987
Earthquake	Anjouan province			2014		10.000
Cyclone Helen	Ngazidja, Moheli, Anjouan provinces	Yes		2014		9.511
Cyclone 'Kenneth'	Grande Comore, Moheli, Anjouan islands			2019	8	345.131
Cyclone 'Belna'	N/A			2019		

In terms of exposure, Comoros is subject to hydrometeorological (tropical cyclones, floods, tsunamis) risks, which accounts for close to 90 percent of its vulnerabilities between TCs and floodings. The country is also exposed to other risks, including geophysical (volcanic eruptions, earthquakes, landslides), biological (cholera epidemics, dengue, chikungunya, etc.). Additionally, there were 8 drought events in the last thirty years, and an ongoing prolonged water scarcity situation, though there is little data to estimate its full effect. The World Bank calculated in 2016 an average of USD 5.7 million in damages each year. Based on models in fact, one-in-hundred years event can deplete 8 percent of GDP. Southwest Indian Ocean Risk Assessment and Financing Initiative (SWIORAFI)[2]² provides interesting insights on the Comoros hazard and vulnerabilities, with an estimated AALs of USD 5.7 million, or 0.5 percent of GDP, between ground up and emergency losses across its exceedance.

TABLE ES1. Average Annual Loss (AAL). All Modeled Perils (AP) by SWIO Island State

SWIO Island State or Territory	Exceedance Probability:	AAL	0.1	0.04	0.02	0.01	0.004	0.002
	Mean Return Period (years):		10	25	50	100	250	500
	Risk Profile: All Modeled Perils (AP)							
Comoros	Ground-up Loss (M USD)	5.7	8.4	12.5	18.1	48.4	148	258.7
	Emergency Loss (M USD)	1.3	1.9	2.8	4	11.1	34	59.5

During the austral winter, from April-May to October, the season is dry and cooler, with temperatures ranging between 23.2°C and 27°C, and a minimum of 14 to 15°C at high altitudes (see Climate Change Portal of the World Bank). Winds (trade winds), called "kusi", blow from the south-east to north-west and are reinforced from May to August (coldest months of the year) by local currents that come from the Mozambique Channel. These physical and climatic conditions make the Union of the Comoros a country highly vulnerable to extreme weather conditions that generate distress situations almost on a yearly basis.

Rainfall is often severe, with an annual average of 500-6,000mm of water. The archipelago does not fall within the normal route of cyclones, but some do come close to their shores and cause damages. The most serious cyclone was recorded in 1950, which caused 524 deaths. Similar damage was observed on the islands of Mohéli and Anjouan. In 1996, storm Dolores caused 67 deaths in Mohéli. Another 7 severe cyclones/ storms were recorded from 1986 to 1999. Cyclone Gafilo in 2004 was the cause of the shipwreck of the SAM-Son boat which sank off the coast of Madagascar, killing more than a hundred people who were on board. In March and September 2007, sea level rises occurred, causing enormous damage in the 3 islands[3]³. The last Cyclone that hit the Comoros dates to 2019, Kenneth, which provoked USD 129 million in losses, and affected about 350 thousand people causing 6 fatalities[4]⁴.

The existing vulnerability of the Comorian population to the impacts of climate change is exacerbated by an inadequate ability to effectively prepare for, prevent, and respond to climate-related disasters. Within this framework, the Poverty Reduction and Growth Strategy (PRGS) and Action Plan (2010 ? 2014) have identified the limitations posed by environmental factors to achieving sustainable development. These strategies aim to foster environmental sustainability and enhance civil security. Additionally, the Comoros recognizes the imperative to confront the menace of natural disasters by bolstering its capacity for disaster preparedness and response.

To date, efforts have been taken, including the formulation of the Climate Change and Natural Disasters Risk Reduction Strategic Programming Framework (CSP), the National Strategy for Reduction of Risk and Disasters (SNRRC), and a National Contingency Plan. Furthermore, instrumental entities such as the Analytical and Information Processing Centre (CATI), the Directorate General of Civil Security (DGSC) with its regional branches (DRSC), and the Center of Relief Operations and Civil Protection (COSEP) have been established. These initiatives play a pivotal role in assessing community vulnerability to climate hazards and enhancing the efficiency of emergency interventions. However, there remain critical gaps in the country's climate risk management framework. These gaps are rooted in the insufficient integration of climate risk considerations into policy and decision-making processes, inadequate data collection and analysis, and lack of streamlined coordination among key entities responsible for disaster preparedness and response. The existing systems, although valuable, require further reinforcement to enhance their effectiveness. The absence of comprehensive risk assessment methodologies and a centralized hub for information processing further hampers the timely and targeted response to climate-related emergencies. Given these challenges, the proposed ACRIF project aims to bridge these gaps by bolstering the Comoros' climate risk management capabilities and play a pivotal role in diminishing Comoros' susceptibility to climate-related risks and disasters. Its actions align with the objectives of the National Adaptation Programme of Action (NAPA), thereby contributing to the broader endeavour of enhancing the country's resilience against the adverse effects of climate change.

The Financial System

The Comorian financial sector is small and concentrated with a significant presence of the state.

There are four banks, four microfinance institutions (MFIs), three financial intermediaries, including the National Post and Financial Services Company (Société Nationale des Postes et Services Financiers, SNPSF), and three electronic money transfer systems.

The total assets of the financial sector represent around 25 percent of GDP measured as deposits held in financial institutions, and only 9 percent of adults have an account at a bank, while 32 percent do at MFIs. In comparison, 33 percent of adults in Sub-Saharan have a bank account. Banks' contribution to the economy and private sector lending is also around 15 percent of GDP. Remittances play a significant role and contribute 18 percent of GDP, which doubled since 2010. The state holds a significant stake in the capital of two private banks and remains the sole shareholder in SNPSF. The three largest financial institutions account for 57 percent of financial sector deposits and 61 percent of assets, making the sector particularly concentrated.

Access to finance is then limited in Comoros, also because banks have large losses in their portfolios and little margins for investments: NPLs stand at 24 percent. This also impacts financial institutions' willingness to grant long-term loans and to invest in the development of financial services. ATM machines remain at low levels of 6 per 100,000 inhabitants, and digital banking is at its infancy. The Government has made strides in adopting a revised Banking Law in 2013 and worked on strengthening the legal and regulatory framework for the Central Bank (BCC). It also invested, with the support of the World Bank, in a new payments system supporting retail (POS), an RTGS and an Automated Clearing House (ACH).

The mobile money industry has yet to take off, with only three licensees four years after the regulation was adopted. Mobile money subscriptions are extremely limited, with MTCV beginning operations as the first e-money issuer in Comoros in 2018. MFIs are somehow filling these gaps through the largest outreach and network. However, very few of their services are automated, if not completely manual. MFIs serve about three out of ten individuals. The largest network (Union des Meck) serves close to 55,000 clients (representing more than 10 percent of adults) and has approximately 30 percent of outstanding loans.

MFIs are currently not accessible through ATMs, POS, or mobile money. Discussions between the telecom network operator, TELMA, and the Union des MECK, were ongoing and promised to deliver various financial services through mobile wallets. These may be a good foundation for the delivery of micro insurance and other relief transfers. Larger MFIs have acquired core banking systems, but the smaller microfinance groupings lack rudimentary information technology (IT) systems to join the digital wave. Furthermore, limited experience on digital development among MFI management teams further impedes digital transformation in this sub-sector that is critical to financial inclusion.

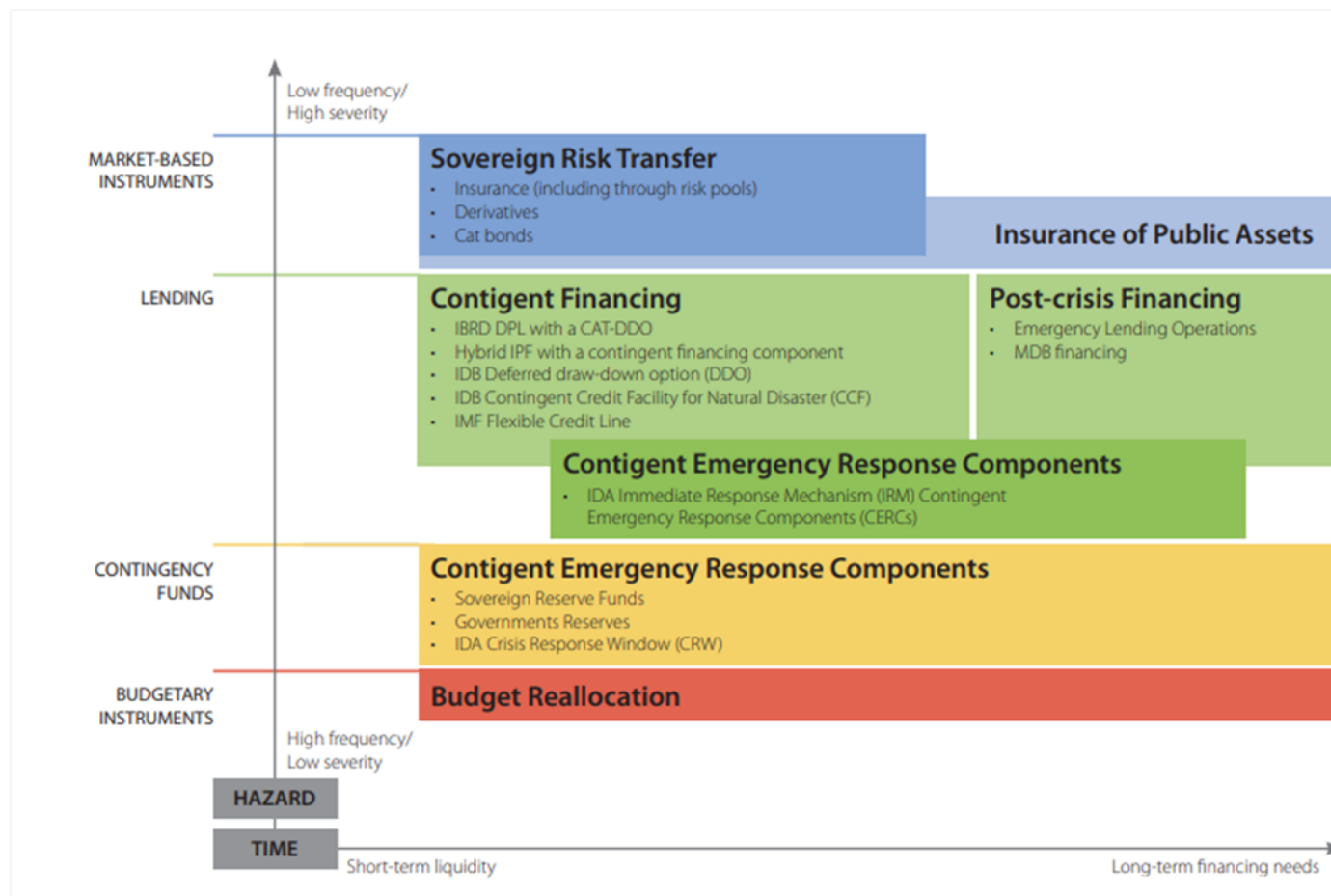
Insurance Sector

Comoros has a small insurance sector. The industry is regulated by the CRCA at the regional level and by the BCC at the national level. There are four insurances providing key classes of compulsory insurance, including motor third-party liability and professional indemnity for insurance intermediaries.

Insurance companies from Inter-African Conference on Insurance Markets (CIMA) member states are permitted to operate in the Comoros without a license, and 100 percent ownership is permitted. CIMA was established in 1992 to harmonise insurance regulation for a group of mainly francophone countries in sub-Saharan Africa. It now counts 14 members, including Comoros^[5], which is expected to join but has yet to sign the CIMA Treaty. In 2019, there were 185 admitted insurers in the CIMA zone and 19 admitted reinsurers. The region posted premium volume for life and non-life insurance of CFA1.24 billion in 2019.

There are various regulations within the CIMA code that insurance buyers, their brokers and insurers must comply with. As an example, CIMA code requires "cash before cover" meaning that a policy cannot be delivered until the premium has been paid to the insurer, with some exceptions for state business or large premiums. This requirement is intended to ensure that insurance premiums are paid to the insurer without unreasonable delays. Ceding is allowed up to 50 percent outside CIMA zone, and some risks cannot be ceded. Insurers operating in the CIMA zone must also meet minimum capital requirements. CIMA set out rules requiring all insurance companies to have minimum share capital of CFA 3 billion by 2019, and CFA 5 billion by 2021. Index based insurance is allowed and regulated, but importantly, while regulation is harmonised, it is not uniform.

Table 2: Financing Tools for Managing Sovereign Disaster Risk



Djibouti

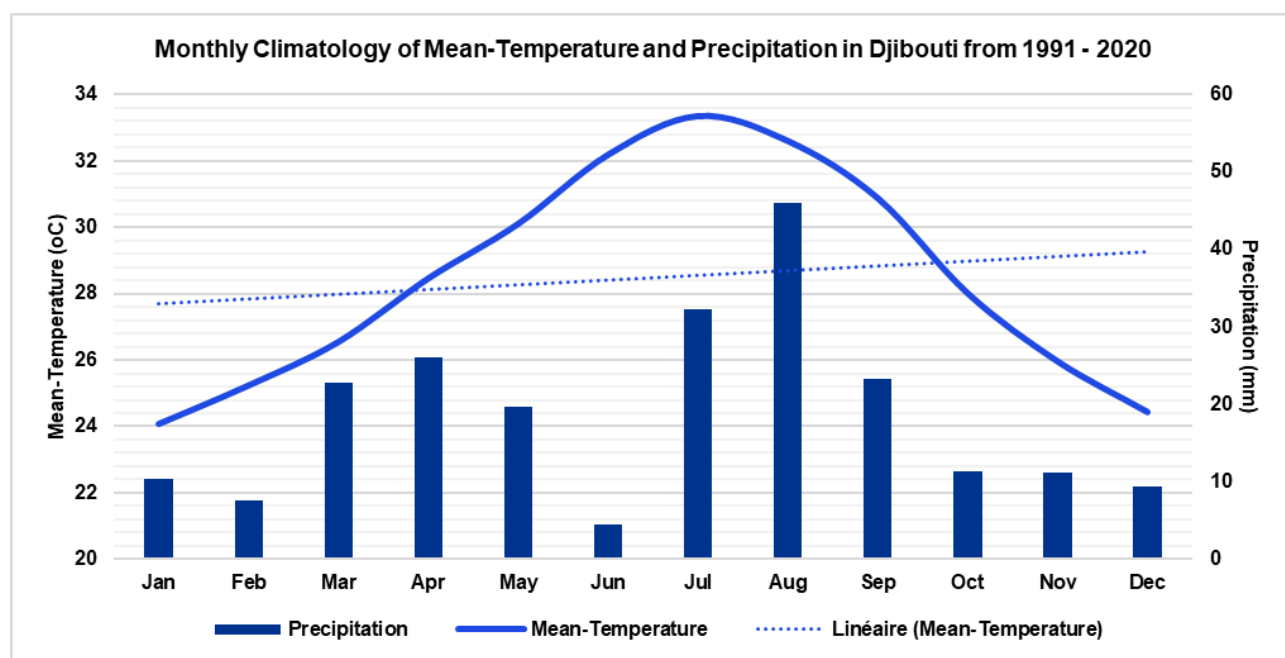
Djibouti experiences a semi-desert arid tropical climate, with the exception of the mountainous regions in the northern Gulf of Tadjourah. The country is characterized by high temperatures and significant evaporation throughout the year. Djibouti is particularly vulnerable to irregular and low precipitation patterns. The climate is divided into two distinct seasons: the cool season from October to April, with mild temperatures ranging from 22°C to 30°C and relatively high humidity and sea winds, and the hot and dry season from May to June and September to October, with temperatures ranging from 30°C to 40°C and often accompanied by violent, hot, and dry sand winds (khamsin). This season is the driest period.

The mean annual temperature for Djibouti is 27.8°C, with monthly averages ranging between 23°C in January and 32°C in July. The mean annual precipitation is 244.6 millimeters (mm), with the highest rainfall occurring between July and September and very low levels of precipitation

throughout the year. The table below illustrates the spatial variation of observed average annual precipitation and temperature across Djibouti.[6]⁶

Table 2 : Observed average annual precipitation and temperature in Djibouti [AW1]

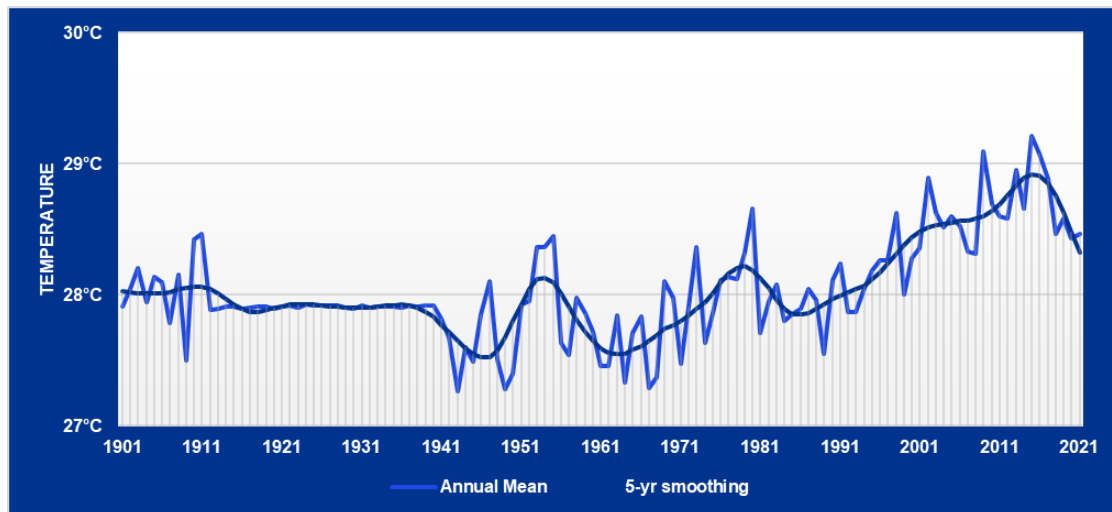
Climate Variables	1901 - 2019
Mean Annual Temperature (oC)	27,8 oC
Mean Annual Precipitation (mm)	244,6 mm
Mean Maximum Annual Temperature (oC)	32,2 oC
Mean Maximum Annual Temperature (oC)	22,5 oC



Graph 1: Average monthly temperature and rainfall of Djibouti for 1991 - 2019

Since the 1970s, Djibouti has undergone a noticeable rise in temperature, particularly in the southern and western regions. This trend has resulted in the occurrence of extreme high temperature spikes, which have become more frequent over time. Furthermore, the number of warm nights has increased dramatically, contributing to an overall decrease in cool nights and an increase in warm nights since 1960. The most significant warming has been observed during the summer hot season, making it a cause for concern for the country's inhabitants and its environment. These changes in

temperature have far-reaching consequences for the region. Higher temperatures can have negative effects on human health, agriculture, and the environment.



Graph 2: Observed Average Annual Mean-Temperature of Djibouti for 1901 - 2021

Djibouti is a country with highly variable precipitation levels, and it experiences very low annual precipitation. As a result, some areas in the country have experienced reduced water availability, and there has been an increase in drought and dry spells. Recently, there has been a noticeable increase in heavy precipitation events, resulting in stronger precipitation and flash flooding. This is a cause for concern as these events can cause significant damage to infrastructure and pose a threat to human life.

The country has also been experiencing an increase in aridity, with more prolonged and intense droughts occurring in recent years. The most significant droughts happened in 1989, 1994, 2004, and 2005, considerable damage to crops and livestock, resulting in severe economic losses. These droughts also caused a reduction in water availability and posed a risk to the health and well-being of the population, particularly in rural areas.

During the period from March to June 2023, about 21% of the analyzed population, approximately 250,000 individuals out of over 1,18 million, are facing high acute food insecurity (IPC Phase 3 or higher). This includes 7% in an Emergency situation (Phase 4) and 14% in a crisis situation (Phase 3). Despite food assistance from the Ministry of Social Affairs and humanitarian partners, predominantly rural populations struggle due to limited food diversity, purchasing power, and livelihood access. The projected analysis for July to December 2023 estimates 24% of the population (around 285,000) experiencing high acute food insecurity. Among these, 100,000 will be Emergency (Phase 4) and 185,000 in crisis (Phase 3). Rural areas are more affected, with approximately 40% facing acute food insecurity, while urban areas see around 15% affected. Malnutrition cases are expected to surpass 300,000 this year, including over 5,500 severe cases among children and 2,900 cases among pregnant and breastfeeding women. Malnutrition situation varies across regions, with different phases of severity. Factors include recurring acute food insecurity, poor dietary practices, high child morbidity, inadequate hygiene, water access, low vaccination coverage, and the influx of refugees from

neighboring conflict. This situation emphasize the urgent need for targeted interventions to alleviate food insecurity and address the underlying factors contributing to acute malnutrition.[7]⁷ & [8]⁸

Djibouti is expected to experience a rapid increase in temperatures in the coming decades.

Projections indicate that the country will witness a temperature rise of approximately 1°C every two decades. This means that by the 2050s, the monthly average temperature increase is expected to be 1.9°C, and by the end of the century, it could reach up to 5.4°C.[9]⁹ These temperature increases are likely to result in longer and more intense heat waves, with a significant decline in cold nights and cold spells. The increase in temperature will also lead to an increase in evaporation and further exacerbate the already dry conditions in the region. This drying effect will have negative consequences on the availability of water resources, which are already limited.

Furthermore, regardless of the emission scenario, temperature increases are expected to continue throughout the end of the century. In a high-emission scenario, the average temperature is projected to increase rapidly by mid-century. This increase in heat and extreme heat conditions will have significant implications for human and animal health, water resources, and biodiversity.

The impact of rising temperatures on human health is expected to be severe, especially for vulnerable groups such as children, the elderly, and those with pre-existing medical conditions.

The increase in heat is also likely to lead to a higher incidence of diseases such as malaria and dengue fever, which are spread by mosquitoes. The impact on animal health will be similarly severe, as many species are adapted to the current climatic conditions and may not be able to cope with the changes brought about by rising temperatures. This could lead to a decline in biodiversity in the region, as some species may be pushed to extinction.

Table 3: Data snapshot: CMIP5 ensemble projection

CMIP5 Ensemble Projection	2020?2039	2040?2059	2060?2079	2080?2099
Annual Temperature	+0.6°C to +1.4°C	+1.3°C to +2.5°C	+2.1°C to +4.1°C	+2.6°C to +5.4°C
Anomaly (°C)	(+1.0°C)	(+1.9°C)	(+2.9°C)	(+3.8°C)
Annual Precipitation	-8.1 to +20.7	-8.7 to +25.6	-10.3 to +38.0	-10.1 to +49.5
Anomaly (mm)	(2.4 mm)	(2.0 mm)	(3.2 mm)	(7.2 mm)

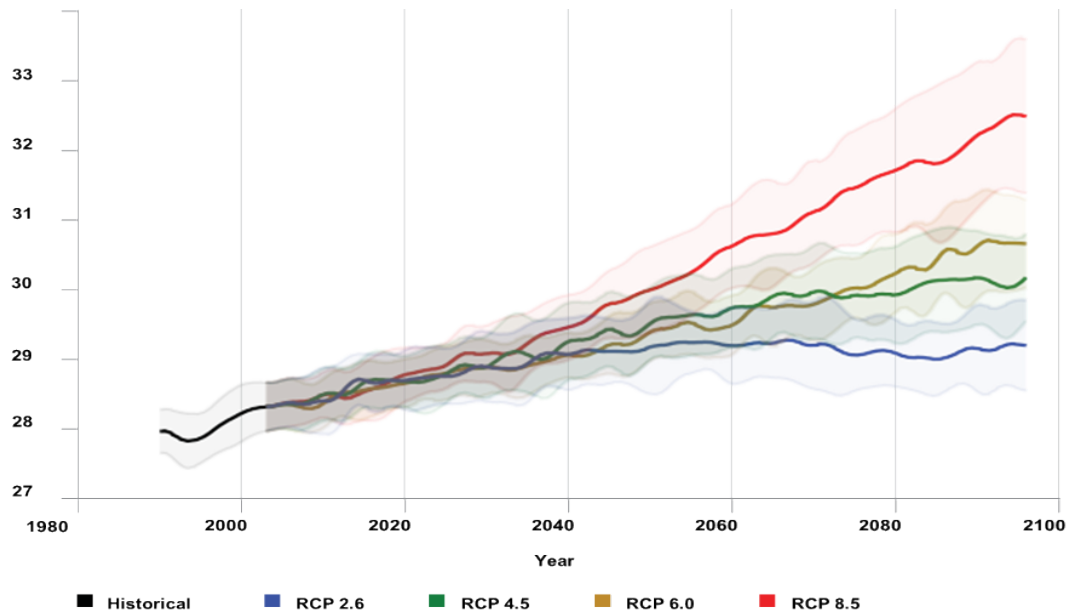
Source: WB Climate Change Knowledge Portal (CCKP, 2020). Djibouti Projected Future Climate.

The rainfall patterns in Djibouti exhibit high variability, and future projections indicate a slight increase in precipitation at the national level until the end of the century. However, this slight increase may not be enough to offset the anticipated reduction in rainfall during critical grazing periods for livestock. Additionally, winter rains from September to February are predicted to decrease, which may significantly impact the country's primary growing season of September and October.

Under high emissions scenarios (RCP8.5), Djibouti is likely to experience more frequent and intense extreme rainfall events, potentially leading to prolonged periods of aridity. This could also have a detrimental effect on the country's water balance, with most projections indicating a decrease by the 2080s. The figure below demonstrates the expected change in annual average precipitation in Djibouti, which is already relatively low and projected to increase only slightly on a national scale by the end of the century under the high emissions scenario.

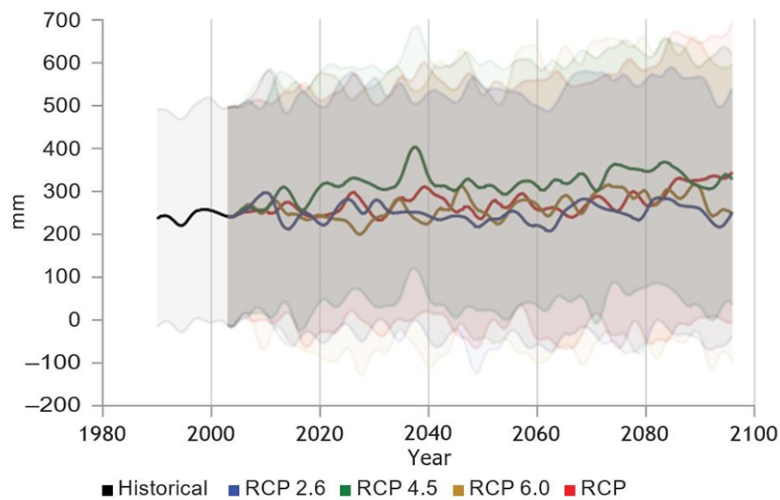
It is worth noting that the management of water routing, storage, and other options will depend significantly on whether precipitation is frequent or sporadic with long periods of drought in between rainfall events. As demonstrated below, the annual average precipitation is already quite low and is anticipated to rise slightly at a national level by the end of the century under the RCP8.5 high emissions scenario.

Graph 3: Historical and projected average temperature for Djibouti from 1986 to 2099



Source: World Bank Climate Change Knowledge Portal (CCKP, 2020)

Graph 4: Annual average precipitation in Djibouti for 1986 to 2099



Source: World Bank Climate Change Knowledge Portal (CCKP, 2020)

Climate Related Natural Hazards

Over the past forty years, natural disasters have affected more than half a million people in Djibouti, which has a high degree of risk to natural hazards. The country is susceptible to floods, droughts, heat waves, and earthquakes, and is also one of the world's most water-scarce nations. Climate change exacerbates this issue, while sea-level rise poses a significant threat to the country's coastline, increasing the risk of inundation and salinization, which could damage port infrastructure and tourism.

From 2008 to 2011, an extended drought across Djibouti reduced the country's GDP by 4%, with farmers and livestock herders being the hardest hit. The agriculture sector lost 50% of its GDP, directly impacting over 15% of the population. Djibouti has no permanent rivers or streams, and the extreme evaporation rate further exacerbates its water scarcity. About 33% of the population lives in high hazard risk zones, while 35% of the economy is chronically vulnerable to floods and drought.

The region is also experiencing an increase in the frequency and intensity of extreme weather events, such as heavy rainfall leading to mudslides, flooding, and flash floods. Additionally, there is an expected rise in extreme events, including droughts, soil erosion, and desertification. Djibouti is projected to become generally hotter and drier in the future, while sea-level rise is expected to result in the loss of a significant portion of the northern and eastern coastlines. This could lead to the loss of agricultural land, infrastructure, and urban areas.

Natural Hazard	Subtype	Events	Total		Total Damage
1900-2020		Count	Deaths	Total Affected	(?000 USD)
Flood	Flood	4	33	102,25	2,5
	Riverine Flood	3	155	90	3,219
	Flash Flood	2	62	348,5	?
Drought	Drought	9	?	1,188,008	?
Epidemic	Bacterial Disease (Cholera Outbreak)	4	88	3,628	?
	Parasitic Disease	1	43	2	?
Storm	Tropical Cyclone	2	2	25,775	?
Insect Infestation	Locust Infestation	1	?	?	?

Climate change is expected to increase the intensity and likelihood of water scarcity and drought across Djibouti. This will have a significant impact on the water, agriculture, coastal zones, human health, and livestock sectors. The reduced rainfall during critical grazing and planting periods will negatively affect the agriculture and livestock industry. Additionally, the frequency of intense precipitation events will lead to a heightened risk of flooding and flash floods. Higher temperatures with increased aridity could cause livestock stress and reduced crop yields, resulting in significant economic losses, damage to agricultural lands and infrastructure, and harm to human health and mortality. Land degradation and soil erosion, exacerbated by recurrent flood and drought, will further

adversely impact agricultural production, leading to a reduction in the livelihoods of the rural poor, who have limited resources to increase adaptive capacity.

The rise in temperature and water scarcity due to climate change is expected to exacerbate the already existing tensions among agricultural, livestock, and human needs for water resources. As temperatures continue to increase, the demand for water is expected to surge, putting a significant strain on the already limited resources in the country. The combination of increasing demand and dwindling supplies of water is a recipe for disaster that could lead to conflicts and displacement of people in the affected areas. Moreover, the effects of climate change such as prolonged droughts, erratic rainfall patterns, and desertification are expected to worsen the water crisis in Djibouti. This could lead to a decrease in agricultural productivity and increase the vulnerability of communities that depend on rain-fed agriculture. As a result, vulnerable groups may suffer from degraded livelihoods and economic resilience. Moreover, the country's tourism industry and port face a particular risk from sea level rise and coastal erosion.

The Insurance Industry in Djibouti

The insurance industry in Djibouti is currently in its early stages with relatively modest range of insurance products and services compared to well-established markets. Nevertheless, the industry is expected to grow in the coming years, driven by multiple factors that include the nation's improving socio-economic landscape, the increasing involvement of international insurance companies, the introduction of governmental insurance initiatives, and the growing momentum of port operations in the vicinity.

Notably, the Djibouti insurance market demonstrated a Compound Annual Growth Rate (CAGR) of approximately 7% between 2014 and 2019. At its core, insurance represents a contractual arrangement wherein a firm guarantees reimbursement in the face of specified loss or damage. This mechanism offers a shield of financial security, effectively mitigating the risks associated with unforeseen events. Encompassing both life and non-life insurance policies, the Djibouti insurance market covers various domains, including automobile, marine, liability and others.^[10]

The regulatory oversight of the insurance sector is administered by the insurance directorate under the Ministry of Economy and Finance. Particularly significant to Djibouti's economic landscape, the port of Djibouti's strategic positioning at the crossroads of major global shipping routes has catalyzed trade activities. This geographic advantage links Europe, the Far East, the Horn of Africa, and the Persian Gulf, amplifying trade endeavors.

Government-led initiatives mandating motor and cargo insurance, coupled with the integration of the COMESA yellow Card Scheme, enhance road and cargo-related safety while stimulating demand for non-life insurance. Furthermore, an uptick in disposable income levels, complemented by several governmental insurance initiatives, is anticipated to propel the growth of the personal insurance sector. This, in turn, will contribute to the broader expansion of the insurance market across the region.

As the Djibouti insurance sector matures and diversifies, it is posed to play an increasingly pivotal role in the country's evolving economic landscape.

Despite the positive developments, a critical gap exists in the Djibouti insurance landscape ? the absence of climate risk insurance. While the industry is poised for growth, climate related coverage remains underdeveloped, even as Djibouti faces climate challenges like extreme weather and water scarcity. As result, Djibouti finds itself dependent on its donor partners for assistance in coping with the aftermath of climate-related events. When such events occur, which can range from severe droughts to coastal flooding, the lack of dedicated climate risk insurance leaves the country's individual, businesses, and infrastructure vulnerable. As a result, Djibouti often looks to its international donor partners for financial aid and support to help recover and rebuild in the wake of these environmental challenges, underscoring the pressing need for the development and integration of climate risk insurance within the nation's insurance framework. This bridging of the climate risk insurance gap demand collaboration between the insurance sector, policymakers, international bodies, and climate experts. Integrating climate risk insurance not only safeguards against environmental uncertainties but also aligns with global efforts to address the impacts of climate change.

Somalia

Somalia lies at the extremity of the sub-Saharan semi-arid zone commonly referred to as the Sahel, which traverses the continent from West Africa to Horn of Africa. Its climate is harsh, and most of its land is suitable only for nomadic pastoralism. Somalia's climate is mainly very arid and semi-arid, with large desert areas in the north and isolated humid semi-arid zones in the south. The country is situated between two subtropical anticyclone belts, and its weather patterns are primarily determined by seasonal monsoon winds.

Rainfall across Somalia is distributed unevenly, with the north being arid and semi-arid and the south experiencing wetter conditions. As a pastoralist nation, Somalis depend on rainfall for pasture and water for their livestock, as well as rain-fed subsistence agriculture. Somalia has two seasonal rainfall seasons, Gu and Deyr, which are influenced by various factors such as the Inter-Tropical Convergence Zone (ITCZ), monsoonal winds, ocean currents, jet streams (including the Somali Jetstream), easterly waves, tropical cyclones, and neighboring Indian Ocean and Red Sea conditions.

Between 1901 and 2015, the average annual temperature in Somalia was highest in the heartland, with slightly lower temperatures around the Gulf of Aden in the north. The average annual mean temperature in all regions of Somalia is typically around 30 degrees Celsius. The hottest months in the north are from June to September, while the south experiences its hottest months from December to March. The average monthly temperature reaches its peak between April and June, with temperatures around 28?.

Somalia faces significant climate risks and challenges, including droughts, floods, and desertification. The country's location in the Horn of Africa region, combined with its arid and semi-arid climate, makes it particularly vulnerable to the effects of climate change. Somalia's climate is mainly influenced by the Indian Ocean monsoon system, which brings most of the country's rainfall. There are two main seasons: the dry season, which lasts from December to March, and the wet season, which lasts from April to November. The average annual rainfall in Somalia ranges from 100 to 200 millimeters (4 to 8 inches), with the highest rainfall occurring in the coastal areas. During the dry season, temperatures can reach up to 40°C (104°F) in some areas, while the wet season is generally cooler with temperatures ranging from 20°C to 30°C (68°F to 86°F). In the coastal regions, temperatures are generally more moderate due to the influence of the Indian Ocean.

According to projections made under a low-mitigation climate change scenario for Somalia, it is likely that temperatures in the country will rise between 3°C and 4°C by the year 2080. This means that by the end of the century, Somalia could experience temperatures that are significantly higher than what they are today. Such a temperature increase could have far-reaching consequences for the country's population, particularly given that Somalia is already known for its high levels of poverty, political instability, and food insecurity.

One significant impact of climate change in Somalia has been a decline in total precipitation since the 1980s. Although the decline has not been significant, it has had noticeable impacts on the country's agricultural and water sectors. The reduced rainfall has made it more difficult for farmers to grow crops and has led to increased competition for water resources. However, global climate models for the Horn of Africa region suggest that there will be an overall increase in precipitation in the coming decades. This contrasts with the trend observed in Somalia in recent decades. Annual rainfall projections by the IPCC and other sources, such as Osima et al. (2018), show a robust increase in precipitation over Somalia. This increase in rainfall is expected to result in episodes of flooding that are more severe than usual.

Drought

Droughts are the most common climate-related disasters in Somalia, with devastating effects on the country's agriculture, livestock, water resources and food security. The country's semi-arid and arid climate, coupled with erratic rainfall patterns and high evapotranspiration rates, make it particularly susceptible to droughts. As results, the country has experienced severe droughts in 1964, 1969, 1974, 1987, 1988, 2000, 2001, 2004, 2008, as well as 2011-2012. The latter drought, 2011 ? 2012, which lasted for over a year, was one of the worst in Somalia's history and resulted in widespread famine, displacement, and loss of life. According to the United Nations, over 250,000 people died from hunger and diseases increasing in recent years due to climate change and other factors.

Droughts in Somalia can be categorized into four types:^{[11]¹¹}

1. **Meteorological droughts** result from a period of months to years with a water deficit as indicated by the difference between precipitation and evapotranspiration. A metrological

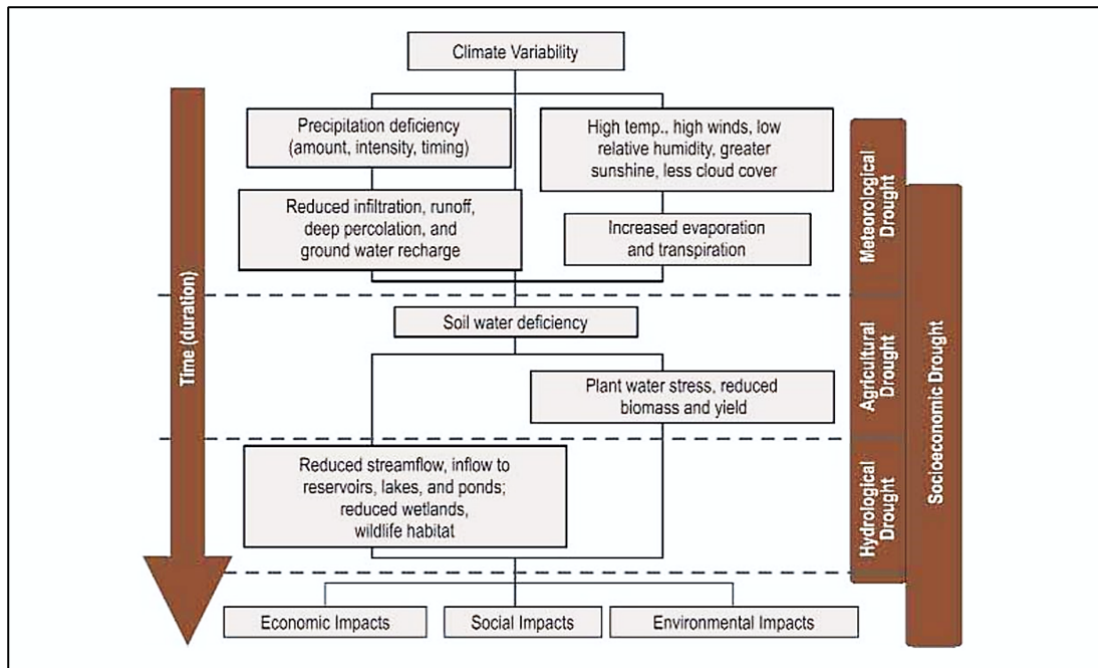
drought is often associated with periods of high temperatures, and usually leads to other types of droughts.

2. **Agriculture drought** is a period of soil moisture deficit caused by less than average rainfall or fewer rainy days. Sometimes high temperatures leading to high evapotranspiration can also result in agricultural drought.
3. **Hydrological droughts** occurs when surface water such as river flow, ponds, lakes, other water reservoirs or underground water are depleted below their long-term averages. Hydrological drought limits availability of water to communities, livestock, irrigation, and industries.
4. **Socio-economic droughts** occur as result of hardships of people's livelihood due to burdens on their economic sources, and increased demand of socio-economic goods yet the supply is limited.

These recurring and intensifying droughts have dire consequences, driving millions from their homes and livelihoods. The gravity of these situations is aggravated by dwindling water sources, contributing to severe impacts on agriculture and livestock ? the primary sources of sustenance for many Somalis and play a crucial role in the nation's economy.

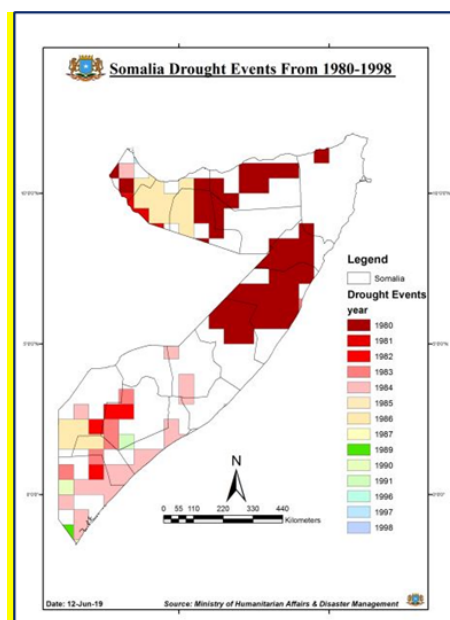
The significance of livestock to the Somali economy and people's livelihoods cannot be overstated. Livestock serves as a vital asset, providing food, income, and means of trade. During droughts, the scarcity of water and forage leads to livestock deaths, reducing the already limited resources available to the population. Thus, further contributes to food insecurity and economic hardships, amplifying the cycle of poverty and forced displacement in the region. As droughts become more frequent and severe, addressing their impact on both agriculture and the critical livestock sector becomes increasingly imperative to ensure the resilience and well-being of the Somali people.

Figure xxxx: Relationships between meteorological, agriculture, hydrological, and socio-economic drought



Source: National Drought Mitigation Center, University of Nebraska-Lincoln, USA

Figure 1: Somalia Drought Events over 20 years



Source: Ministry of Humanitarian Affairs and Disaster Management

- In December 2018, more than 1.5 million people were assessed to be in crisis following the impact of the 2016/2017 drought and the failure of the deyr rains in 2018.
- In 2017 over 2.9 million people faced food insecurity crisis and emergency as a result of the 2016 drought. Additionally, more than 3.3 million people were classified as Stressed.
- Post deyr 2011. Total population in crisis and emergency post deyr 2011/2012 ranged from 0% in Awdal and northwest to 53% in Balko with a mean of 23% over the whole country.
- Post deyr 2010. Percent of population in AFLC and HE categories ranged from 0% in both Awdal and Northwest, 51% in Mudug, 55% in Galgaduud, to 70% in Hiran, with overall country mean of 20%.
- Post deyr 2008(2008 drought), percent of people in AFLC and HE varied from 2% and 4% in northeast and northwest respectively, to 66% in the South.
- In 2006 an estimated 1.7 million people in the north, central and southern regions faced conditions of acute food and livelihood crisis. People in AFLC category ranged from 10% in Mudug to 81% in Bay with a mean of 45% over the whole country.

Box 1: Summary of food insecurity past trends in Somalia mainly caused by drought

Source: FSNAU/FEWSNET technical series

The drought crisis Somalia during 2016 and 2017 emerged as a result of consecutive seasons of poor rainfall, leading to a severe nationwide drought and a state of national disaster. This was exacerbated by the below-average rainfall during the 2017 Deyr season, marking a fourth consecutive year of inadequate precipitation. The impact on water resources has been particularly dire, heavily affecting agricultural activities, primarily livestock sustenance, which forms a substantial portion of the rural economy, contributing around 65% of the GDP. Livestock conditions deteriorated drastically, causing unprecedented deaths.

The adverse weather conditions also triggered a sharp decline in cereal production, reaching a historical low in 2016, a trend unseen since the onset of the Somali conflict in 1988. With an estimated USD 1,02 billion in damages and USD 2,23 billion in losses, the total economic toll of the drought was projected to exceed USD 3,25 billion. The productive sector, encompassing irrigation, rain-fed crops, livestock, and fisheries, incurred the largest share of the effects at 59%. Meanwhile, the physical, social, and cross-cutting domains constituted 38%, 1%, and 1% respectively, with livestock and environment & natural resource management bearing the brunt at 50% and 36%.

The aftermath crises unveiled critical needs across sectors. Agriculture, including irrigation and rain-fed crops, alongside urban development and municipal services, emerged as the sectors with the most pressing requirements, accounting for 28,3% and 16,6% of total needs respectively. Water supply and sanitation, transport, livestock, nutrition, environment, clean natural resource management, and health also stood out as essential sectors, with demands ranging from 4,7% to 10,2%.

	Cost (USD)		
	Damages	Losses	Needs
Productive Sectors			
			500
Agriculture - Irrigation and Rain-Fed Crops	63 789 000	247 655 790	292 663
			110
Agriculture - Livestock	350 687 691	1 262 317 038	494 000
Agriculture - Fisheries	0	9 965 562	5 650 000
			616
Productive Sectors Total	414 476 691	1 519 938 390	436 663
Physical Sectors			
			180
Water Supply & Sanitation	41 958 000	20 480 616	738 000
			147
Transport	0	0	900 000
			99
Environment & Natural Resource Management	564 795 354	610 683 583	853 510
			428
Physical Sectors Total	606 753 354	631 164 199	491 510
Social Sectors			
			82
Health	0	32 570 088	132 713

			104
Nutrition	0	3 132 587	131 888
			43
Education	0	0	629 471
			229
Social Sectors Total	0	35 702 675	894 072
Cross-cutting Issues			
			293
Urban Development & Municipal Services	0	0	273 694
			13
Social Protection & Safety Nets	0	0	183 000
			25
Food Security	0	0	360 000
			22
Livelihoods & Employment	0	46 622 167	100 000
			44
Gender & Social Inclusion	0	0	200 000
			58
Governance	0	0	360 000
Conflict	0	0	0
			26
Displacement & Migration	0	0	000 000
			5 000
DRR	0	0	000
			3 500
Macro Impact	0	0	000
			490
Cross-cutting Issues Total	0	46 622 167	976 694
			1 765
Grand Total	1 021 230 045	2 233 427 431	798 939

Box 1: Summary of food insecurity past trends in Somalia mainly caused by drought

Source: Somalia Drought & Needs Assessment, Volume I, Synthesis Report **Flood**

Floods are also a significant climate risk in Somalia, with significant impacts on the country's infrastructure, agriculture, and livelihoods. Floods in Somalia are typically caused by heavy rainfall, often associated with tropical cyclones and the East African monsoon. Both flash floods and riverine

flooding have become more common in Somalia in recent years. Flash floods are common in the northern areas, especially in low-lying and built-up areas. Qardo, a district town in the Bari region, often experiences this type of flooding owing to the topography and poor drainage system. Other towns that are prone to flash floods include Burco in the Togdheer region and southern parts of the Bay region. The Juba and Shabelle rivers experienced severe flooding from 2018 to 2020 following heavy rains in the Ethiopian highlands. The presence of open riverbanks exacerbated the floods, the consequences of which were felt for several years. The floods result in the overflowing of rivers, flash floods, and landslides, leading to loss of life, displacement, and damage to infrastructure and crops.

Floods have severe impacts on agriculture, which is the main source of livelihood for many Somalis. The floods destroy crops and wash away topsoil, leading to reduced productivity and food shortages. Furthermore, floods contaminate water sources, leading to the spread of waterborne diseases. In addition, floods have also significant impacts on infrastructure, including roads, bridges, and buildings, which are damaged or destroyed by floodwaters. This hampers relief efforts and access to essential services, such as healthcare and education.

The rising sea level along Somalia's coast is another major concern. The sea level is currently increasing at a rate of about 1.3 mm/year, and this trend is expected to continue. Rising sea levels could result in more frequent and severe flooding, particularly in low-lying areas. This could have serious implications for the country's population, many of whom live in coastal areas.

In October 2019, various regions across Somalia experienced several levels of flooding. The Hirshabelle State was the most impacted, particularly in the Baladweyne District and other town along the river, when the Shabelle River burst its banks as a result of heavy rains. The repercussions were far-reaching, with the loss of lives and the catastrophic destruction of vital infrastructure, crops, property, and livestock. The impact reverberated across 17 districts within Jubaland, Hirshabelle, and Southwest states, casting its shadow over the lives of over half a million people. The aftermath saw a staggering estimated count of 370,000 individuals forcibly displaced from their homes.

In the backdrop of this deluge, an existing challenge loomed large: persistent food insecurity, the product of recurring droughts and crop failures in preceding years. The floods aggravated this predicament, intensifying the peril of water-borne diseases. The situation grew even more complex as it intertwined with the concurrent outbreak of desert locusts in the region, effectively amplifying the intricacies of the humanitarian crisis that unfolded in Somalia throughout the year 2019.

Sector	Damages	Losses	Total Effect	Short-Term Needs (6-12 Months)	Medium Term Needs (1 - 3 years)	Total Needs (USD)
Transport	94 806 623		94 806 623			115 382 276
Housing	26 470 853		26 470 853			33 657 690
Education	25 951 817	3 094 545	29 046 362	21 242 411	13 581 214	34 823 625
Health	1 239 982	40 999 040	42 239 022			46 015 018
Water, Sanitation and Hygiene	8 895 566	20 480 616	29 376 182			24 801 800
Agricultural and Pastoral Livelihoods				28 043 377		28 043 377
Disaster and Flood Risk Management	6 080 400	9 025 000	15 105 400	6 401 400	35 576 900	41 978 300
Displacement	9 019 500	15 976 763	24 996 263			25 000 000
Grand Total	172 464 741	89 575 964	262 040 705	55 687 188	49 158 114	349 702 086

Box 1: Summary of food insecurity past trends in Somalia mainly caused by drought

Desertification

Desertification is another major challenge for Somalia, characterized by the loss of vegetation cover, soil erosion, and increased aridity. The process of desertification is often the result of natural factors, such as climate variability and droughts, and human activities, such as overgrazing, deforestation, and soil degradation. Somalia's semi-arid and arid climate, combined with a history of conflict and limited infrastructure, has made the country particularly vulnerable to desertification. The country's vegetation cover has declined rapidly over the past few decades, with many areas experiencing severe degradation and land-use change.

Overgrazing is one of the most significant drivers of desertification in Somalia, with livestock rearing being the main economic activity in many regions. The overgrazing of vegetation leads to soil compaction, which reduces soil water infiltration and leads to increased soil erosion. As a result, vegetation cover is lost, and the land becomes more arid and less productive.

Deforestation is another driver of desertification in Somalia and the deforestation rate is increasing at alarm stage. A recent study by Food Agriculture Organization (FAO) / Somalia Water and Land Management Information System for Puntland estimates the annual rate of *Acacia bussei* trees decline at about 5% in Puntland, and this rate seem also to be applicable across Somalia. According to a WSP report, the charcoal output of north-east Somalia in 1996 was estimated to be in the order of 4.8 million sacks [each weighing 25-30 kg]. Producing such a volume, required cutting approximately 2.1 million *Acacia bussei* trees. At an average density of 60 trees per hectare, this translates into a deforestation rate of 35 000 hectares of land per year.

Extrapolating the above figures for production of the 10 million sacks of charcoal produced in the South Somalia during 2011 [only export], means felling 4.375 million trees or clearing 72 916 hectares of land. As the deforestation level increases, this ensues an increase of desertification and in turn land degradation, where the vulnerability of pastoral and agropastoral communities to droughts increases. There is a strong linkage between the deforestation, desertification, and droughts. The removal of trees can reduce the water-holding capacity of the soil, leading to a decline in soil fertility and productivity.

Tropical Cyclones

Tropical cyclones don't happen very often in Somalia. However, from 2015 to 2020, the country had storms every year that destroyed a lot of property because of the strong winds and heavy rains that caused flash floods. Before then, cyclones were experienced once in ten years.¹² The most memorable ones include SAGAR (2018), PAWAN (2019), and GATI (2020), which may have been the strongest of them all and caused human lives loss and the massive destruction of infrastructure. The frequent occurrence of cyclones along the coast of Somalia has been associated with the warming of sea surface temperature and the local effects of the Indian Ocean Dipole.

The Insurance Industry in Somalia

The insurance industry in Somalia has faced significant challenges due to prolonged instability, conflict, and governance issues, resulting in limited or non-existent traditional insurance operations. However, recent efforts have emerged to establish insurance services, including Takaful insurance based on Islamic principles and microinsurance for underserved communities. Remittance-based insurance initiatives leverage remittance networks, while emerging private sector initiatives navigate complex factors to offer insurance.

A notable development in 2020 was Somalia's renewed membership in the Multilateral Investment Guarantee Agency (MIGA), marked by an agreement signed between Somalia's Minister of Finance, Abdirahmen Beileh, and the World Bank. This agreement offers political risk insurance and credit enhancement, presenting opportunities for entrepreneurs, investors, and insurance industry growth in Somalia. Following this agreement, the Federal Government of Somalia passed an insurance bill in 2020. This legislative effort, jointly undertaken by the Federal Government of Somalia, the Ministry of Finance, and the Central Bank, represents a significant milestone. After 30 years since the collapse of the central government, comprehensive regulation and supervision are being established for both conventional insurance and Takaful business in Somalia.

The objectives of this law are multi-faceted, aiming to establish a robust regulatory framework, promote market development, ensure safety and fairness, instil public confidence, and protect policyholders' interests. However, challenges persist, including a lack of insurance awareness and limited knowledge among the population. Collaborative efforts with government bodies, NGOs, the private sector, the diaspora, and others seek to address this gap and drive increased insurance uptake.

Despite Somalia's developing insurance sector, there is the absence of climate risk insurance. This lack of climate insurance market leaves the nation vulnerable to extreme weather, drought, and environmental perils. This void compels Somalia to lean heavily on external aid for post-disaster recovery, underscoring the pressing need for the integration of climate risk insurance. Collective action involving insurers, policymakers, international organizations, and climate experts is imperative. By embracing climate risk insurance, Somalia enhances its resilience, aligns with global climate initiatives, and reinforces economic stability in the face of climate uncertainties.

South Sudan

South Sudan faces significant vulnerability to the adverse effects of climate change. The country is already witnessing the negative impacts of rising temperatures and increasing variability in rainfall patterns. This variability manifests in erratic and intense rainfall, leading to more frequent and severe flooding in various regions. These climate-related changes pose a significant threat to livelihoods that are highly dependent on climatic conditions.

The socioeconomic situation in South Sudan further exacerbates the challenges posed by climate change. The country ranks 185 out of 189 on the Human Development Index, with an estimated 74.3% of the population experienced extreme poverty in 2019^[12]¹². Additionally, South Sudan is recognized as the fourth most fragile state according to the 2021 Fragile State Index^[13]¹³.

South Sudan spans a land area of approximately 644,330 square kilometers, with around 4 percent of this land being suitable for cultivation, totaling an estimated 2.76 million hectares. The country experiences a sub-humid climate characterized by an average annual rainfall of about 900 mm/year. Rainfall levels vary across different regions, ranging from 700 mm/year in lowland areas like Eastern Equatoria, Jonglei, Upper Nile, and Bahr el Ghazal, to 2200 mm/year in Western Equatoria and the highlands of Eastern Equatoria. Depending on the specific regions, South Sudan has either one or two distinct rainy seasons. In Western and Central Equatoria, rainfall follows a bimodal pattern, with the first rains occurring from April to June and the second from August to November. This results in a long-wet season from April to August, a short dry period from December to March, and extended periods for agricultural activities spanning 280-300 days. Other regions exhibit a unimodal rainfall pattern, with a wet season lasting from May to October and a dry period from November to April. South Sudan experiences high temperatures throughout the year, with mean temperatures typically above 25°C and sometimes exceeding 35°C, particularly during the dry season from January to April. These extreme conditions can trigger migration among pastoral communities.

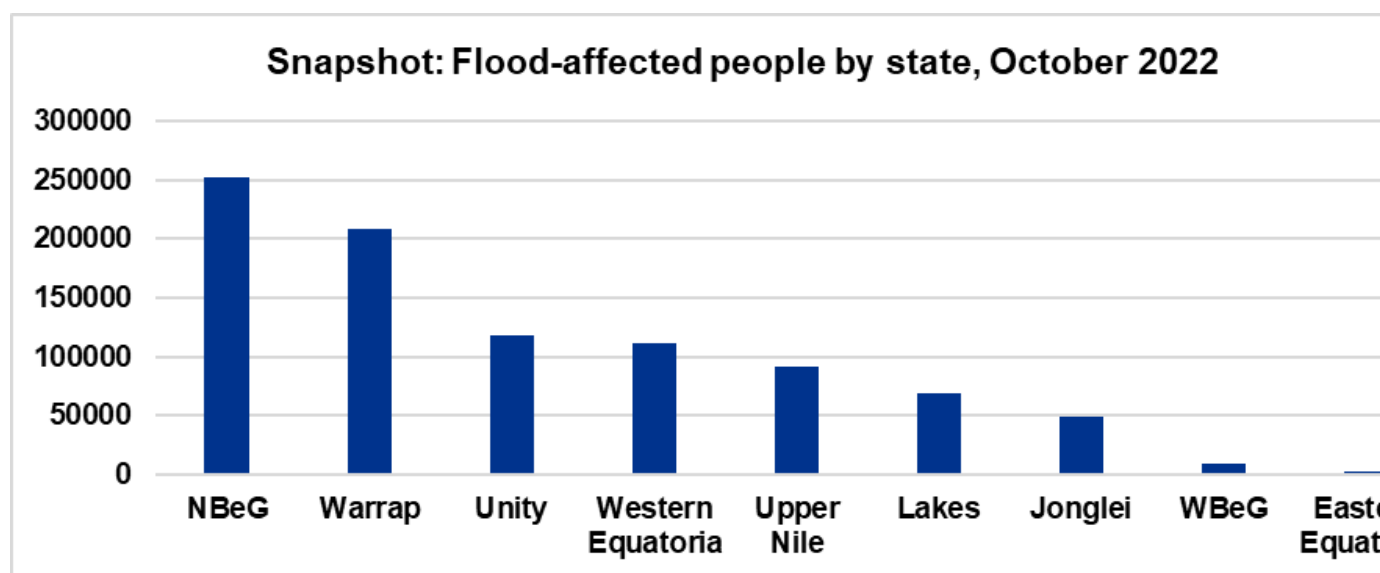
South Sudan faces significant climate risks that have profound implications for its environment, economy, and societal well-being. The country is highly vulnerable to various climate-related hazards, which necessitate a comprehensive understanding of the challenges at hand. The following climate risks are particularly salient in South Sudan:

Floods

Flooding represents a primary climate risk in South Sudan, predominantly occurring during the rainy season from July to September. Intense precipitation leads to the overflow of Nile River tributaries, resulting in extensive flooding across the nation. The repercussions of flooding include the displacement of populations, infrastructural damage, agricultural losses, and the proliferation of waterborne diseases.

Losses from floods have been increasing over the years. The figures below show the number of internally displaced people caused by floods, and a snapshot of flood affected people by state in a flood in October 2022. According to reports^{[14]¹⁴}, in 2020 ? It is estimated that ? floods affected 1,214 km of roads, 110,831 buildings with a total built-up area of 3.3 million m², and 148,200 hectares of cropland. Total damages and losses are estimated at USD 121.1 million. It is also estimated that between May and November 2021, over 800,000 people in 33 counties were affected by flooding in areas along the Nile and Lol rivers, and in Sudd marshlands^{[15]¹⁵}.

Source: <https://www.internal-displacement.org/database/displacement-data>



Source:

https://www.humanitarianresponse.info/files/documents/files/south_sudan_flooding_snapshot_no.2_11-oct-2022.pdf

Droughts

South Sudan experiences recurrent drought events. These droughts can endure for extended periods, typically spanning two to three years. Water scarcity, reduced agricultural productivity, and heightened food insecurity are among the prominent outcomes of prolonged droughts. Insufficient rainfall profoundly impacts crop cultivation and livestock rearing, adversely affecting the livelihoods of communities dependent on these sectors.

Climate-related epidemics

Climate change contributes to the emergence and spread of infectious diseases within South Sudan. For instance, elevated temperatures and altered precipitation patterns create favorable conditions for the proliferation of disease vectors such as mosquitoes, thereby increasing the risk of vector-borne diseases like malaria. Additionally, flooding events can escalate the prevalence of waterborne diseases such as cholera.

Intercommunal conflict

Climate-related factors, particularly the competition over limited natural resources such as water and grazing land, exacerbate intercommunal conflicts in South Sudan. Climate change impacts, including prolonged droughts and floods, can intensify these conflicts, leading to population displacement, livelihood disruptions, and heightened food insecurity.

Food insecurity

Climate risks, notably floods and droughts, exert a significant toll on agricultural production in South Sudan. Erratic rainfall patterns, water scarcity, and extreme weather events disrupt farming activities, leading to crop failures and diminished food production. Consequently, the country grapples with alarmingly high levels of food insecurity and malnutrition.

Displacement and migration

Climate-induced hazards force substantial population displacement within South Sudan and prompt cross-border migration. Floods and droughts render certain regions uninhabitable, compelling communities to seek refuge in safer areas. The resulting influx of displaced individuals strains local resources and amplifies vulnerabilities.

Future climate prospects

Climate projections for South Sudan indicate that by the 2050s, the country is expected to experience a temperature increase of 1-4°C across most areas. Additionally, there will be changes in rainfall patterns, with a focus on increased intensity of seasonal rainfall rather than an increase in the frequency of rainy days^[16]¹⁶. This shift has already resulted in both widespread and localized flooding, particularly when high water levels exceed the capacity of the River Nile and its tributaries. Prolonged flooding occurs in certain areas due to stagnant water caused by inadequate drainage systems.

Deforestation in South Sudan, driven primarily using trees for fuelwood and charcoal production, as well as illegal logging, is exacerbating the effects of climate change and extreme weather events. With limited access to alternative energy sources, the majority of the population heavily depends on forests for cooking, boiling water, and lighting. This unsustainable reliance on fuelwood leads to the loss of forest cover, causing large-scale erosion, increased surface water runoff, and siltation in rivers, particularly the Nile. Addressing the underlying causes of deforestation and promoting sustainable energy and resource management is crucial to mitigate climate change impacts.

preserve ecosystems, and ensure the well-being of both the environment and the people of South Sudan.

Effectively addressing these climate risks necessitates a comprehensive and multidimensional approach. Key elements of a robust response strategy include bolstering disaster preparedness, enhancing early warning systems, adopting sustainable land and water management practices, and investing in climate-resilient infrastructure. International assistance, capacity-building initiatives, and collaborations with regional and global partners are vital for South Sudan to strengthen its resilience and effectively mitigate the impacts of climate change.

Climate and Disaster Risk Management in South Sudan: A Complex Challenge

Climate and disaster risk management in South Sudan is a multifaceted challenge exacerbated by the country's vulnerability to both natural and human-induced disasters. The nation faces a range of climate and environmental risks, including droughts, floods, conflicts, and economic instability. Effective management of these risks is crucial for the well-being of its population and sustainable development. However, the existing challenges, limited resources, and dependency on external aid present significant obstacles to building resilient systems.

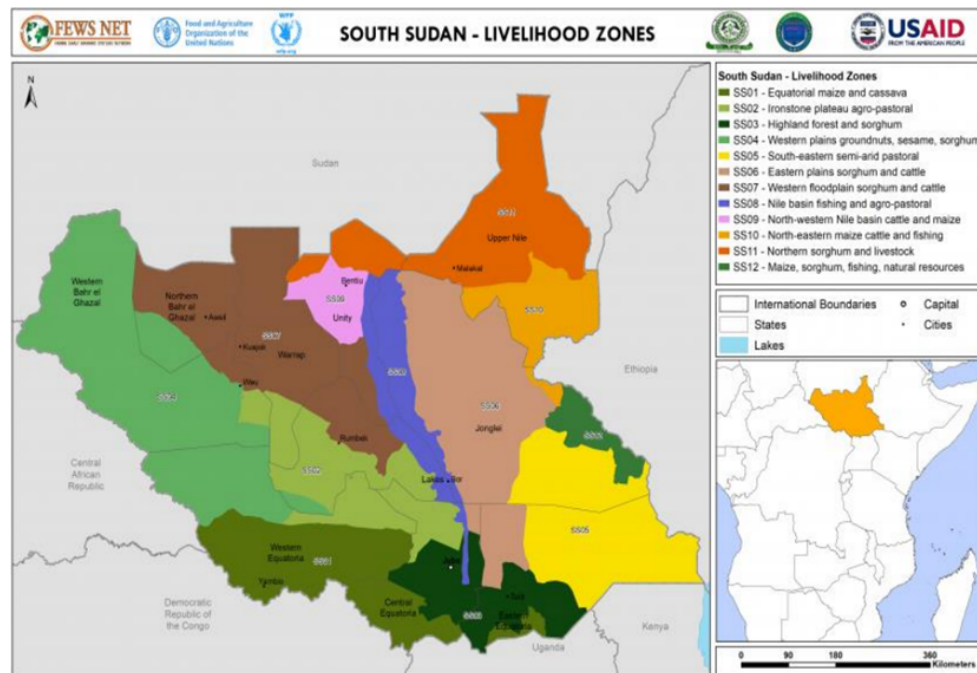
South Sudan has made efforts to enhance climate and disaster risk management through a combination of policies, institutions, and community-based approaches. The government, with support from international organizations and development partners, has established disaster management frameworks, early warning systems, and contingency plans. These initiatives aim to predict, mitigate, and respond to various hazards, such as floods and droughts, and facilitate coordinated efforts between government agencies and humanitarian organizations.

Despite these efforts, south Sudan's capacity to manage climate and disaster risks remains constrained by numerous factors. The country's history of conflict, internal displacement, and underdeveloped infrastructure hampers its ability to adequately respond to disasters. This leads to a significant reliance on external and internal aid for post-disaster recovery and relief efforts. Humanitarian organizations and international partners play a crucial role in providing emergency assistance, including food, water, shelter, and healthcare, following major disasters. While external aid plays a significant role in post-disaster recovery, climate risk insurance holds promise as a tool to enhance resilience, incentivize preparedness, and support sustainable development. By addressing challenges and building on existing initiatives, South Sudan can work towards a more resilient and self-reliant future in the face of climate and disaster risks.

The insurance market in South Sudan remains underdeveloped and faces significant challenges. Limited financial infrastructure, lack of awareness, and a predominantly agrarian economy hinder the growth of insurance services. Traditional insurance products are often unaffordable for the majority of the population, particularly in rural areas where vulnerability to climate and disaster risks is high. Additionally, the lack of reliable historical data poses difficulties in designing effective insurance solutions. Despite these obstacles, fostering a conducive environment for insurance innovation, along with tailored outreach and education efforts, could pave the way for a more inclusive and responsive insurance market that complements the country's efforts in climate and disaster risk management.

Ex-ante climate risk insurance policy offers South Sudan a proactive approach to disaster management. By providing financial coverage before climate-related events occur, it encourages risk reduction, preparedness, and sustainable practices. This shift from reactive to preventive measures fosters resilience, reduces the socio-economic impact of disasters, and incentivizes investments in climate-resilient infrastructure. As reliance on external aid decreases, the policy promotes self-reliance, empowers vulnerable communities, and aligns with the country's development goals, creating a more prosperous and resilient future.

Map 2: South Sudan Livelihood Zones.



Source: National Strategy for Disaster Risk Management in South Sudan and Plan of Action (2019-2024)

[1] Population, total - Comoros | Data (worldbank.org)

[2] SWIO is a joint initiative between the World Bank Group (WBG), the Indian Ocean Commission (IOC), and the five participating Island States of the Comoros, Madagascar, Mauritius, Seychelles, and the Archipelago of Zanzibar? a semi-autonomous Region of Tanzania.
<https://documents1.worldbank.org/curated/en/951701497623912193/pdf/116342-WP-PUBLIC-52p-SWIO-RAFI-Summary-Report-2017-Publish-Version.pdf>

[3] Source: 2007 National Contingency Plan

[4] Kenneth affected more than 40 percent of the population, i.e., 345,131 individuals, including 185,879 in need of humanitarian assistance, 153 injured, 11,969 displaced and 6 dead, 4,854 houses totally destroyed and 7,013 partially damaged, 147 water tanks destroyed and affected, 527 businesses affected.

[5] Others are Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo Brazzaville, Equatorial Guinea, Gabon, Guinea Bissau, Ivory Coast, Mali, Niger, Senegal, and Togo

[6] Data analysis from the Climate Change Knowledge Portal (CCKP) of the World Bank Group reveals historical information from 1901 to 2019.

[7] Djibouti | ACAPS

[8] IPC_Djibouti_Acute_Food_Insecurity_2022MarDec_French.pdf (ipcinfo.org)

[9] https://climateknowledgeportal.worldbank.org/sites/default/files/2021-04/15722-WB_Djibouti%20Country%20Profile-WEB.pdf

[10] Government, international players drive Djibouti's insurance market (africabusinesscommunities.com)

[11] International Strategy for Disaster Reduction, the World Bank (unisdr.org)

[12] UNDP. Human Development Indicators. <http://hdr.undp.org/en/countries/profiles/SSD>

[13] The Fund for Peace. Fragile States Index 2017: South Sudan. 2021.
<http://fundforpeace.org/fsi/country-data/>

[14] Paul Watkiss Associates (2022) Climate change adaptation, Disaster Risk Reduction and Early Warning Systems in South Sudan

[15] United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2021. South Sudan Floods. The Cost of Inaction as of November 2021. Available at <https://reliefweb.int/report/south-sudan/south-sudan-floods-cost-inaction-november-2021>

[16] See Richardson, K., Calow, R., Pichon, F., New, S. and Osborne, R. (2022) Climate risk report for the East Africa region. Met Office, ODI, FCDO. , World Bank Climate Portal <https://climateknowledgeportal.worldbank.org/country/south-sudan/climate-data-historical>

and African Development Bank. 2018. National Climate Change Profile. South Sudan

ii) Baseline scenario and any associated baseline projects

The global impact of climate change and natural disasters has been worsening in the last few decades, and more specifically in Africa. Between 1994 and 2013, more than 6,870 natural disasters occurred worldwide, and claimed 1.35 million lives or almost 68,000 lives on average each year. In addition, an average of about 218 million people were affected by natural disasters per annum during this 20-year period[1]. Between 2000 and 2015, an average of about 340 climate-related disasters per annum were recorded, up 44% from the 1994-2000 average and well over twice the level in 1980-1989[2]. Drought affected more than one billion people between 1994 and 2013, and about 41% of global drought disasters were recorded in Africa[3].

Future climate projections based both on models and observations indicate that one of the most serious consequences of climate change is the likelihood of greater frequency and intensity of extreme weather events. The Intergovernmental Panel on Climate Change (IPCC) projections under medium scenarios (RCP 4.5) as reported in the IPCC Fifth Assessment Report (AR5) indicate that extensive areas of Africa will exceed 2 °C of warming relative to the late twentieth century mean annual temperature by the last two decades of this century, with all of Africa reaching that threshold under high emission scenarios[4]. This will have devastating consequences for human well-being and the livelihoods of rural people across the Continent. With one in four people in Sub-Saharan Africa living in extreme poverty and most of the workforce in small-scale agricultural production, the majority of the population does not have the safety nets as can be found in wealthier nations.

In this context, the approach to adaptation and management of climate related crises, has been through ex-post approaches and humanitarian responses, with major gaps including delayed support during emergencies, lack of predictable funding, maladaptation, and lack of leverage for small economies to manage crises independently. While the climate change negotiations and disaster risk platforms underscore the need to manage these thematic areas coherently, not many countries have fully embraced this, and disaster management continues to operate independent of climate change management and development planning is not risk informed, hence economic growth trajectories often get disrupted by climate crises most of which can be anticipated.

More than ever before, African countries need to reduce their exposure and vulnerability, and create a system to absorb, adapt and recover in the face of climate shocks. Given the growing

impacts of climate change and how development trajectories get disrupted from increasing climatic events, it is crucial to mainstream climate and disaster risk management into development planning. In fact, climate risk management in Sub-Saharan Africa suffers from inadequate financing and challenges in the deployment of available funds. This is due to the tight fiscal space and budget constraints in countries, along with the absence of dedicated funding mechanisms for climate risk management, and limited insurance penetration, which is restricting the contribution of the private sector to this agenda. Additionally, risk financing instruments can also be complex, involving intangible benefits accruing at some indeterminate point in the future. The complexity and uncertainty of the benefit make it hard for governments to understand the value proposition, contributing to limited uptake of such instruments. Therefore, to financially address the humanitarian needs in the aftermath of these events, governments resort to shifting money away from other critical development programming; borrowing (where rates are often higher for rapid post-crisis financing), incurring debt; or relying on external 'free' humanitarian assistance, which is unpredictable and often comes too late. As a result, when climate disasters strike, countries are often unable to provide enough immediate financing to fully address response and recovery needs, meaning that the effects of such events must be absorbed by the population. Often, it is the poorest households who are disproportionately negatively impacted by disaster shocks and other crises due to their higher vulnerability and exposure.

This project is building on the African Development Bank's flagship programme on climate risk finance, the Africa Disaster Risk Financing (ADRFi) programme which is aimed at catalyzing countries to migrate from ex-post to ex-ante approach towards management of climate related crises. Through the ADRFi programme, the project will aim to address the additional cost of mainstreaming climate risk management into development planning and catalyzing the Africa region to embrace innovative tools for climate action financing and predictable financing following climate related crises. The programme is implemented in partnership with the Africa Risk Capacity (ARC), working with countries that have ratified the ARC Treaty on climate risk financing. The ADRFi programme is funded from the African Development Fund of the African Development Bank, and the ADRFi Multi-Donor Trust Fund (MDTF), which has been established to promote climate risk financing over the African Continent, and with funding from the Swiss, US State, USAID, Canada and the British Governments. The MDTF has mobilized over \$ 50 million to date, and with the growing demand in the region for climate finance the fund has significant potential to grow and have a lasting impact in the region.

The ADRFi programme has been running since 2018, where 7 countries have been supported with climate risk management solutions, partial premium support and development of Disaster Risk Financing Strategies. In 2022, 8 more countries are being supported and more countries have expressed interest. A recent dividend of the programme includes a payout disbursed to the Government of Madagascar following the impacts of Tropical Cyclones Batsirai and Ana, where the government of Madagascar has received \$10.7 Million payout following premium payment of \$2.0 million. In addition to delivering on key results, ADRFi has also elevated the profile of climate risk management through leveraging the role of Ministries of Finance and development planning with sectors that manage climate risk management. Despite this increased interest, there remain challenges for uptake and use of climate risk financing instruments by governments. Reasons for limited uptake include, among others:

- ? Limited funding to cover the substantial start-up costs for climate risk financing instruments, given the already tight budgets and competing priorities that these Governments are faced with.
- ? Lack of understanding within governments on risk financing and how it fits into regular processes of budgeting and finance.
- ? Lack of adequate and affordable tools and data to effectively quantify risk, which is a first step toward understanding what combinations of financial solutions could optimize coverage of risks for a specific country.
- ? Political economy pressures (e.g., planning vs. payout horizons, opportunity costs of spending on uncertain future outcomes, mis-aligned incentives, etc.) which can discourage financial planning of this sort.
- ? Lack of technical expertise within vulnerable countries to design and implement climate risk management solutions.
- ? There often remains a government reliance on ex-post ?free? funding by the humanitarian community due to decades of access to such assistance.
- ? There are few readily available pre-arranged financing solutions that are specifically tailored to fit different countries? needs and contexts those that address the needs of LDCs.

The program is also complementary to the proposed Africa Climate Risk Insurance Facility for Adaptation (ACRIFA). While both programs target climate risk insurance, ACRIFA is geared towards the private sector response to climate risk insurance on the micro and meso levels. The proposed ACRIFA program involves the following activities:

- a. Designing innovative insurance products that address the specific climate and disaster risks faced by African countries and communities
- b. Developing financial instruments and risk mitigation tools that facilitate access to finance for Agri-SMEs and enterprise development in the agri-food system, as well as broader climate and disaster risk management
- c. Building the technical capacity of local and regional insurance providers, regulators, and other stakeholders to effectively deliver and scale climate risk insurance solutions.

African Risk Capacity (ARC) is the specialized agency of the African Union that supports member states improve their capacities to better plan, prepare, and respond to extreme weather events and natural disasters. ARC supports the development and implementation of parametric (index-based) weather risk insurance pool that will provide participating African countries with predictable, quick-

disbursing funds with which to implement pre-defined contingency response plans in the case of a drought.

Technically, ARC is a sovereign risk transfer pool, like the Caribbean Catastrophe Risk Insurance Facility and Pacific Catastrophe Risk Assessment and Financing Initiative established by the World Bank in 2007 and 2014, respectively. ARC benefits from the support of the donor community since its inception. It provides risk transfer solutions to member countries against drought, river flood, tropical cyclone, and now pandemic risks. As of now, 18 countries in Africa have received risk transfer insurance between the Replica and the parametric risk insurance programs. For drought, it has provided insurance coverage that resulted in payouts exceeding USD 151 million since its first policies were issued in 2014. These resources were eventually used to finance rapid response and help member countries throughout drought and food emergencies. As an example, in the 2021/2022 season, ARC delivered over \$60 million in insurance claims following a severe drought and floodings to 8 of its member countries. This money was used to provide timely food assistance to over 1.5 million people, preventing a potential humanitarian crisis.

Graph 5: ARC policies, premiums, and payouts

[1] Centre for Research on the Epidemiology of Diseases (CRED): The Human Cost of Natural Disasters ? A Global Perspective (2015)

[2] Climate and Development Knowledge Network. The IPCC's Fifth Assessment Report ? What's in it for Africa? (online access:

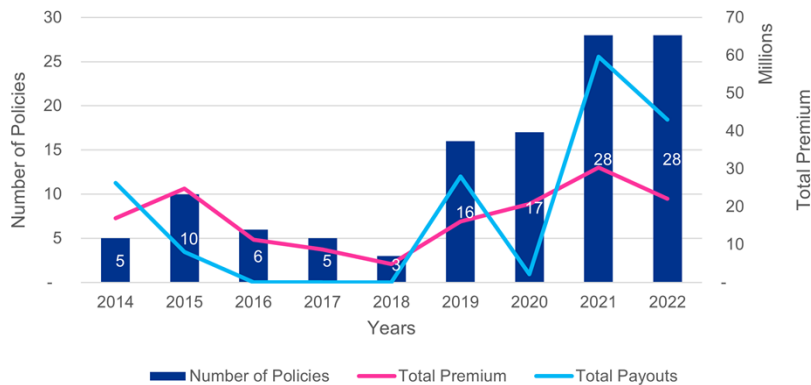
<https://cdkn.org/resource/highlights-africa-ar5/>) (2014)

[3] I. Niang, O.C. Ruppel, M.A. Abdrabo, A. Essel, C. Lennard, J. Padgham, and P. Urquhart, 2014: Africa. In: Climate Change 2014: Impacts, Adaptation, and

Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S.

MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1199-1265.

[4] WMO: State of Climate in Africa < https://library.wmo.int/doc_num.php?explnum_id=10421> .



Source: ARC

However, while insurance payouts can provide much-needed financial support following a disaster, they are only one component of a comprehensive climate risk management strategy. It is also crucial to invest in climate-resilient infrastructure, early warning systems, and climate-smart agricultural practices, among other things. In fact, ARC supports with capacity building and technical working groups the development of early warning systems, the establishment of Operational Plans for emergency response in line with comprehensive governance structures by linking early warning systems with contingency planning and insurance. In this regard, ARC provides an innovative approach to climate risk management.

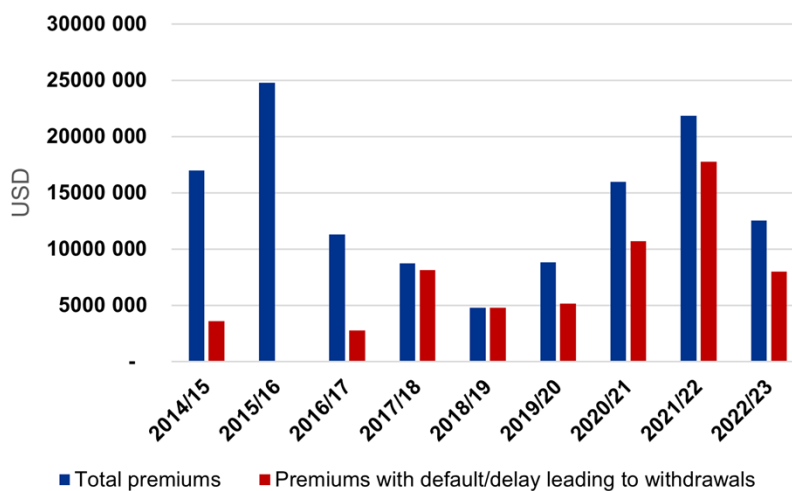
The core of ARC is the Africa Risk View Monitoring System. It is a tool that interprets weather data and crop information to assess the impact of drought or deficit or excess rainfall on vulnerable populations. By estimating the number of people affected and the associated response costs, it helps in understanding the potential consequences and planning appropriate interventions, e.g. emergency and response costs. These estimates range across a vector of relative losses associated with weather events that are modelled based on probabilities and other stochastic processes. As a result, the model is highly dependent on the quality of historical data, including data on exposures, assets, economic activities, geographic locations, people, resilience capacity, etc. The tool, or index, is used to price the insurance policies and transact with the markets.

Participating in risk pools is advantageous to countries, as they can benefit from the capacity and technical support of ARC, but also financially given the nature of the program. Insurance pools benefit from risk diversification, abating costs for the individual participating countries. Recent studies pointed to potential gains of 60 percent in premiums for events with a frequency of one-in-hundred years, depending on the geographic location of the pool. Other studies (see Clarke) estimated that the combination of the participation to risk pools and buying insurance protection may have a return close to 1.6 per each dollar paid for the policies. Additionally, ARC pool seems to be tailored to provide protection for relatively frequent events (one in four years), making an interesting back stop for emergency support, especially considering that the primary objective of ARC is to provide immediate financial resources.

ACRIF Country	Engagement with ARC
Comoros	Participated in Tropical Cyclone pool 2022/23. Failed payment.
Djibouti	Never participated in risk pool.
Somalia	Participated in Drought risk pool 2022/23 and 2023/24, also with Replica (START Network). Replica received USD 4.2 million payout in January 2023.
South Sudan	Not yet signed agreement

One of the shortcomings of the insurance pools is that the portfolios need to be transacted with risk takers (mostly insurance and reinsurance groups) almost simultaneously, around June 1st. Any delay in premium payments by the countries becomes a financial liability of ARC. Thus far, ARC has resolved the issue by cancelling the policies of those countries not contributing within weeks from inception. However, this instability has generated uneasiness, and anecdotally an increase in premium costs close to 10/15 percent. ARC has in fact experienced, in the worst years, accumulated delays in premium payments close to approximately USD 7 million.

Figure 2 - ARC premium payments and defaults/delays



Source: ARC

Other Relevant Weather Risk Insurance Programs

WFP R4 Rural Resilience Initiative: it offers insurance coverage in exchange for participation in risk reduction activities, safeguarding farmers' assets and stimulating recovery from climate shocks. This initiative promotes farmers' investment in productive resources and encourages riskier but more lucrative ventures. R4 also fosters gender equality by enhancing women's access to resources and decision-making power. To ensure long-term sustainability, R4 helps establish rural financial markets, building capacities among households, insurance companies, and micro-finance institutions. The initiative also extends insurance access through various channels and fortifies stakeholders' capacity to take over insurance processes, facilitating local ownership and resilience.

World Bank DRIVE project: it supports pastoralists in Djibouti, Ethiopia, Kenya, and Somalia against drought impacts and improve market connectivity. The initiative will reach around 250,000 households (1.6 million individuals), aiming to generate private capital for drought insurance, savings, and digital accounts. DRIVE aims to facilitate regular livestock sales, enhance quality standards, and transition from live animal to livestock product value chains. By pooling drought risk through COMESA's reinsurance company, ZEP-RE, operational and premium costs are expected to decrease. The project draws on successful drought insurance programs in Ethiopia and Kenya.

IFC's Global Index Insurance Facility (GIIF): in Kenya and Rwanda and backed by the European Union and Netherlands, the facility will work in several emerging markets with an initial focus on Sub-Saharan Africa, where farmers and agricultural workers make up 60 percent of the workforce, but most cannot find crop coverage. IFC conferred grants totaling roughly \$4.1 million from the GIIF trust fund to three partners in Africa -- the Syngenta Foundation for Sustainable Agriculture; the International Livestock Research Institute; and MicroEnsure.

iii) Proposed alternative scenario with a description of project components, outcomes, outputs, and deliverables

As climate related disasters lead to several direct and indirect financial impacts on governments, this project will promote adaptation and resilience to the negative impacts of climate through sovereign risk financing and risk transfer measures that provide cover against the financial impacts of climate related disasters as well as financing some of the post-disaster expenses. In the context of climate risk management, risk pools have emerged as cost-effective vehicles to help countries access rapid financing for disaster response. Additionally, pooling risks at the regional level makes it more affordable for Governments to transfer their climate risks at a premium that is more competitive than what they would have gotten if they were to seek insurance directly in the market. Furthermore, recent research indicates that one dollar invested in pre-arranged financing solutions saves about four dollars in humanitarian spending[1].

Globally, Africa is lagging in ex-ante management of crises, contributing to only 0.5% of global insurance to agricultural climate related crises[2]. The AfDB is advocating for such instruments through this project, leveraging on the experience of the AfDB in promoting innovative climate risk financing instruments through the ADRiFi programme. Within the ADRiFi programme, Madagascar has over the past 2 years received payouts of more than \$11 Million cumulatively following tropical

cyclones from the risk pool. Given the timely assistance and investments in adaptation, there is growing interest from member states of the African Development Bank to de-risk climate crises, and this has potential to make countries that are prone to climate related crises to have predictable and timely financing to safeguard development gains, to adapt to the changing climate, to save lives and property and to own climate risk management even from domestic budgets.

This project will enhance understanding of climate risk management in African LDCs, by endowing them with relevant requirements for risk modelling, disaster risk financing policies and legislation, thereby fostering enabling environments for an uptake of climate risk financing instruments in Africa. It is expected that through this will facilitate ex-ante approach to climate risk management and empower countries to have timely financial resources following extreme climatic events, provide rapid assistance to the most vulnerable and foster sustainable recovery by reducing exposure of the marginalized groups to extreme climate events. This innovation will transform Africa's approach to climate risk management, by promoting ex-ante climate risk financing approaches and incentivizing the mobilization of financial resources to address the risks of climate disasters in a sustainable manner. In addressing the challenges for the uptake of climate risk financing instruments, the project will foster capacity building, knowledge generation on climate risk management, thereby facilitating a foundation towards resilience and innovative climate risk financing in Africa. This will be done essentially through three main components including:

[1] <https://www.globalriskfinancing.org/sites/default/files/2020-07/GRiF%20Theory%20of%20Change.pdf>

[2] Agricultural insurance has been present in some African countries since the early 20th century (Burger, Reference Burger1939; Adesimi and Alli, Reference Adesimi and Alli1980; Alli, Reference Alli1980; Atlas Magazine, 2017), however, the market remains very small. As of 2008, four out of 47 countries in the

region had a functioning agricultural insurance program and an additional six were implementing pilot projects (Mahul and Stutley, Reference Mahul and Stutley2010). The last decade has observed gradual improvement ranging from agriculture micro-insurance (Di Marcantonio and Kayitakire, Reference Di Marcantonio, Kayitakire, Tiepolo, Pezzoli and Tarchiani2017) with several countries piloting index insurance (Sandmark et al., Reference Sandmark, Debar and Tatin-Jaleran2013). Hess and Hazell (Reference Hess and Hazell2016) found that about 653,000 farmers had some form of insurance coverage and our updated program coverage suggests over 2 million smallholder farmers have insurance in Africa. Source:

<https://www.cambridge.org/core/journals/environment-and-development-economics/article/determinants-of-uptake-and-strategies-to-improve-agriculturalinsurance-in-africa-a-review/6FB330C15BEE881A0358E1159DFF3199>

COMPONENT 1: Setting the enabling environment for the adoption of climate risk financing instruments in African LDCs

This component aims at building the overall capacity and understanding of climate risk and disaster risk management through assistance and capacity building in the following areas:

1.1 Strengthen understanding of climate risk exposure of African LDCs and establishment of institutional climate risk management processes and frameworks needed to be put in place to facilitate enhanced recovery from climate shocks and will include the following tasks:

- ? **Improve understanding:** Long-term technical and capacity building to main stakeholders to enhance the understanding of weather and climate information and risk, vulnerability and exposure maps, and assist in improving coordination among key actors of the DRM systems. Particular emphasis shall also be given to implement awareness campaigns on DRM at all levels.
- ? **Support to plans:** Provide technical and capacity support to improve the preparedness and response infrastructure, framework, and contingency plans, and support in enhancing the decentralization of civil protection systems.
- ? **Data:** Surveys to collect data on household, businesses and other affected agents of vulnerability to climatic hazards, and training in statistical analysis and modeling of data collected for members of the ARC technical working group, which is partly composed of weather agents.
- ? **Analysis:** Analytical reviews and assessments of the flooding or drought exposure, vulnerability and risk Assessment, all elements that require capacity and understanding of various factors, including socioeconomic status, age, health, and the quality of the built environment, vulnerability data, food security and nutrition indicators, data quality and analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought.

1.2 Enhanced understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in African LDCs (Governments, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.) and will include the following tasks:

- ? **Awareness building:** Awareness building of national members of National Disaster Risk Management Council (NDRMC), and training and capacity building of members of Country Disaster Management Committees, both at the country and regional levels, ARC Technical Working Group, government officials and the members and officials National Early Warning Technical Working Group the and other stakeholders on enhance the understanding of weather and climate information and risks, vulnerability and exposure maps, and the functioning of national climate monitoring and reporting systems at both

national and regional levels, and training on food security and nutrition indicators, data quality and collection (methodologies, methods, tools), data analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought.

- ? **Review disaster risk management strategies:** Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity. This will include (a) reviewing the existent disaster risk financing framework, budgeting process appropriation for preparedness and emergency funding, tagging across ministries, agencies, and provide appropriate knowledge and capacity building across the various stakeholders, and (b) evolve various financing instruments into a comprehensive disaster risk management strategy, including pre-funding, contingent lines of credit, insurance and re-insurance products, catastrophe risk insurance.

Develop disaster risk financing strategies: Assist participating LDCs in developing and implementing comprehensive financing strategies to complement ARC's coverage with different instruments and support the mobilization of the private sector, and support LDCs in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.

COMPONENT 2: Improving uptake of climate and disaster risk financing in Africa

The objective of this component is to increase access and participation of African LDCs in the Sovereign regional risk pool offered by the African Risk Capacity (ARC). The component includes a Guarantee Facility to address liquidity gaps and time mismatch in the contracting of the risk pools, and premium payments to the four HoA countries.

The component will include the following activities and elements:

- ? **Premium payments:** Support premium payment for climate risk insurance for PRIME policies to ARC Ltd over a multi-year period (2024-2028). The premium payment will cover 100 percent of the first year, decreasing each year thereafter, conditional to the remainder being contributed by the LDCs through their MDF allocations.
- ? **Premium payment guarantee:** A regional 6-month liquidity facility to guarantee the payment of the premium for the policies of the LDCs, which would enable ARC to efficiently place the sovereign risk pool with the risk takers on time for the beginning of the risk seasons. The facility aims at addressing delays and policy cancellations, which have anecdotally experienced variability and instability, and resulted in increased rates on-line and insurance multiples. The guarantee would then address delays and preserve the integrity of the sovereign pools, while retaining the obligations of LDCs and their donors to perform on premium

payments. The guarantee facility will be set up with its independent governance based on the Premium Financing Group serving as steering committee. The size of the guarantee was calculated as 66 percent of the premium arrears outstanding at any time during the worst year of contributions (notably the 2021, when COVID delayed operations and appropriation processes), i.e. USD 4 million.

COMPONENT 3

Enhance capacity and skills of African LDCs in collecting and managing data that is critical for climate risk management and improve communication and dissemination of climate risk management practices., this component will provide funding for:

Communication and dissemination: Strengthen communication and dissemination channels (often multiple channels), including software and hardware and comm equipment and backups, as to improve coordination of data and messages, and promote ex-ante community engagement and awareness involving stakeholders in risk assessment, transparently communicating about risks, and continuously monitoring and adapting engagement approaches to ensure positive outcomes. This can be done:

? Stakeholder collaboration: Work with local stakeholders, such as community leaders and organizations, to build partnerships and involve them in disaster risk management efforts.

? Training and capacity building: Conduct training programs to enhance community understanding of disaster risks, preparedness, and response measures.

? Participatory decision-making: Involve community members in decision-making processes related to disaster risk management to consider their input and priorities.

? Awareness campaigns and public events: Conduct campaigns, workshops, and events to promote a culture of preparedness and resilience within the community.

? Community-based early warning systems: Engage the community in designing and implementing early warning systems, including training and communication networks.

Specific activities by country:

Comoros

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Component 1: Technical assistance and capacity building
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Training, capacity, and awareness building to the members of the National Climate Change Committee (CNCC) and the Technical Intersectoral Committee within the Office of the Prime Minister, the National Drought Management Authority (NDMA), and the other stakeholders to enhance the understanding of weather and climate information and risks, vulnerability and exposure, and the functioning of national climate monitoring and reporting systems at both national and regional levels
Perform an analytical review and assessment of the flooding or drought Exposure, Vulnerability and Risk Assessment, all elements that require capacity and understanding of various factors, including socioeconomic status, age, health, and the quality of the built environment, vulnerability data, food security and nutrition indicators, data quality and analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought
Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products. The studies should include concrete recommendations for how the nascent private insurance markets can be supported through policy.
Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity, and assist Djibouti in developing and implementing comprehensive gender sensitive financing strategies to complement ARC's coverage with different instruments and support the mobilization of the private sector, and support the country in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.

Component 2: Premium payments

- Support premium payment for Tropical cyclone and flooding risk insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028) and for flooding, when available, and depending on the availability of donors? and other contributions. The premium payment will cover 100 percent of the first year, decreasing each year thereafter, conditional to the remainder being contributed by the LDCs through their envelope allocations.

Component 3: Investments

- Establishment and maintenance of climate information systems

Support communication and dissemination of risk data: Investment in equipment and systems to improve communication[AW1] and dissemination channels ((including software, hardware and communication systems) for climate risk data and promote community engagement [AW2] [SD3] [OB4] and awareness campaigns through public meetings, seminars, workshops, education in school, etc.

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Djibouti
Component 1: Technical assistance and capacity building

Training, capacity, and awareness building to the members of the National Climate Change Committee (CNCC) and the Technical Intersectoral Committee within the Office of the Prime Minister, the National Drought Management Authority (NDMA), and the other stakeholders to enhance the understanding of weather and climate information and risks, vulnerability and exposure, and the functioning of national climate monitoring and reporting systems at both national and regional levels
Perform an analytical review and assessment of the flooding or drought Exposure, Vulnerability and Risk Assessment, all elements that require capacity and understanding of various factors, including socioeconomic status, age, health, and the quality of the built environment, vulnerability data, food security and nutrition indicators, data quality and analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought
Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products. The studies should include concrete recommendations for how the nascent private insurance markets can be supported through policy.
Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity, and assist Djibouti in developing and implementing comprehensive gender sensitive financing strategies to complement ARC's coverage with different instruments and support the mobilization of the private sector, and support the country in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.
Component 2: Premium payments
Support premium payment to increase the existing ceding percentage of the current policies for Djibouti. These additional funding will be financed over a multi-year period (indicatively 2024 to 2028) and depending on the availability of ADF, donors and other contributions.
Component 3: Equipment and facilities
Establishment and maintenance of climate information systems
Support communication and dissemination of risk data: Investment in equipment and systems to improve communication ^[AW1] and dissemination channels ((including software, hardware and communication systems) for climate risk data and promote community engagement ^[AW2] ^[SD3] ^[OB4] and awareness campaigns through public meetings, seminars, workshops, education in school, etc.
Program management

Somalia

Component 1: Technical assistance and capacity building

Training, capacity, and awareness building to the members of the Somali Disaster Management Agency (SODMA), and the other decision makers and stakeholders to enhance understanding of weather and climate information and impact-based forecasting and the functioning of national climate monitoring and reporting systems at both national and regional levels

Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity, and assist Somalia in developing and implementing comprehensive gender sensitive financing strategies to complement ARC's coverage with different instruments and support the mobilization of the private sector, and support the country in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.

Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products. The studies should include concrete recommendations for how the nascent private insurance markets can be supported through policy.

Component 2: Premium payments

Support premium payment to increase the existing ceding of the current policies for Somalia. This additional funding will be financed over a multi-year period (indicatively 2024 to 2028) and depending on the availability of ADF, donors and other contributions.

Component 3: Equipment and facilities

Support communication and dissemination of risk data

- Establish the baseline local knowledge, opportunities for monitoring, evaluation and early warning at community-level, and manner in which information dissemination and communication can be done effectively to support early action.
- Establish a Gender equity and Inclusivity oversight function within the Federal Government of Somalia (FGS) Climate Data and services institutional framework, to ensure oversight of all processes and products, to ensure gender equity and related principles, is integrated.
- Test Climate Data product information transfer and integration into local knowledge and practices through surveys at community-level.
- Establish a suggestion-line/portal where open communication can be made, anonymously if so desired, to promote sharing of ideas and comments regarding process and progress in Climate service delivery across Somalia (promote open communication)
- Build capacity at FGS level to enable effective communication and information packaging and sharing for services across the value chain

Establishment and maintenance of climate information systems[OB5]
<ul style="list-style-type: none"> - Develop action plans on implementing and maintaining existing automatic weather stations networks and services including observation equipment, data transmission networks, etc. - Build human resources capacity at FGS level to enable data and systems management, analytical processes and methods to be applied. - Support at least 12 Month for Operational sustainability for Infrastructure (including acquisition of Protective Equipment)
Program management

South Sudan
Component 1: Technical assistance and capacity building
Awareness building to the national members of the National Disaster Risk Management Council (NDRMC), and training and capacity building of the members of the Country Disaster Management Committees, both at the country and regional levels, ARC Technical Working Group, government officials and the members and officials National Early Warning Technical Working Group the and other stakeholders on enhance the understanding of weather and climate information and risks, vulnerability and exposure maps, and the functioning of national climate monitoring and reporting systems at both national and regional levels, and training on food security and nutrition indicators, data quality and collection (methodologies, methods, tools), data analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought
Provide technical and capacity building to improve the exposure and vulnerability data collection, and enhance the ability to improve the accuracy and quality of data collection to support the risk assessment, vulnerability analysis and preparedness and response functions, including training personnel, routine surveys of households, businesses and other affected agents
Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products. The studies should include concrete recommendations for how the nascent private insurance markets can be supported through policy.
Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity, and assist South Sudan in developing and implementing comprehensive gender sensitive financing strategies to complement ARC's coverage with different instruments and support the mobilization of the private sector, and support the country in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.
Component 2: Premium payments[AW1] [SD2] [OB3]

Premium payments for sovereign flood risk insurance are already provided for under the 'Additional Financing to the Program to Build Resilience for Food and Nutrition Security through the Africa Disaster Risk Financing Programme' supported by the African Development Bank in South Sudan through funding from the Transition Support Facility. This additional financing was approved by the African Development Bank's Board of Directors in April 2023 and is currently being operationalized. The Premium support will become effective after South Sudan accedes to the African Risk Capacity Treaty and completes the preparatory technical work of risk profiling, contingency and response planning and selects risk transfer parameters.

Component 3: Equipment and facilities

Support communication and dissemination of risk data: Investment in equipment and systems to improve communication and dissemination channels (including software and, hardware and communication systems) for climate risk data, and promote community engagement and awareness campaigns through public meetings, seminars, workshops, education in school, etc.

Establishment and maintenance of climate information systems: This aspect is similarly already supported under the 'Additional Financing to the Program to Build Resilience for Food and Nutrition Security through the Africa Disaster Risk Financing Programme' supported by the African Development Bank in South Sudan through funding from the Transition Support Facility.

Program management

iv) Alignment with GEF focal area and/or impact program strategies

The proposed project and outcomes are aligned to the GEF focal areas, especially CCI which is on 'Reducing Vulnerability and Increase Resilience through Innovation and Technology Transfer for Climate Change Adaptation'. As this is the main driver of providing the foundation for ex-ante approach towards climate risk management in Africa, Innovative tools to manage risk, such as risk insurance facilities, risk pooling, risk transfer, and supportive policy and capacities are among the core targets of the GEF in cycle 7. This project is delivering on this objective, and it will benefit from AfDB's foundational baseline programme 'the ADRiFi Programme' which is already under implementation with significant support from partners for scale up. The project further cements adaptation, climate risk management into development financing and insurance, thereby making Ministries responsible for Finance and Development Planning into becoming active agents of climate action. Given that in most countries, institutions for disaster management and climate change management have low convening power, the project will elevate climate risk management to the core of government business and decision making, by leveraging on the convening power of Ministries of Finance and Development Planning. It is to be expected that when governments start owning the climate action including through domestic financing, the trajectory of resorting to humanitarian appeals will change and implementation of sustainable development goals will be more coherent.

v) Incremental/additional cost reasoning and expected contributions from the baseline

Proper climate risk management and climate risk financing strategies, in particular insurance, allow for a more cost-effective way of handling increased climate disasters. In general, parametric climate risk insurance enables prompt responses to disasters, and smoothens out expenses for disaster management. An initial cost benefit analysis sovereign insurance through ARC estimated a potential additional benefit of US \$ 1.55 to US \$ 1.90 for every dollar invested in insurance premiums if payouts are delivered through existing safety nets such as cash transfer schemes or a state-contingent welfare scheme, for instance index-based insurance or an employment guarantee scheme (Clarke and Vargas Hill, 2013). The program promotes the use of such mechanisms. ARC premiums are further supported by a Multi-Donor Trust Fund, which will be used as co-financing for the ACRIF program. This ensures great value for money for the GEF funding.

GEF Components	Business as usual and baseline scenario	Incremental cost reasoning/Value added
Setting the enabling environment for the adoption of climate risk financing instruments in African LDCs	<p>The ADRiFi programme is providing capacity building in the area of risk profiles, modeling, setting up of triggers for insurance, capacity building of governments and links disaster risk management agencies, institutions responsible for climate risk management, development partners and Ministry of finance to mainstream climate risk management in development planning. The scale of the programme remains low, with Africa contributing only less than 1% of global climate insurance (only agricultural available in literature). While the momentum is growing, the programme is yet to have regional approach to convene countries, bring key players and leverage from climate financing. Further investments are needed to enhance comprehension of risk management and strengthen enabling environment for the uptake of the climate risk financing instruments at both national and regional levels.</p>	<p>The ADRiFi is advocating a new concept to the region, and in the preliminary years, comprehension of risk management has been minimal. This GEF support will enable the programme to reach more countries, and Ministries for development planning and finance will serve a critical role so that climate change adaptation should be delinked from development.</p> <p>Through the program, participating countries will have increased capacity for climate risk management and climate risk financing mechanisms.</p>

Improving uptake of climate and disaster risk financing	The ADRiFi programme is supporting countries with partial premium financing from the MDTF and their ADF allocation to enable their participation in the regional risk pool provided by the African Risk Capacity	GEF funding will be instrumental in enabling a timely and sustainable participation of African LDCs in the ARC sovereign risk pool. Efficiency in the delivery of climate change adaptation and risk management are very key, and the support from the GEF with capacity building, the risk guarantee facility and resilience building interventions that address root causes of vulnerability will enable member countries to manage climate data better, which will in the long run deliver credible systems, and this will facilitate better roll out of this facility in Africa. The more countries subscribe to policies, the greater the risk pool, and the lower premium costs will become thereby providing an incentive to countries to pay from their domestic budgets independently in the long run.
Strengthen adaptation and resilience of African LDCs against climate risks	The ADRiFi is supporting development of contingency plans and well as implementation plans based on currently available climate data in African LDCs, which is not always of good quality, and may cause inaccuracy of trigger points and contingency plans. Some issues which arose from stakeholder consultations are the inclusion of marginalized groups in the contingency plan coverage and interventions from payouts following a crisis. Furthermore, support provided by ADRiFi at the institutional level is limitative in terms of impacts in strengthening the adaptive capacity of the most vulnerable.	In order to better inform contingency planning and further strengthen countries' participation in the ARC risk pool, quality and availability of climate data is paramount. GEF support will also be instrumental in strengthening the adaptive capacity of the most vulnerable and minimizing their exposure to climate risks, through community engagement and dissemination of information.

vi) **Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)**
This project is aimed at enhancing resilience and adaptation of both humans and the biophysical environment to climate shocks by addressing the drivers to climate vulnerability and fostering the adoption of innovative climate risk financing solutions. Given that increasing extreme events are arising from disequilibria in the environment, apart from addressing adaptation needs, this project will also deliver interventions that enhance resilience. The project will enable better planning to address the impacts of climate hazards and prevent loss of human lives and livelihoods. Moreover, the project will strengthen preparedness of African LDCs towards climate shocks, through enhanced multi-hazard early

warning systems, and strengthen the financial resilience of African LDCs and their most vulnerable population, by promoting the adopting of climate risk financing instruments such as risk transfer. Furthermore, through locally tailored small-scale adaptation measures, the project will raise awareness about the need for humans to co-exist with the natural environment and adapt to the changing pattern of the climate and the impacts of such variability on their lives and livelihoods. For example, crises like flooding are minimized from nature-based solutions like afforestation, catchment management, as such the project will also promote nature-based solutions, which will indirectly enhance ecosystem integrity and deliver global adaptation benefits.

As development planning will be risk informed, this project will enhance Ministries of Finance which are responsible for allocating resources in the public sector to invest in resilience, which will indirectly raise the profile of domestic climate financing. As countries become more resilient, more independent in financing climate risk management, in the long run this will empower countries to invest more in adaptation and resilience. As the global pandemic of covid-19 is still in existence with significant health, social and economic impacts, this project will also facilitate recovery from covid-19 pandemic through including covid-19 response as part of contingency planning. As such, payouts will also be sensitive to covid-19 pandemic, with the principle of building back better from Covid-19 pandemic. Some of the adaptation options following feasibility assessments may include scaling up areas under irrigation agriculture, which would enhance income generation and food security in some vulnerable households who have been socially affected by impacts of the covid-19 pandemic. Adaptation options that utilize nature-based solutions also derive some investments like, integrated water management systems, bee keeping and honey production, which deliver both environmental, social and economic co-benefits as appropriate.

vii) Innovativeness, sustainability and potential for scaling up

Innovation

A regional climate risk insurance facility program is innovative because it combines financial tools, regional collaboration, risk management strategies, and customized approaches to address the challenges posed by climate change in a comprehensive and forward-thinking manner. This program is innovative for several reasons:

- 1. It provides a risk transfer mechanism for countries** vulnerable to climate-related risks. It offers insurance coverage against climate hazards and helps to mitigate the financial burden and provides a safety net for the affected communities,
- 2. It promotes regional collaboration and cooperation** among countries facing similar climate risks. It encourages countries to come together and pool their resources to create a collective response to climate change. This collaborative approach fosters knowledge sharing, capacity building, and the development of common risk management strategies,
- 3. It tailors insurance products to meet the specific needs and vulnerabilities of the region.** This customization ensures that the insurance coverage aligns with the unique circumstances of the region, enhancing its effectiveness and relevance,
- 4. It goes beyond insurance by incorporating risk management strategies** and resilience-building measures and aims to reduce vulnerability and enhance adaptive capacity.
- 5. It involves innovative financial mechanisms to fund the insurance coverage which enables faster payouts** and ensures prompt response in the aftermath of a climate-related event.

Sustainability

The approach is sustainable because it provides direct benefits and addresses the risk profiles of many less developed countries (LDCs). Historical trends and projections suggest that climate-related crises will become more frequent, posing a threat to development and adaptation goals if neglected. The facility is appealing to most countries due to its high return on investments and the fact that the ADF support from the Bank is provided on concessional basis. Additionally, the project offers support to countries in designing strategies for disaster risk financing. By implementing these strategies, countries can mobilize sustainable resources for adaptation and climate risk management.

Scaling up

Successful implementation of this program can serve as scalable and replicable models for other regions facing similar challenges. Lessons learned from this regional program can be applied to others, facilitating the expansion and adoption of such programs throughout African, and indeed, globally. This scalability allows for a wider reach and impact in tackling climate risks.

1b. Project Map and Coordinates

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



Country	Latitude	Longitude
Comoros	-11.6455	43.3333
Djibouti	11.8251	42.5903
Somalia	5.1521	46.1996
South Sudan	6.8770	31.3070

1c. Child Project?

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

2. Stakeholders

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

Civil Society Organizations

Indigenous Peoples and Local Communities No

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Stakeholders play a crucial role in the African Climate Risk Insurance Facility (ACRIF), and

their active involvement is key for enhancing climate resilience across the continent. The

project recognizes the importance of engaging various stakeholders, including governments,

international organizations, private sector entities, civil society and local communities. Their

engagement is vital in several ways:

1. Stakeholders provide financial resources, technical expertise, and capacity-building support, enabling the ACRIF to offer climate risk insurance coverage to African countries.
2. Stakeholders actively participate in policy dialogue, shaping the facility's strategic direction and ensuring alignment with national priorities and regional climate resilience agendas.
3. Stakeholders facilitate knowledge sharing, fostering the exchange of best practices, lessons learned, and innovative approaches to climate risk management.
4. Moreover, stakeholders, particularly local communities, provide critical input into the design, implementation, and evaluation of ACRIF programs, ensuring that they are contextually appropriate, inclusive, and responsive to the needs of vulnerable populations.

By collaborating and engaging with diverse stakeholders, the ACRIF will harness collective expertise, resources, and perspectives, fostering effective and sustainable climate risk management across Africa.

Key stakeholders consulted during the project preparation included the staff of relevant ministries in each of the four countries. Relevant departments in these ministries provided inputs on

existing gaps that could be addressed through the project. Key departments and institutions consulted during program appraisal included:

Table 8: Stakeholders, Roles, and Engagement Strategy

Country	Ministry/Department/Agency	Roles	Engagement Strategy
Implementing Parents and Co-Financiers	Global Environment Facility	? Financial Support: The GEF provides financial resources to the ACRIF, enabling the provision of climate risk insurance coverage to African countries.	Through regular meetings, regional workshops, as counterparts for activities and more

African Development Bank

? Capacity enhancement for Regional Member Countries in climate change adaptation, mitigation, and risk financing
? Support in developing better risk management systems and conducting risk assessment
? Financial support for initial premiums and mobilizing national resources for disaster risk management
? Collaboration with the African Risk Capacity (ARC) as the guarantee facility manager
? Alignment with Africa Development Bank's priorities, including ?Feed Africa? and improving the ?Quality of Life of Africans?, and addressing climate change challenges in Country Strategy Papers (CSPs).
? Provide quality assurance

	African Risk Capacity	? Provide parametric insurance services for African Union (AU) Member States and farmer organizations. ? Contribute to resilience building and improve response to climate-related disasters. ? Support food security by safeguarding agricultural productivity. ? Facilitate risk pooling and transfer to relieve governments and populations. ? Disburse rapid financing for pre-approved contingency plans.	
Comoros	? Directorate General for Civil Security (DGCS)	Executing Agency	Governments are engaged throughout the implementation of the program, through regular meetings, regional workshops, as counterparts for activities and more. Regional workshop will give a chance for participating countries to compare experiences and promotes peer learning.
	? G?n?rale de l'Environnement et des For?ts	Part of Steering Committee	
	? Ministry of Finances, Budget, and Banking Sector	Part of Steering Committee	
Somalia			
	Ministry of Environment and Climate Change	Chair of the Project Steering Committee and part of the Project Implementation Unit	
	Somalia Disaster Management Agency	Executing Agency	
Djibouti	Ministry of Finance	Executing Agency	
	Secr?tariat Ex?cutif de Gestion des Risques et des Catastrophes - Ministry of Interior	Part of Project Steering Committee	
	Ministry of Housing, Urban Development and Environment	Part of Project Steering Committee	

	Ingénieur ?cologique - Minist?re de l'Environnement et du D?veloppement Durable	Part of Project Steering Committee	
South Sudan	Executing agency to be determined	Third party implementing agency	
	Ministry of Environment and Forestry	Part of Project Steering Committee	
	Ministry of Humanitarian Affairs and Disaster Management	Executing Agency	
Private Sector	Stakeholders from private sector that are involved	Delivering services as needed	The private sector engagement strategy includes a market assessment, capacity building, regulatory framework development, and international collaboration. It aims to identify opportunities, build stakeholder capacity, advocate for supportive regulations, and leverage international expertise for sustainable development in climate insurance across the beneficiary countries.
Civil Society Organization	National Civil Society Organizations	Serves as advocates and partners, contributing to program development, policy advocacy, and monitoring. They amplify the impact by ensuring inclusive, transparent, and impactful climate resilience programs.	Through regular consultations, capacity-building, and joint initiatives. Involve them in policy advocacy, monitoring, and community engagement to ensure inclusive, transparent, and impactful climate resilience programs.

Beneficiaries	Households, Private Sector, Civil Society, etc.?	Household, Civil society representatives as well as NGOs that are benefitting from the program.	Community consultations and capacity building. Establish feedback mechanisms, community-led committees, and inclusive decision-making processes to ensure programs align with local needs and inclusive decision-making processes to ensure programs align with local needs and priorities.
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Table 9: Stakeholder Engagement Plan

[illegible]

4. Stakeholder engagement plan																			
5. Risks																			
6. Economic analysis																			
7. Environmental analysis																			
8. Gender action plan																			
9. Monitoring and evaluation																			
10. Other																			
Draft CEO Report																Draft CEO Report			

The role of Beneficiary countries? Governments:

The African Climate Risk Insurance Facility project, involving Comoros, Djibouti, Somalia and South Sudan, aims to promote sovereign risk insurance for catastrophe and weather risks. Thus, the project?s governance structure ensures active involvement and accountability of member countries in its design and implementation. This ownership will ensure the participating country?s major stakeholders such as community and local groups and the private sector, and ultimately increase a participating country?s accountability for the project outcome.

Member states will play a crucial role in the success of the African Climate Risk Insurance Facility by providing financing for the facility as well as participating in its governance. They contribute the necessary financial resources to support ACRIF?s operations, ensuring the facility?s availability and sustainability. In addition to financial contributions, member countries actively engage in the governance of ACRIF through representatives. These platforms allow them to contribute to strategic decision-making and provide valuable insights for guiding the facility?s operations effectively.

While government policy support may vary among member countries, there are common actions expected from them. Firstly, governments establish enabling regulatory frameworks that facilitate the smooth functioning of ACRIF. These frameworks ensure transparency, efficiency, and compliance in the implementation of catastrophe and weather risk insurance. Secondly, governments conduct public awareness campaigns to SMEs, and the public about ACRIF and the benefits of catastrophe and weather risk insurance. These campaigns aim to increase understanding and encourage the uptake of insurance coverage.

Governments also implement policies that promote robust disaster risk management practices. This involves incentivizing vulnerable farmers to adopt risk reduction measures by providing financial incentives and subsidies, offer technical assistance and training, establish information-sharing platforms, encourage collaboration and community building and implement early warning systems. Furthermore, governments may integrate catastrophe and weather risk insurance into existing government programs. For example, they can establish mechanisms that link mortgages in disaster-prone areas to insurance coverage, providing financial protection for homeowners and reducing the reliance on post-disaster aid.

Through their active involvement in financing, governance, and policy support, member countries contribute to the overall effectiveness and impact of ACRIF. Their collective efforts promote resilience, disaster risk reduction, and increased access to insurance, ultimately strengthening the ability of communities and businesses to cope with the challenge posed by climate-related risks.

Key government stakeholders in each country include:

? Comoros:

- o Directorate General for Civil Security (DGCS) ? **Executing Agency**

- o G?n?rale de l'Environnement et des For?ts
- o Ministry of Finances, Budget, and Banking Sector

? **Djibouti:**

- o Ministry of Finance ? **Executing Agency**
- o Secr?tariat Ex?cutif de Gestion des Risques et des Catastrophes - Ministry of Interior
- o Ministry of Housing, Urban Development and Environment

? **Somalia:**

- o Ministry of Environment and Climate Change
- o Somalia Disaster Management Agency ? **Executing Agency**

? **South Sudan:**

- o Executing agency to be determined (third party implementing agency)
- o Ministry of Environment and Forestry
- o Ministry of Humanitarian Affairs and Disaster Management (MHADM) ? **Executing Agency**

Engagement strategy: Governments are engaged throughout the implementation of the program, through regular meetings, regional workshops, as counterparts for activities and more. Regional workshop will give a chance for participating countries to compare experiences and promotes peer learning. The following table outlines the engagement strategy with governments, emphasizing the objectives, engagement strategy and implementation.

Objective	Engagement Strategy	Implementation
Ensure ongoing communication and collaboration between ACRIF and key ministries of the beneficiary countries	Regular Consultations and Meetings	Hold regular meetings with government representatives to discuss project progress, challenges, and opportunities. Implement a structured reporting mechanism for key milestones and outcomes updates.

Foster a collaborative environment and facilitate peer learning among participating countries	Regional Workshops	Coordinate regional workshops uniting government officials, stakeholders, and experts to share experiences, best practices, and lessons in implementing climate risk insurance
Ensure active participation and contribution of member countries in strategic decision-making	Inclusive Decision-Making Platforms	Create governance platforms with country representatives for policy discussions, project direction, and operational decisions. Foster open dialogue, seeking insights from participating governments to improve project effectiveness.
Enhance the capacity government officials to effectively contribute to the implementation of ACRIF	Capacity Building Initiatives	Conduct training programs and workshops for government representatives on topics related to climate risk insurance, disaster risk management, and governance.
Encourage collaborative initiatives between ACRIF and member countries to address specific climate resilience challenges	Joint Activities and Projects	Identify joint project opportunities aligning with national priorities and ACRIF's objectives. Collaborate on research, data research, risk assessment, and establish task forces or working groups with government representatives to address specific programmatic needs.
Work collaboratively with governments to establish and strengthen enabling regulatory frameworks	Policy Support and Frameworks	Engage in dialogue with government departments and provide technical assistance for developing and enhancing regulatory frameworks aligned with ACRIF's goals.

Collaborate with governments to integrate ACRIF into existing government programs related to disaster risk management	Integration into Government Programs	Integrate catastrophe and weather risk insurance with government initiatives, including disaster response programs. Collaborate with government agencies to align ACRIF with national resilience and development strategies.
Establish robust monitoring and evaluation mechanisms to track the impact of ACRIF programs in each member country	Monitoring and Evaluation	Conduct regular reviews to assess the effectiveness of disaster risk reduction policies and insurance coverage.

1. Private Sector

The role of the Private Sector

The private insurance markets in Somalia, Djibouti, South Sudan, and Comoros are underdeveloped due to challenges of political instability, weak regulations, limited infrastructure, and low awareness. The lack of stability resulting from frequent changes in government, civil unrest, and ongoing conflicts creates an uncertain environment for insurers and discourages potential investors. In addition, inadequate regulatory frameworks and enforcement contribute to a lack of consumer protection and limited oversight of insurance operations. The limited infrastructure in these countries, including communication networks and transport systems, poses further obstacles for insurance companies in reaching potential customers and providing efficient services. Furthermore, there is low awareness and limited financial literacy among population regarding the underdeveloped private insurance markets. Many individuals in these countries are unfamiliar with the concept and benefits of insurance, leading to a perception that it is unnecessary or unaffordable. This lack of awareness prevents the market from realizing its full potential.

To address these challenges and stimulate market growth, efforts must be made to strengthen regulatory frameworks, improve financial literacy, and raise awareness about the importance of insurance.

Engagement strategy: During the program preparation phase, the private insurance markets in participating countries were found to be nascent and not suited for program implementation. Still, private insurance market companies will be engaged in the program through the proposed studies and mapping. They will be engaged as stakeholders in the program, and beneficiaries of some of the proposed policy changes. As such, their inputs are valuable. The following table outlines the engagement strategy with private sector, emphasizing the objectives, engagement strategy and implementation.

Objective	Engagement Strategy	Implementation
Lay the groundwork for the establishment of a private sector for climate insurance in the participating countries	Market Assessment and Development	Perform a thorough market assessment to identify gaps, challenges, and opportunities for private sector engagement in climate insurance. Partner with global experts and organizations with experience in similar insurance market development. Formulate a phased roadmap for private sector development, taking into account regulatory frameworks and infrastructure enhancements.
Build the capacity of potential stakeholders who may participate in the future private insurance market	Capacity Building for Future Engagement	Conduct training programs and workshops for local businesses, financial institutions, and government agencies to improve understanding of climate risk and insurance concepts.
Collaborate with representative governments to creating a conducive regulatory environment that supports the future growth of the private insurance sector	Regulatory Framework Development	Engage with regulatory authorities and policymakers to discern prerequisites for establishing a private insurance market. Advocate for the formulation of supportive regulatory frameworks specifically tailored to climate insurance.
Seek support and collaboration from international organizations and experts with experience in developing insurance markets	International Collaboration	Establish partnerships with organizations that specialize in market development, climate resilience, and insurance. Leverage international expertise to provide insights and guidance on best practices for building a sustainable private insurance sector.

2. Beneficiaries and civil society organizations

Direct and indirect beneficiaries, including households, private sector entities, civil society organizations, and more, are integral to shaping and enhancing the impact of ACRIF. Direct

beneficiaries, such as households and businesses, actively contribute local insights crucial to program implementation, ensuring initiatives address diverse community needs. ACRIF's inclusive decision-making empowers these direct beneficiaries, allowing them to actively share program priorities. Moreover, the indirect beneficiaries, including civil society organizations, benefit from community-level awareness campaigns, providing a channel to disseminate information about climate risk insurance. Regular feedback mechanisms, involving both direct and indirect beneficiaries, contribute to ongoing program refinement. Actively participating in monitoring and evaluation, these diverse beneficiaries offer perspectives that enrich assessments of program impact. Capacity-building initiatives empower both direct and indirect beneficiaries, fostering resilience at individual, community, and organizational levels. This inclusive approach ensures ACRIF initiatives are impactful and responsive to the multifaceted challenges faced by households, private sector entities, civil society organizations, etc.

The following table outlines the engagement strategy with beneficiaries and CSOs, emphasizing the objectives, engagement strategy and implementation.

Objective	Engagement Strategy	Implementation
Actively involve and empower beneficiaries in ACRIF processes	Beneficiary Engagement	Establish feedback mechanisms, conduct community consultations, and incorporate local insights into decision-making. Facilitate workshops and forums to ensure beneficiaries understand and can contribute to ACRIF
Foster collaboration with CSOs to enhance project effectiveness and inclusivity	CSO Collaboration	Form partnerships with CSOs, involve them policy discussions and project planning. Leverage their networks for effective public awareness campaigns and community outreach. Provide platforms for CSOs to contribute insights and expertise.

Strengthen the capacity of communities through engagement with CSOs	Community Capacity Building	Collaborate with CSOs to conduct training sessions and workshops at the community level. Empower local communities to understand, access, and benefit from ACRIF. Support CSOs in initiatives that align with the project's objectives, fostering sustainable development at the grassroots level.
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3. Other stakeholders

The project also aims to include a comprehensive stakeholder analysis as it is rolled out. This analysis aims to identify and assess the various stakeholders involved in the implementation and utilization of the facility. By conducting a detailed stakeholder analysis, the project will gain insights into the interests, perspectives, and roles of different stakeholders, allowing for targeted engagement strategies and the development of inclusive and participatory approaches. The stakeholder analysis will help ensure that the ACRIF considers and incorporates the needs and priorities of relevant actors, maximizing their involvement and support throughout the project's lifecycle. Ultimately, this process will contribute to the effective implementation and long-term sustainability of the ACRIF, as it fosters collaboration and ownership among stakeholders, leading to more impactful outcomes in enhancing climate resilience across Africa.

Knowledge generated throughout the lifespan of the project will be disseminated through regular interactions, missions, the support of the program manager, regional workshops and topical deep dives organized to foster direct and peer to peer learning and promote knowledge sharing (see Chapter 7). Moreover, the African Development Bank will establish a micro website through which it will foster knowledge dissemination towards a wider audience.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Women and girls are more vulnerable to the effects of climate change than men, primarily as they constitute the majority of the world's poor and are more dependent on natural resources that are threatened by climate change[1]. Climate change has a significant impact on securing household water, food, and fuel, which are activities that usually are the responsibility of women and girls. Social norms, traditional roles, and different power structures contribute to the differential impact of climate change on women and men. Women are disproportionately affected by climate change when coupled with unequal access to resources and decision-making processes, limited mobility, and living in rural areas. Climate change affects livelihoods and wellbeing, and women may experience the impacts of climate change differently[2] The differentiated impact of climate change on women and men should be considered in climate policies, plans, and adaptation initiatives.

Women and girls account for the majority of migrants in the East and Horn of Africa. Women account for the highest number of refugees and asylum seekers, as they are more likely to be forcibly displaced, while men are more likely to migrate irregularly in search of employment opportunities.[3]

Climate-induced displacement is an escalating and discrimination based on geographical origin can further deepen pre-existing gender disparities, exposing women to additional vulnerabilities. Women and children face a significantly higher risk, being 14 times more likely to die in disasters and 80% more likely to be displaced due to climate change.

Discriminatory laws, norms, and practices persistently affect gender equality in the region. Hidden aspects of gender inequality, such as social acceptance of discrimination against women and girls, need to be tackled by governments and communities to achieve gender equality[4].

The four countries with in-country activities in this project have similar, yet different gender gaps:

1. Comoros:

Women in the Comoros face various challenges related to climate change, including the degradation of natural resources and limited access to renewable energy. These challenges affect their livelihoods, income, and ability to provide for their families. Women are heavily involved in the agricultural sector, comprising 63% of the workforce, which puts them at a higher risk of poverty. They are also underrepresented in formal sectors, with lower workforce participation and limited access to

education. Gender disparities exist in decision-making bodies, politics, and the private sector. While women have legal access to property, cultural norms and poor land registration systems restrict their ability to utilize assets for credit and finance. Gender-based violence is prevalent, and protection mechanisms need to be strengthened. The youth population faces limited educational and work opportunities, which can lead to increased violence and organized crime. High fertility rates and population growth strain households and hinder sustainable growth in the Country.

The main source of income for women in the Comoros is the informal economy and the agriculture sector. Although women represent about half of the population in the country (49.6%), women are still under-represented in all formal sectors of society. Women's workforce participation is 33%, while men's is 57%. There is also a significant gender gap in education, as 47% of working women have no formal education. Women tend to be overrepresented in self-employment and informal trade, while men benefit more from wage employment. 63% of the workers in the agricultural sector are women, where they occupy trades within the areas of food production, market gardening, cash crops, and fishing. Households with agricultural as their main source of income face a considerably higher risk of poverty compared to those households who work in other industries. The source of income has a substantial impact on living standards and the ability to alleviate poverty. Approximately 45% of households in Comoros rely on agriculture as their primary source of income, and over half of them experience poverty, while 31% lives in extreme poverty. The informal economy in the country is a key source of income for most households, particularly so for women. Accessing a traditional bank credit is very limited for women who cannot qualify for a loan, this is a direct consequence of the informal income women possess.

Custom and national laws in Comoros grant women access to property. According to article 82 of the Family Code, girls are entitled to inherit housing when getting married. In theory, these assets can be used as collateral and facilitate women's access to credit and finance. However, these assets tend to go to their husbands, maternal uncles, or brothers. The poor land registration system and matrilineal system in the country, restricts women's ability to utilize their own land to obtain bank loans. The number of female-headed households has increased from 21.5% in 2004 to 27.8% in 2014. Many female-headed households rely on remittances as the only source of income.

There is a need to incorporate national protection mechanism to prevent gender-based violence and mitigate the consequences of gender-based violence. A significant majority, approximately 70%, of women have experienced physical or sexual violence, additionally, one out of every three women has faced verbal, physical, or sexual attacks from their intimate partners. The legal age for marriage in the country is 18 years old, still 20% of girls are married before the age of 18. 39% of the female population justify domestic violence. There is no legislation in the country that prohibits female genital mutilation, and there is no source in the country that indicated that this is a subject of concern. The lack of available data in the country makes it difficult to assess the protection mechanism women can turn to in the events of gender-based violence. Yet, the country has in their NDC developed a National Preparedness Plan and Emergency Response system, that has taken gender into account in the education and protection sector. This plan focuses mainly on internally displaced people, to prevent their exploitation and secure their protection. Nevertheless, a similar plan on protection mechanism for

women at a national level would be beneficial for women in the country as the limited data that exist reports that GBV is a challenge in the country.

2. Djibouti:

In 2020, the Republic of Djibouti had a population of 988,000 people, of which 47.5% were women. Djibouti has a predominantly urban population, with a significant proportion of young people. Approximately 32% of the population is under 15 years old, with girls accounting for 48.45%. Additionally, 67.27% of the population is under 35 years old, with women representing 47.38%. 8.97% of the population is 55 years old or older, with women comprising 45.21% of this demographic. The median age in Djibouti is approximately 20 years. As a result, there is a high dependency ratio in Djibouti, with 51% of households consisting of eight individuals.

Cultural values deeply influence gender dynamics in Djibouti. Traditional roles and social imbalances persist, with men often holding dominance and women needing male approval. Marriages, orchestrated by parents, aim to maintain control over lineage. In some cases, second marriages involve dowries, fostering integration. However, these practices can inadvertently reinforce women's objectification. Child marriages, prevalent due to parental arrangements and legal loopholes, lead to teenage pregnancies and hinder education. Efforts for equity must respect cultural nuances while safeguarding the rights and well-being of all, particularly vulnerable girls and women.^[5] Child brides are often ill-equipped to handle the physical, emotional, and socioeconomic challenges posed by climate change. Their limited decision-making power and lack of education can hinder their ability to adapt to changing conditions effectively. Additionally, the interruption of education due to early marriages limits girls' exposure to information and skills necessary for adapting to climate change challenges. Failure to address these aspects may result in climate adaptation and mitigation strategies that overlook the unique needs and experiences of women and girls, ultimately perpetuating their vulnerability.

The illiteracy rate among women in Djibouti is at 60.5%. Moreover, 19% of women are engaged in official employment. As a result of the high unemployment rate among women, many of them face poverty and extreme poverty. Although the Government of Djibouti has made notable efforts in promoting women's economic empowerment, women still encounter limitations in accessing income-generating activities^[6].

Gender inequality is prominent in the labor market. The unemployment rate stands at 62.8% among youths, 68.6% among women^[7], and 54.6% among men in Djibouti. There are limited work opportunities for women and the society consist of structural discrimination. Djibouti has been classified as one of the fragile situations in a recent World Bank report due to its inadequate institutions and public policies. As an initiative to promote women's involvement in the economy, microfinance programs have been established. However, a common obstacle faced by women is their inability to provide the necessary collateral to secure credit. Despite having the legal right to equal treatment, women face a disparity in employment opportunities compared to men and often receive lower wages for similar work^[8]. In 2011, 8.8% of women reported to have a financial account, either alone, together with someone else or a mobile money service. While microfinance programs aim to empower women economically, the lack of collateral can hinder participation. Formal employment enhances

creditworthiness for accessing loans and climate-related insurance. Limited access to financial accounts restricts women's financial inclusion. A bank account facilitates financial management, savings, and engagement with climate insurance options. 26,2% of national parliament seats were held by women in 2021. This rate is higher than other comparable countries[9].

Official data and estimates of gender-based violence in Djibouti is limited. Victims often experience stigma and fear since perpetrators, who are typically relatives or family members, may retaliate against them. Although the government has criminalized female genital mutilation, it remains a widespread practice in Djibouti. UNFPA reports that female genital mutilation among women aged 15 to 49 is alarmingly high at 78.4%. Infibulation, a severe form of female genital mutilation, is particularly predominant in rural areas. The rates of female genital mutilation vary across different regions and ethnic groups. Djibouti currently lacks a specific law that explicitly criminalizes domestic violence. However, it does have provisions within the Penal Code and other laws that criminalize various forms of gender-based violence such as rape, human trafficking, and sexual assault. These legal provisions also eliminate the possibility of perpetrators being exonerated through marriage and restrict mitigating measures for honor crimes. These legal frameworks provide a foundation for addressing gender-based violence in the legal system. However, the enforcement of these legislations is still unsatisfactory[10].

3. Somalia

Gender disparities are deeply embedded within Somali society. In 2020 Somalia was ranked as the second lowest gross domestic product per capita in the world. The labor force participation between age 15-64 was estimated to be 73.6%, for men and 23,1% for women in 2019. Agriculture remains the largest employer for women, accounting for 83.9% of the labor force.

Gender inequalities is manifested in the limited access that Somali women have to crucial resources. In sectors like agriculture, livestock, and fisheries, women often face barriers in accessing production inputs, technology, and financial resources. This unequal access restricts women's ability to enhance productivity and adapt to changing circumstances brought about by droughts and other shocks. Consequently, women are more vulnerable to the effects of these crises, as they lack the necessary resources and support to mitigate their impact effectively.

Women holds 24,4% of the parliamentary seats in Somalia, and the election agreement from September 2020 pledged to reserve 30% of the seats for women's representation. This is a step in the right direction, however more extensive efforts are necessary to achieve true inclusivity in the country.

Somalia stands among the countries with the highest count of internally displaced persons in the world. The displacement is primarily caused by the conflict with Al-Shabab, pervasive violence, drought, limited livelihood prospects, and forced evictions. As of 2021, the number of internally displaced individuals in Somalia exceeded 3.86 million, where 62% of them are estimated to be women and girls[11]. Furthermore, an estimated 7.7 million Somali women, men, and children are projected to need humanitarian aid in 2022. The gravity of the situation in Somalia persists, requiring continuous assistance efforts to avert the forthcoming threat of famine[12].

Somalia ranks among the lowest countries globally in terms of gender equality, with high maternal mortality rates with 692 out of 100.000[13]. Early marriage remains prevalent, further exacerbating the challenges. Somalia health and demographic survey highlights that 99.2% of women aged 15-49 have undergone female genital mutilation, leading to both immediate and long-term physical, sexual, and psychological consequences.

The impact of drought in Somalia has disproportionately affected women and girls, impacting their livelihoods, safety, and overall well-being. The Somali society is characterized by a distinct gender division of labor, which results in women having unequal access to resources, opportunities, power, and decision-making authority. These gender disparities have implications during times of crisis, such as droughts and other shocks, as the specific roles and responsibilities of women and men differ significantly.

Women and adolescent girls with disabilities face greater risks of gender-based violence due to challenges in reporting or escaping violence and accessing essential primary services. Women, girls, widows, divorced women, female-headed households, pregnant and lactating women, orphans, women, and girls with disabilities are subjected to diverse forms of violence and discrimination, restricting their social status and social norms. Women and girls belonging to minority clans also express exclusion and being targeted when it comes to receiving humanitarian assistance, and they struggle to assert their right to land ownership. Pregnant and lactating women face significant risks of abuse and violence, especially in contexts of food insecurity. Inadequate nutrition and financial constraints prevent them from accessing much-needed maternal care services, putting their own health and the health of their unborn children at risk. The condition of pregnancy may further impede their ability to seek help or escape situations of intimate partner violence. Women encounter difficulties in ensuring their livelihoods and obtaining basic sanitary materials, particularly in situations where they travel long distances to access these necessities.

The illiteracy remains high, and it hinders women access to crucial information for their protection. The literacy rate among women has not been recorded since 1972 at was at that time 5%. Adolescent girls, already vulnerable due to discriminatory gender norms and practices, face increased vulnerability when displaced by droughts, as it further restricts their access to resources, opportunities, and the implementation of their reproductive rights, resulting in adverse health consequences. Displacement also heightens their risks of gender-based violence and harmful practices such as female genital mutilation and child marriage. 16% of women aged 20-49 were married before the age of 15. Parents often encourage early marriage for their young daughters, hoping it will provide financial and social benefits while alleviating financial burdens on the family. This prevalent practice in Somalia leads to early pregnancies and limits girls' opportunities to complete their education and acquire skills that could lead to higher incomes in the future[14].

4. South Sudan

Women and girls in South Sudan face substantial protection concerns, especially during daily chores that expose them to the risk of sexual violence. The refugee crisis in South Sudan disproportionately affects women, with an estimated 83% of asylum-seekers being women. Climate-induced displacement further deepens gender disparities and exposes women to additional

vulnerabilities, with women and children facing a significantly higher risk of death and displacement due to climate change.

Girls are underrepresented in the education system, with lower enrollment rates at both primary and secondary levels and a literacy rate of 29% among females older than 15 years. The consequences of climate change, such as the closure of educational facilities, pose additional challenges for girls in accessing clean water, menstrual hygiene management education, and menstrual products.

Integrating Gender-Sensitive Strategies

Gender-sensitive strategies are needed to respond to the environmental and humanitarian crises caused by climate change. Women play a dual role, being both susceptible to the impacts of climate change and influential participants capable of instigating change in this context. The InsuResilience Global Partnership recognizes the importance of including gender-responsive strategies in climate and disaster risk finance and insurance. There is a need to increase access to climate risk insurance solutions among vulnerable populations, especially women, as it can enhance adaptation and resilience building mechanisms to better manage climate risks and unexpected shocks. Gender is relevant to all aspects of climate risk responses and climate risk insurance models. Prevailing gender norms can influence individual's access to information and choice of solutions to strengthen their resilience to climate change[15].

Promoting women's access to land, finance, skills, and technology for climate resilience and markets can support women's economic empowerment and strengthen their resilience in rural areas. Women's economic empowerment can lead to increased income, improved food security, and greater participation in decision-making. Women farmers face various challenges, including limited access to finance, markets, and information on climate-smart agricultural practices. Efforts to support women farmers should be tailored to their specific needs and should consider the social, economic, and cultural context in which they operate. Innovative solutions, such as mobile phone-based platforms for accessing information and financial services, can help overcome some of the barriers that women farmers face. Partnerships between governments, civil society organizations, and the private sector can help create an enabling environment for women's economic empowerment in agriculture. Promoting women's economic empowerment in agriculture is a key strategy for managing the impacts of climate change[16].

Collecting sex-disaggregated data is crucial for policymakers to accurately assess situations and formulate evidence-based responses and policies. It provides an opportunity to challenge prevailing gender norms and understand the specific context in which interventions are implemented. Utilizing accurate and comprehensive data is essential to ensure equitable outcomes and address the increased vulnerability of women and girls in the face of climate change and gender disparities.

[1] <https://www.afdb.org/en/documents/document/economic-brief-climate-change-gender-and-development-in-africa-25666>

[2] https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf

[3] Women and Girls Account for the Majority of Migrants in East and Horn of Africa: IOM Report | International Organization for Migration

[4] Africa: to achieve gender equality, governments and communities must tackle the social acceptance of discrimination against women and girls, says new report - OECD

[5] <https://www.hrw.org/news/2022/04/14/submission-committee-rights-child-review-djibouti>

[6] <https://2017-2020.usaid.gov/djibouti/our-work/gender-equality-and-womens-empowerment>

[7] The current employment rate stands at 19%, with a significant portion of women actively engaged in the labor force through informal channels. This nuanced scenario has implications for various aspects, including the gender wage gap and women's access to financial services such as bank accounts, loans, and climate insurance. This situation places women at a comparative disadvantage

[8] <https://docs.wfp.org/api/documents/WFP-0000108570/download/>

[9] https://moldova.unfpa.org/sites/default/files/djibouti_infographic_report_2-12-2020_signed_off.pdf

[10] https://moldova.unfpa.org/sites/default/files/djibouti_infographic_report_2-12-2020_signed_off.pdf

[11] <https://reliefweb.int/report/somalia/somalia-cccm-2022-rapid-gender-analysis-september-2022>

[12] <https://data.unwomen.org/country/somalia> Somalia's Women Voices: Pushing for Gender-Inclusive Representation (worldbank.org)

[13] <https://reliefweb.int/report/somalia/somali-health-and-demographic-survey-2020>

[14] <https://reliefweb.int/report/somalia/overview-gender-based-violence-situation-somalia-advocacy-brief-2022>

[15] https://www.insuresilience.org/wp-content/uploads/2022/10/insuresilience_applygender_181128_web-2.pdf

[16] <https://africa.unwomen.org/en/digital-library/publications/2021/03/women-in-climate-resilient-agriculture-in-wca>

Gender action plan

Component	Gender Activity
<p>Component 1</p> <p>Strengthen understanding of climate risk exposure of African LDCs and establishment of institutional climate risk management processes and frameworks needed to be put in place to facilitate enhanced recovery from climate shocks</p>	<p>? Technical assistance and capacity building to understand the differences on how climate change affects youth, women, men and people with disabilities.</p> <p>? Long term technical and capacity building to main stakeholders to enhance the understanding of weather and climate information and risk, vulnerability and how it affects men, women, girls, boys and people with disabilities differently. Exposure maps and assist in improving coordination among key actors of the DRM systems. Particular emphasis shall also be given to implement awareness campaigns on DRM at all levels.</p> <p>? Provide technical support to improve the preparedness and response infrastructure, framework and contingency plans, and support in enhancing the decentralization of civil protection systems. While assuring that the above mentioned has included the different needs of men, women, girls, boys and people with disabilities</p> <p>? Surveys to collect sex and age-disaggregated data on household, businesses and other affected agents of vulnerability to climatic hazards, and training in statistical analysis and modeling of data collected for members of the ARC technical working group, which is partly composed of weather agents.</p> <p>? Analytical reviews and assessments of the flooding or drought exposure, vulnerability and risk Assessment, all elements that require capacity and understanding of various factors, including socioeconomic status, age, gender, health, and the quality of the built environment, vulnerability data, food security and nutrition indicators, data quality and analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought and how it differently affects women, men, boys, girls and people with disabilities.</p> <p>? Expected activities and workshops will have 35% representation of women.</p>

<p>Enhanced understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in African LDCs (Governments, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)</p>	<p>? Awareness building of national members of National Disaster Risk Management Council (NDRMC), and training and capacity building of members of Country Disaster Management Committees, both at the country and regional levels, ARC Technical Working Group, government officials and the members and officials National Early Warning Technical Working Group the and other stakeholders on enhance the understanding of weather and climate information and risks, vulnerability and exposure maps, and the functioning of national climate monitoring and reporting systems at both national and regional levels, and training on food security and nutrition indicators, data quality and collection (methodologies, methods, tools), data analysis (including hazard/risk analysis), and vulnerability assessments, with particular emphasis on key risks such as flooding and drought. All of the above mentions should generate information on how climate change and disaster risk management should be targeted differently for women, men, girls, boys, elder and people with disabilities.</p> <p>? Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of instruments and their complementarity. This will include (a) reviewing the existent disaster risk financing framework, budgeting process appropriation for preparedness and emergency funding, tagging across ministries, agencies, and provide appropriate knowledge and capacity building across the various stakeholders, and (b) evolve various financing instruments into a comprehensive disaster risk management strategy, including pre-funding, contingent lines of credit, insurance and re-insurance products, catastrophe risk insurance.</p>
<p>Component 2:</p> <p>Increase access and participation of African LDCs in the Sovereign regional risk pool offered by the African Risk Capacity (ARC).</p>	<p>? Support premium payment for climate risk insurance for PRIME policies to ARC Ltd over a multi-year period (2024 2028) ? and ensure that 10% of the payments are given to women-led households.</p>

<p>Component 3:</p> <p>Enhance capacity and skills of African LDCs in collecting and managing data that is critical for climate risk management, and improve communication and dissemination of climate risk management practices</p>	<p>? Strengthen communication and dissemination and communication channels (often multiple channels) and promote community engagement and awareness of the new policies that are now also applicable for women.</p>
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[1] <https://www.afdb.org/en/documents/document/economic-brief-climate-change-gender-and-development-in-africa-25666>

[2] https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf

[3] https://www.insuresilience.org/wp-content/uploads/2022/10/insuresilience_applygender_181128_web-2.pdf

[4] <https://africa.unwomen.org/en/digital-library/publications/2021/03/women-in-climate-resilient-agriculture-in-wca>

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.

The project is engaging the private sector at various levels. The private sector's involvement in the African Climate Risk Insurance Facility through the African Risk Capacity spans international, regional, country, and local levels. At the international market level, ARC transfers risk through reinsurance coverage and utilizes financial instruments to access global funding. Regionally, ARC operates through risk pools and provides technical support to regional organizations. At the national level, ARC offers sovereign insurance policies and develops country-specific risk profiles. Locally, ARC engages with stakeholders, provides capacity building, and explores community-level insurance schemes. Overall, ARC's engagement with insurance at these levels ensures a coordinated and tailored approach to managing climate risks in Africa.

Limited private sector engagement at national and local level. Considering the prevailing challenges in Somalia, Djibouti, Comoros, and South Sudan, including fragile governance structures, security issues, limited resources, and the nascent state of the climate risk insurance market, private sector engagement in the implementation of the African Climate Risk Insurance Facility in these countries is anticipated to be minimal. However, the project has a clear objective of integrating and advancing the participation of the local private sector in their respective insurance markets. To achieve this, the project will implement targeted actions encompassing:

A. Raising awareness: Raising awareness among local businesses about the benefits and opportunities within the insurance market is crucial. Through awareness campaigns, workshops, and engagement with business associations, the project will educate the private sector about the role and importance of climate risk insurance offered by the African Climate Risk Insurance Facility. By enhancing understanding and knowledge, the project seeks to generate interest and encourage active involvement.

B. Mapping and identification: Studies will be carried out to map private insurance markets in more detail for each of the respective countries. The studies should include concrete recommendations for how the nascent private insurance markets can be supported through policy.

C. Integrating the private sector requires addressing regulatory and governance challenges. Collaborating with government entities and policymakers, the project aims to advocate for necessary reforms and improved governance structures. Creating an enabling environment that encourages private sector engagement and ensures a favorable regulatory framework for insurance activities is essential.

D. Financial resources: Another critical barrier to private sector involvement in these countries is the limited availability of financial resources. Recognizing this challenge, the project plans to indirectly incentivize and provide financial support to private sector, specifically in the realm of climate risk insurance. This will be achieved by fostering partnerships with local financial institutions to develop customized financial products tailored for climate-resilient initiatives. Additionally, the project aims to establish collaborative ventures between public and private entities, offering co-financing arrangements that leverage government funds to attract private investment into climate adaptation and mitigation projects. Capacity-building workshops and knowledge-sharing endeavors will further empower local businesses to navigate and capitalize on climate risk insurance opportunities effectively. Through these comprehensive strategies, the project endeavors to enhance access to climate risk insurance products and services, facilitating the active participation of private enterprises and bolstering long-term engagement and sustainability.

E. Capacity-building plays a crucial role in empowering local insurers and businesses to effectively understand and navigate climate risks. The project will implement training programs, establish knowledge-sharing platforms, and form partnerships with experienced insurers. Through these initiatives, the project aims to equip the private sector with the necessary expertise and skills to offer relevant and effective insurance solutions. By enhancing the capacity of local actors, the project contributes to the overall mission of promoting resilience and effective risk management in the target countries.

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):

1)

Key Risk	Type	Description	Anticipated Impact and Probability (scale from 1 (low) to 5 (high))	Mitigation Options
Regional Level				
Failure to repay the premium advance amount to the Premium Guarantee Support Facility	Operational/ Financial	Participating countries may fail to repay the premium advance within a specific time-period and fulfill their obligations under the terms of agreement.	Probability: 2 Impact: 4	Precise illegibility and selection criteria and enforcement mechanisms of the facility will ensure that premium advances are repaid within specific timeframe.
Further climate change leading to increased frequency and severity of climate disasters	Strategic	Increased frequency and severity of climate disasters will eventually make the ARC proposition untenable, as premiums become too high even with donor support. The sustainability of the program is threatened if countries find ARC insurance premiums too expensive.	Probability: 3 Impact: 4	The risk insurance pool (ARC) works better the larger the number of participating countries. Donor support to increase the geographic scope can be used to counteract some of the risk.
Country Level				

Key Risk	Type	Description	Anticipated Impact and Probability (scale from 1 (low) to 5 (high))	Mitigation Options
Ongoing or potential conflict in participating LDCs may limit implementation	Political and strategic	Ongoing (or escalation of) conflict in Somalia and potential for political instability (or conflict) in South Sudan may delay critical activities	Probability: 3 Impact: 5	To the extent possible, the regional program coordinator and the overall support from the African Development Bank ecosystem will ensure efficient continuity of the project
Conflict in Sudan may have some spillover effects to other countries which may limit implementation	Political and strategic	Conflicts in Sudan has resulted in large scale displacement affecting the capacity and priorities of the relevant ministries and government agencies in countries such as South Sudan. This may limit implementation of the program	Probability: 4 Impact: 5	Implementation in South Sudan through a Third-Party Implementation Agency may alleviate some of the capacity constraints on the Ministry of Humanitarian Affairs and Disaster Management which is the EA for this program.
Lack of involvement and/or co-operation among stakeholders	Operational/Political	Political disagreements and competition among key ministries and government agencies involved in the implementation of the program could hinder efficient implementation and effective achievement of results.	Probability: 3 Impact: 3	The regional coordination element of the project will ensure that the steering committees within each participating country are inclusive, and that significant decisions are made through consultative process.
Political interests over implementation of innovative financing	Organizational/Operational	Some politicians may want to capitalize on crises	Probability: 3 Impact: 5	Being a regional program, regional coordinating platforms and peer learning will play a critical role to minimize politicization, and the program will be demand driven

Key Risk	Type	Description	Anticipated Impact and Probability (scale from 1 (low) to 5 (high))	Mitigation Options
Lack of willingness from the private sector to participate in climate risk management	Strategic, Financial	The private sector may find investment in climate risk management very risky	Probability: 3 Impact: 4	The program will invest in strengthening the private sector's understanding to encourage greater participation.
Inability to identify, engage and strengthen private sector actors on insurance	Operational	As project preparation phase has shown, private insurance markets in participating countries are not well developed. Identifying private sector participants can be difficult because they are not extant.	Probability: 4 Impact: 3	Program design has shifted away from private sector participation due to this risk. Private sector engagement will be highlighted through studies and research.
Lack of implementation capacity of the executing agencies in the participating countries.	Organizational/Operational	Lack implementation capacity and identifying and mobilizing the right resources within the executing agencies may delay critical activities	Probability: 3 Impact: 4	The executing agencies will be supported by the Regional Program Coordinator and the Bank ecosystem

6. Institutional Arrangement and Coordination

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

Institutional Arrangement

ACRIF will be implemented through the existing African Development Bank infrastructure and will be coordinated by the ADRiFi Program Coordination Unit. Given that this is a regional program and because of the type of activities under each component, the African Development Bank will assume the overall supervision and coordination role for this program at the regional level. It will also act as the main government counterpart for the purposes of project execution. To implement program activities at the country level, a lean Program Implementation Unit (PIU) will be established within the existing institutions

responsible for Disaster Risk Management (Executing Agency (EA)) in the participating countries. In the cases where the EA lacks the capacity to implement the program, ACRIF will be implemented by a third-party implementing agency (TPIA).

To coordinate the Program, the AfDB Coordination Unit will appoint a Program Coordinator who will be supported by Programme Specialists^[1] and the existing AFDB ecosystem functions including Financial Management, Procurement, Disbursement, Climate Change and Green Growth, Gender and Fragility and Resilience will support the Project Implementation Units (PIUs) at the country-level Executing Entities to manage and oversee the implementation of the work. The African Development Bank's Gender Specialists will similarly support the in-country Gender Specialist to implement the Gender Action Plans at country level. Indicative Terms of Reference (ToRs) for the Regional Coordinator and key PIU staff are included in Annex K

The Program Coordinator will be mainly responsible for:

1. Oversight of the program to ensure timely and effective execution of project activities
2. Gathering and Consolidation of financial and implementation reports from the countries
3. Organizing and coordinate annual Workshops for peer learning
4. Support the national PIUs on project execution and procurement related issues.

At the country level, the PIU will be typically comprised of:

1. National Program Coordinator
2. Finance officer
3. Procurement Officer
4. Monitoring and Evaluation Specialists, and
5. Gender Specialist.

Main tasks of the PIU will include:

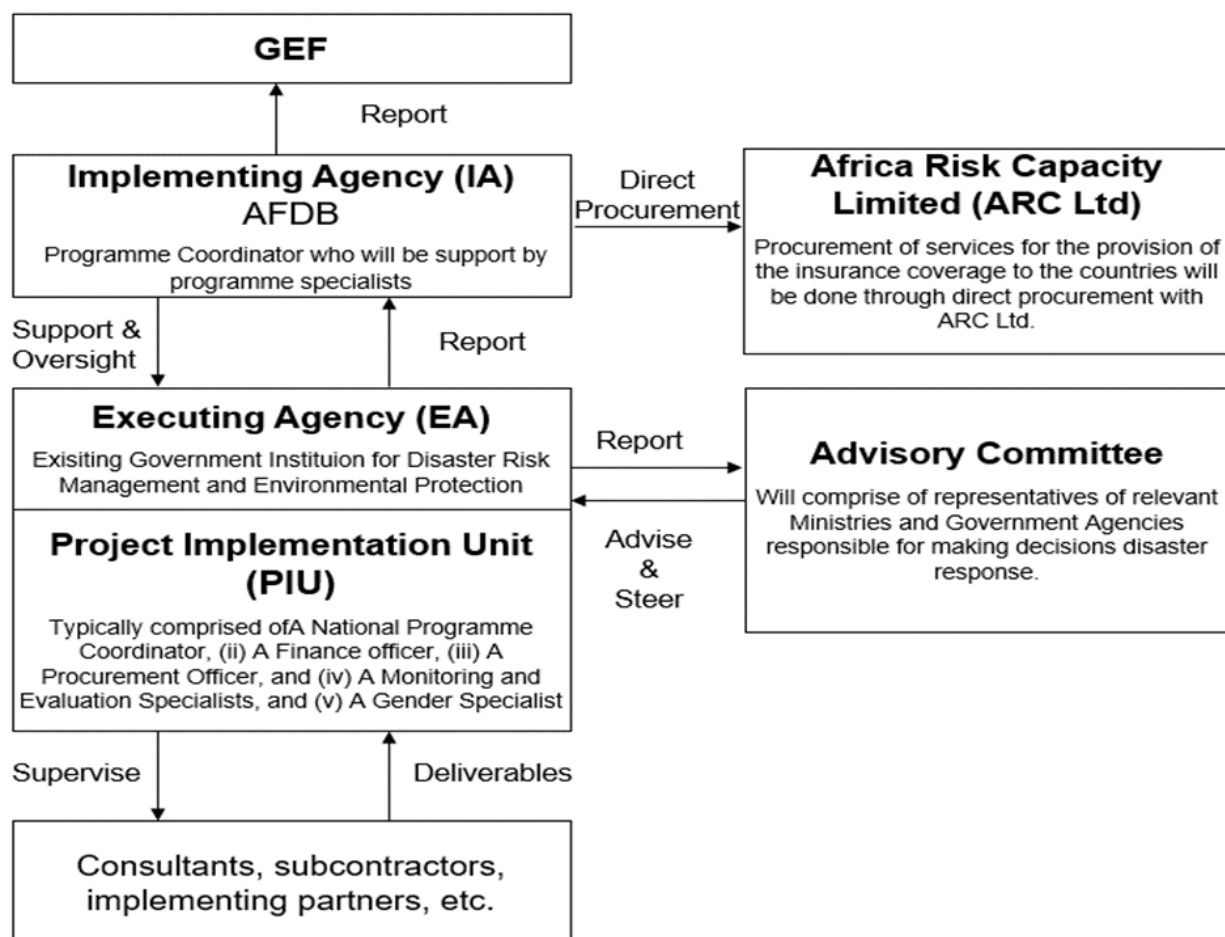
1. Planning and budgeting of annual work,
2. Coordinating the implementation of planned activities
3. Organizing periodic participative reviews
4. Preparing quarterly and annual implementation reports
5. Signing of contracts with service providers
6. Monitoring and evaluation
7. Partnering with development partners.

In addition to the PIU, an advisory committee (AC) will be established in each country to provide strategic guidance throughout the implementation of the program. The AC will be composed of representatives of relevant Ministries and Government Agencies responsible for making decisions on climate and disaster risk, financing, planning and response.. The AC will convene once a year.

Figure 1: Organogram for Institutional Arrangement

1

Figure 1: Organogram for Institutional Arrangement



Premium Support Guarantee Facility Trust

A premium support guarantee facility (PGSF) Trust will be established at ARC Ltd to support ARC LDC Member States that have formally committed to pay premiums for ARC insurance policies, but where payment is delayed due to sovereign government invoice payment processes. In cases where the country's policy start date has begun, missed payment deadlines may require ARC Ltd to withdraw the insurance policy offer.

Participating countries will enter into an agreement with the PGSF, creating a legal obligation on the country to repay the premium advance within a specific time-period back to the PGSF Trust, to replenish it. If a country fails to repay the premium advance amount to the PGSF Trust, then ARC Ltd would exercise remedial rights which could include (i) excluding the country from future participation in ARC insurance programs until the amount is paid and settled, and/or (2) withholding the amount of premium owing to the PGSF Trust from any insurance policy pay-out triggered under the ARC Ltd insurance policy for that underwriting period.

Eligibility, selection criteria, and prioritization of countries will be further developed through a detailed concept note that would detail the governance, structure, enforcement, and expenses of the Trust.

[1] Also called Task Managers in AFDB parlance

7. Consistency with National Priorities

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

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

The Paris Agreement indicated the development trajectories towards limiting global warming to 1.5 degrees Celsius above pre-industrial levels and to increase the long-term ability of countries to adapt to the adverse impacts of climate change. The NDCs are intended for parties to set out ambitious, national mitigation and adaptation targets, strategies for achieving those, and potential support needs. Currently, all countries under the ACRIF program have set mitigation targets, but only insufficiently account for resilience measures, while it would be essential for countries to enhance their account of resilience measures, including climate and disaster risk financing instruments and investment tools which are the key elements of the ACRIF. As such, long-term investment strategies of the countries shall be anchored to long-term investment strategies that include quantitative sectoral investment targets for mitigation and resilience efforts. To achieve this, ACRIF will provide critical assistance in understanding the losses associated with the materialization of climate-related risks and the gains from avoiding or reducing climate risk exposures. Currently, the associated financial losses and the costs of measures to avoid those losses are often unknown, and the risk data remain siloed and limited to the overall data quality. ACRIF can contribute to address these failures and build capacity in national and local markets to the point where cost-effective tools and management can be addressed by the private sector or public-private partnership models.

The introduction of climate and disaster financing instruments through ARC builds on the correct detecting, understanding and valuation of risks and exposures. Therefore, considering the participation of the countries to the sovereign risk pooling is part of the national adaptation planning processes and can help in building a cost-effective investment mix in adaptation measures, risk retention and risk financing, such as risk transfer via ARC, or contingent credit lines and other cat instruments, and risk management. Currently, only few NDCs refer to a comprehensive risk financing strategy, which is a critical component of ACRIF project. Furthermore, only few NDCs specify the anticipated costs of their planned adaptation measures and no NDC quantifies the anticipated costs of introducing the envisioned risk financing instruments. Accordingly, there is no clarity on how to integrate cost-effectiveness to maximize resilience. Three barriers hinder progress in this area:

1. There is no resilience baseline against which to plan and cost adequate adaptation and risk financing measures. The necessary information can be provided by ARC and others, and should be available, understandable and useable by the governments.

2. There is no adequate methodology and tools to develop an integrated investment portfolio of adaptation measures.
3. There is a lack of guidance on the instruments which build a comprehensive risk financing strategy and on how to develop a comprehensive risk financing strategy, which combines such instruments.

Especially this last point is a critical element to which ACRIF can contribute. The UN's IPCC has conducted sensitivity analyses for warming extending from a low of 1.5-degrees Celsius to a high of 4.5-degrees Celsius. In order to adequately plan, measure the investments, costs, benefits and risk financing options, countries need to understand their starting point. This means understanding their resilience baseline, against which to decide for investment and financing targets that support sufficient and cost-effective adaptation and risk management action. Such baseline ACRIF is helping equip countries with the necessary methodology and/or tools and capacities, allowing them to independently make and understand these assessments and their results. Building on such assessment, countries can then be supported in identifying and selecting resilience measures that help to deviate from the original baseline scenario to enhance resilience.

The African Climate Risk Insurance Facility (ACRIF) program aligns with the national priorities of Somalia, Comoros, Djibouti, and South Sudan. This alignment is crucial as it takes into account the recipient countries' national development plans, adaptation needs, disaster risk management strategies, and the policies of the African Development Bank (AfDB). The project focuses on addressing CCA-1 priorities, which are based on global conventions such as the UNFCCC (United Nations Framework Convention on Climate Change) and the Sendai Framework for Disaster Risk Reduction.

Table 4: National Alignment with ACRIF

Countries	Policies	Alignment
Comoros	A National Platform for Disaster Risk Reduction and Prevention	?
	The National Strategy for Disaster Risk Reduction in the Comoros	?
	The National Contingency Plan	?
	The Cyclone-specific Emergency Plan	?
	Updated Nationally Determined Contribution (NDC)	?
Somalia	National Climate Change Policy	?
	National Environmental Policy	?
	National Determined Contribution	?
	National Drought Plan	?
	National Adaptation Program of Action	?

South Sudan	Updated Nationally Determined Contribution (NDC)	?
	National Strategy for Disaster Risk Management in South Sudan and Plan of Action	?
	Second Nationally Determined Contribution (NDC)	?
Djibouti	The National Disaster Risk Reduction and Management Policy (NDRRMP)	?
	The National Early Warning and Response System (NEWS)	?
	The National Drought Management Authority (NDMA)	?
	Nationally Determined Contribution (NDC)	?

The AfDB is committed to implementing national climate actions and places significant emphasis on the economic growth of its member states. Climate change and fragility are fundamental aspects of the AfDB's ADF 16 (African Development Fund) strategy, which is one of the main funding sources for the AfDB. Therefore, the ACRIF program aims to engage all member states, and the selection criteria for participation include the implementation of national development plans, Nationally Determined Contributions (NDCs), the Sendai Framework for Disaster Risk Reduction (SFDRR), and the utilization of complementary investments from other development partners, including climate funds like the GEF (Global Environment Facility), GCF (Green Climate Fund), and Adaptation Fund. These partnerships and investments are essential for the AfDB's objectives.

At the operational level, community-based activities under Component 3 of the ACRIF program will be guided by the participating Least Developed Countries' (LDCs) National Adaptation Plans (NAPs) or National Adaptation Plans of Actions (NAPAs) as appropriate. This ensures that the project aligns with and supports the specific adaptation priorities outlined in the respective countries' plans.

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.

The AfDB implementation team will leverage on the Regional Project Coordinator to act as a dedicated Knowledge Management, Monitoring and Evaluation Specialist provided by the Bank. Knowledge generated throughout the lifespan of the project will be disseminated through regular interactions, missions, the support of the program manager, regional workshops and topical deep dives organized to foster direct and peer to peer learning and promote knowledge sharing. Moreover, the Bank will establish a micro website through which it will foster knowledge dissemination towards a wider audience.

The project itself has a significant capacity building component that will secure the services of long-term advisors to the countries on pivotal components of Disaster Risk Management and Disaster Risk Financing. The project will structure this long-term assistance on a results-based management system from the design stage, which will include results-based reporting, specific deliveries and targets, and the

generation of information that helps to draw lessons (both positive and negative) during implementation, that helps adaptive management and that helps to objectively update the adaptation tracking tools and managing risks. Additionally, the Program Manager will provide knowledge and information sharing support to the local authorities and stakeholders within the limits of its mandate.

The design of the program for market-based instruments thrives on credible information, as such building on the ADRiFi this area will be consistently managed to inform the progress towards achievement of results. The project will have specific tools for linking inputs, activities, outputs, outcomes and impact with clear cause and effect relationships and indicators at each stage, which will guide the M&E Plan which will have a dedicated budget. The main practices deployed by the program will involve:

- ? Identifying and collecting knowledge and information from various sources
- ? Organization easy retrieval and accessibility to all parties involved via knowledge repositories or databases
- ? Sharing via meetings, workshops, events, periodic exchanges
- ? Transfer mentoring and training programs, brainstorming sessions, research and development initiatives, innovation programs, and cross-country collaboration
- ? Continuous learning will also be encouraged.
- ? Study visits between program members EA entities/PIUs

The project will undergo independent evaluation at mid-point and during closure and will be reported to AfDB's Board of Directors. These processes are important in keeping the project implementation on track, to enhance efficiency and make key decisions on adaptive management based on the risks being managed, and new risks like pandemics which could not be foreseen during design.

Budget and Timeline for Key GEF-Funded Knowledge Management and Learning Activities

[illegible]

[illegible]

[illegible]

Activity	Budget	Year1				Year2				Year3				Year4				Year5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Diagnostic study of the historical impacts of climatic disasters in the Comoros	100,000																				
Dissemination of disaster risk financing strategy	100,000																				
Training in GRC for the technicians/agents to be deployed to the islands to collect, process and analyse data on disasters on an ongoing basis	50,000																				
Djibouti																					
Study on gendered impacts of climate risks on women and girls	50,000																				
TOTAL BUDGET	2,245,768																				

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1)

The monitoring and evaluation (M&E) of the African Climate Risk Insurance Facility (ACRIF) for Somalia, Comoros, Djibouti, and South Sudan will be an integral part of the program's implementation. To ensure effective M&E, a regional coordinator will be appointed to oversee the program's progress and activities. This coordinator will work closely with each country's Project Implementation Unit (PIU) to develop a comprehensive M&E plan tailored to the specific needs and context of the country.

The regional coordinator's role is pivotal in maintaining a continuous and rigorous monitoring of the program. They will provide guidance and support to the PIUs, ensuring that the M&E plan is properly implemented, and monitor the overall progress and performance of the ACRIF program in each country. By closely monitoring the implementation process, the regional coordinator can identify potential challenges, gaps, and areas for improvement, allowing for timely corrective actions to be taken.

To enhance the effectiveness of M&E efforts, each PIU includes an M&E expert from the executing agency. This expert will bring their specialized knowledge and skills in monitoring and evaluation, contributing to the efficient and effective implementation of the program. They will work in collaboration with the PIUs to establish appropriate M&E indicators, data collection methods, and reporting mechanisms, ensuring that the program's performance is accurately measured and evaluated. **The M&E expert and gender expert for each PIU is also responsible for reporting on the gender action plan.**

In the case of South Sudan, the responsibility for M&E will be entrusted to a dedicated Third-Party Implementation Agency (TPIA). The TPIA will assume the role of ensuring the rigorous monitoring and evaluation of the program's implementation in South Sudan. Working closely with the regional coordinator and the respective PIU, the TPIA will conduct regular assessments, collect relevant data, and generate comprehensive M&E reports to gauge the progress and impact of the ACRIF program in the country.

The M&E process will not only focus on tracking the program's outputs and outcomes but also aim to capture lessons learned, best practices, and potential areas for program expansion or adaptation. It will provide valuable insights and evidence to inform decision-making, optimize resource allocation, and strengthen the program's overall effectiveness.

By establishing a strong M&E framework, the ACRIF program demonstrates its commitment to transparency, accountability, and results-based management. The regional coordinator, along with the PIUs and M&E experts, will collaborate closely to ensure that the M&E plan is effectively executed, data is collected accurately, and reports are generated promptly. Through continuous monitoring and evaluation, the ACRIF program can adapt, improve, and deliver sustainable climate risk insurance solutions that address the specific needs and priorities of each participating country.

ACRIF M&E Plan

M&E Activity	Description	Frequency	Responsible persons	Budget (GEF funded) - USD
Inception workshop and inception report	The inception workshop brings together the stakeholders involved in the project and the inception report. It provides an opportunity and means to finalize preparations for the implementation of the proposed project, including the formulation of the first annual work plan, details of stakeholder roles and responsibilities, and reporting and monitoring requirements. Given the consultation process at PPG, only minor adjustments are planned.	Within the first two months of project inception	ADRFi Coordination Unit	50,000
Logical results framework	The project's logical results framework includes SMART indicators for each expected result as well as medium- and end-of-project targets. These indicators will be the main tools for assessing the progress of project implementation and the achievement of project results. Means of verifying the progress of the results and the implementation of the project will be carried out throughout the implementation period.	Gender disaggregated data collected on an ongoing basis to provide the required quantitative and qualitative data on progress against each indicator before project evaluation reports and the definition of annual work plans.	ADRFi Coordination Unit	No specific budget (part of Project Coord. tasks)
Quarterly progress reports	The PIU will prepare a summary of the substantial and technical progress of the project towards achieving its objectives. The summaries will be reviewed and approved by the AfDB before being sent to the AfDB Project Coordinator.	Quarterly	ADRFi Coordination Unit	No specific budget (part of Project Coord. tasks)

M&E Activity	Description	Frequency	Responsible persons	Budget (GEF funded) - USD
Annual Project Report	The annual project report covers the evaluation of the advance on the project's outputs and outcomes, key achievements, evidence of success, constraints, lessons learned and recommendations, as well as the overall evaluation of the project. The annual progress report will be prepared by the Project Coordinator after consultation with relevant stakeholders and will be submitted to the AfDB	Annual	AfDB Project Coordinator	No specific budget (part of Project Coord. tasks)
Monitoring by the Steering Committee	The members of the Steering Committee will meet twice a year to assess the progress of the project and take decisions on recommendations to improve the design and implementation of the project in order to achieve the expected results.	2 times /year	Country-level PIU	Part of project operational costs for each country
Independent external mid-term evaluation	A mid-term evaluation of the project will be carried out at the beginning of the third year of implementation, focusing on relevance, results (effectiveness, efficiency and timeliness), issues requiring decisions and actions and early lessons learned in project design, implementation, and management	Half-way through project implementation.	GEF Secretariat	Budget to be provided GEF Secretariat
Independent external evaluation at the end of the project	A final evaluation, which takes place three months before the last TPR meeting, focuses on the same issues as the mid-term evaluation but also covers impact, sustainability and monitoring recommendations, including the contribution to capacity building and the achievement of global environmental objectives.	At least three months before the end of the project implementation.	GEF Secretariat	Budget to be provided GEF Secretariat

M&E Activity	Description	Frequency	Responsible persons	Budget (GEF funded) - USD
Financial Monitoring Report	The PIU will be required to produce financial monitoring reports (FMR) on a quarterly basis. These FMR will be prepared and submitted to the Bank no later than 45 days after the end of each quarter.	Quarterly	PIU	Part of project operational costs for each country
Implementation Progress Reviews	Implementation Progress Reviews using the Bank systems covering all aspects of implementation from procurement, disbursement, financial management, environmental and social safeguards, gender will be undertaken either physically or remotely twice per year	Bi-annually	AfDB Project Coordinator	200,000
Financial and Procurement Audit	A financial and procurement audit will be carried out each year. The PIU will develop and implement a strategy to address the audit recommendations after each audit. Including closure audit.	Annual	PIU and Bank	Provided in country project budgets
	TOTAL indicative costs			250,000

PS: In the case of South Sudan, the responsibility for M&E will be entrusted to a dedicated Third-Party Implementation Agency (TPIA).

10. Benefits

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

The African Climate Risk Insurance Facility offers several benefits for the participating countries both on the national level and on the local level. Given the participating countries lack a climate risk insurance market, ACRIF aims to address this gap and provide a proactive ex-ante climate risk insurance and effectively manage and reduce the severity of climate change damages. This brings numerous socioeconomic benefits both at the national and local levels.

At national level, ACRIF brings socioeconomic advantages by addressing the challenges posed by natural disasters and climate-related risks. These events often devastate a country's physical and human capital, leading to a decline in productive capacity. However, with access to ACRIF's climate risk insurance, these countries can obtain quick financial resources for post-disaster reconstruction, reducing the time required to rebuild their economic base and thereby, swift economic recovery. This is particularly significant as government's often struggle to secure additional resources in the aftermath of catastrophic events for relief and reconstruction. There, a well-developed insurance sector, facilitated by ACRIF, can finance post-disaster reconstruction, or manage risks through risk transfer schemes, thereby reducing the need for government financing. This, in turn, minimizes fiscal risks, safeguards resources for social services, and facilitates more efficient resources allocation.

Through ACRIF, the countries can access insurance policies that are specifically tailored to respond to humanitarian needs and facilitate early recovery efforts. This sovereign insurance enables governments to proactively manage and mitigate the financial risks associated with climate-related disasters, empowering them to swiftly and effectively respond to the impacts of extreme weather events and build resilience within their nations. Immediate insurance payouts into the national budget are provided in the event of weather events, as defined in the parametric weather risk contracts. These funds can be swiftly allocated to provide assistance to the affected population, particularly the poor, in the aftermath of natural disasters. The implementation of ACRIF also contributes to the development of national insurance industries, attracting new clients, generating additional premium income, and improving access to global reinsurance markets. This strengthens the financial sector, promotes market growth, and enhances the country's ability to manage climate risks.

At local level, ACRIF will significantly increase access to affordable catastrophe and weather risk insurance for millions of people in Somalia, Djibouti, Comoros, and South Sudan. This includes households, farmers, SMEs, and other businesses exposed to weather-related risk. While SMEs and businesses may not be direct beneficiaries of ACRIF, they play an essential role as secondary beneficiaries by providing services and contributing to the recovery efforts in the aftermath of climate disasters. Access to affordable disaster insurance serves as a crucial financial safety net, protecting people's savings invested in their homes and securing their livelihoods from weather-related losses. It provides a means to mitigate personal financial ruin and ensures the stability of households and businesses in the face of climate risk insurance supported by ACRIF lowers borrows costs, improves equity valuations, and enhances access to credit for businesses, thereby fostering economic growth and resilience.

ACRIF recognizes the gender dimensions, and the role of women play in agriculture, particularly in countries like Somalia, Djibouti, Comoros and South Sudan. ACRIF's provision of catastrophe and weather risk insurance helps farmers, including women, withstand and recover from major weather changes, ensuring more stable employment opportunities in the agriculture sector. The collection of gender data by ACRIF can enable insurance the provision of tailored insurance products and services to the specific needs of women, ensuring their active participation in purchasing catastrophe and weather risk insurance.

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	Low		

Measures to address identified risks and impacts

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

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
ADRIFI Environmental and Social Compliance Note (ESCON)	Project PIF ESS	

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

RESULTS FRAMEWORK	
? PROJECT NAME AND SAP CODE: African Climate Risk Insurance Facility-Derisking Adaptation to Climate Change in Africa	? COUNTRY/REGION: COMOROS, DJIBOUTI, SOMALIA, SOUTH SUDAN
? PROJECT DEVELOPMENT OBJECTIVE: To establish the African Climate Risk Insurance Facility (ACRIF) to promote climate risk insurance as a viable instrument of improving climate risk management, strengthening adaptation and addressing fragility on the African continent	
? ALIGNMENT INDICATOR (S):	
	RESULTS MATRIX

RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADO A INDICATOR	UNIT OF MEASUREMENT	BASELINE (2023)	TARGET MID-TERM	TARGET AT COMPLETION (2028)	MEANS OF VERIFICATION
? OUTCOME 0.1: CORE GEF INDICATORS						
OUTCOME INDICATOR 0.1:	Sovereign climate risk insurance coverage	Number of people covered by sovereign climate risk insurance, disaggregated by sex and age.	450,000	1,300,000 50% women 50% men	2,600,000 50% women 50% men	Implementation reports from PMU
OUTCOME INDICATOR 0.2:	Disaster risk financing policies in place	Total no. of policies/plans that will mainstream climate resilience and gender		2	4	Implementation reports from PMU
OUTCOME INDICATOR 0.3:	Enhanced capacity and knowledge in delivery of climate risk management	Total number of people trained, disaggregated by sex and	0	350 30% women 70% men	700 30% women 70% men	Implementation reports from PMU

RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADO A INDICATOR	UNIT OF MEASURE	BASELINE (2023)	TARGET MID-TERM	TARGET AT COMPLETION (2028)	MEANS OF VERIFICATION
COMPONENT 1: Setting the enabling environment for the adoption of climate risk financing instruments in African LDCs						
? OUTCOME 1.1: Strengthened understanding of climate risk exposure of African LDCs and establishment of institutional climate risk management processes and frameworks needed to be put in place to facilitate enhanced recovery from climate shocks.						
OUTCOME INDICATOR 1.1.1:	Number of countries where risk profiles are used in disaster risk planning	Number	0	2	4	Implementation reports from PMU
? OUTCOME 1.2: Enhanced understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in African LDCs (Governments, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)						
OUTCOME INDICATOR 1.2.1:	Number of countries where climate risk financing instruments are budgeted for and implemented	Number	0	2	4	Implementation reports from PMU
? OUTCOME 1.3: Enhanced capacity of African LDCs to mobilize sustainable financial resources for climate risk management and adaptation through the design and implementation of Disaster Risk Financing (DRF) strategies						
OUTCOME INDICATOR 1.3.1:	Number of budgeted and properly financed disaster risk financing strategies	Number	0	2	3	Implementation reports from PMU
? OUTPUT STATEMENT 1.1.1: Gender sensitive risk profiles independently elaborated by the country each year						
OUTPUT INDICATOR 1.1.1.1:	Gender sensitive risk profiles independently elaborated by participating countries each year	Number	1	3	6	Implementation reports from PMU
? OUTPUT STATEMENT 1.1.2: Climate risk response contingency plans developed						

[illegible]

RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADO A INDICATOR	UNIT OF MEASUREMENT	BASELINE (2023)	TARGET MID-TERM	TARGET AT COMPLETION (2028)	MEANS OF VERIFICATION
OUTPUT INDICATOR 1.2.2.1:	Number of mapping studies and feasibility studies of private sector participation in providing private climate risk insurance products	Number	0	2	4	Implementation reports from PMU
? OUTPUT STATEMENT 1.3.1: Disaster risk financing strategy developed						
OUTPUT INDICATOR 1.3.1.1:	Number of countries with disaster risk financing strategies developed	Number	0	2	4	Implementation reports from PMU
COMPONENT 2: Improving uptake of climate and disaster risk financing in Africa						
? OUTCOME 2.1: Strengthened participation of African LDCs in the Sovereign regional risk pool offered by the African Risk Capacity						
OUTCOME INDICATOR 2.1:	Numbers of countries participating in the ARC Risk Pool PRIME (exc. Replica)	Number	3	3	4	Government and DRM agencies; ARC project reports and project supervision reports
OUTCOME INDICATOR 2.2:	Average outstanding arrears in premium payments to ARC	Value in USD	USD 7 mio	USD 5 mio	USD 3.5 mio	ARC
OUTCOME INDICATOR 2.3:	Numbers of HoA countries consecutively participating for one year in the ARC Risk Pool	Number	0	2	4	Implementation reports from PMU

RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADO A INDICATOR	UNIT OF MEASUREMENT	BASELINE (2023)	TARGET MID-TERM	TARGET AT COMPLETION (2028)	MEANS OF VERIFICATION
OUTCOME INDICATOR 2.4:	Numbers of HoA countries financing premium payments from domestic resources	Number	0	2	4	Implementation reports from PMU
OUTCOME INDICATOR 2.5:	Number of people covered by sovereign climate risk insurance	Number	450,000	1,300,000	2,600,000	Implementation reports from PMU
? OUTPUT STATEMENT 2.1.1: Sovereign insurance Guarantee Facility established						
OUTPUT INDICATOR 2.1.1.1:	Guarantee Facility established	Number	0	1	1	Implementation reports from PMU
? OUTPUT STATEMENT 2.1.2: Countries covered through Guarantee Facility						
OUTPUT INDICATOR 2.1.2.1:	Number of countries covered through Guarantee Facility annually	Number	0	3	6	Implementation reports from PMU
? OUTPUT STATEMENT 2.1.3: ARC Premium policies financially supported						
OUTPUT INDICATOR 2.1.3.1:	Number of countries with ARC policy premium payments supported	Number	0	2	4	Implementation reports from PMU
COMPONENT 3: Strengthening Adaptation and Resilience of African LDCs against climate risks						
? OUTCOME 3.1: Enhanced capacity and skills of African LDCs in collecting and managing data that is critical for climate risk management, and improve communication and dissemination of climate risk management practices.						
OUTCOME INDICATOR 3.1.1:	Number of countries with improved dissemination and communication channels	Number	0	2	4	Implementation reports from PMU

RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADO A INDICATOR	UNIT OF MEASUREMENT	BASELINE (2023)	TARGET MID-TERM	TARGET AT COMPLETION (2028)	MEANS OF VERIFICATION
? OUTPUT STATEMENT 3.1.1: Community engagement activities						
OUTPUT INDICATOR 3.1.1.1:	Number of community engagement capacity building activities, training of trainers (ToT) implemented	Number	0	5	10	Implementation reports from PMU
? OUTPUT STATEMENT 3.2.1: Weather stations constructed/rehabilitated						
OUTPUT INDICATOR 3.2:	Number of weather stations constructed in Somalia	Number	0	5	10	

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).

STAP Review

The GEF Scientific and Technical Advisory Panel (STAP) provided comments on the PIF. The following table summarizes their major concerns, and how this was addressed during the program design phase.

STAP Review concern	How it has been addressed
1. The additionality of the program vs already existing similar programs is not clear.	The program's scope has been more clearly defined, both in terms of activities and geographical coverage. Complementarity with existing programs on country levels has been highlighted throughout the program design to avoid duplication of efforts. See section 1b)
2. The program is not clearly defined and too vague	The program's scope has been more clearly defined, and activities fleshed out in further detail. Activities have been defined on a country-level, which was only possible when participating countries were selected.
3. PIF is not detailed on how the program can be scaled up	Additional information on the potential for scaling is provided, in particular with relation to the guarantee facility. Furthermore, the facility is open for participation of other donors.
4. Risks not properly identified or quantified	Risks have been further nuanced and analyzed with the selection of participating countries. Climate risks added.

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

Provide detail funding amount of the PPG activities financing status in the table below:

PPG approved at PIF: USD 200,000			
<i>Project preparation activities implemented</i>	<i>GETF/LDCF/SCCF Amount (USD)</i>		
	<i>Budgeted amount</i>	<i>Amount spent to date</i>	<i>Amount committed</i>
Consultants	140,000	98,000	42,000
Stakeholder Inception Workshop	30,000	31,420	0
Stakeholder Validation Workshop	30,000	28,580	0
Total	200,000	158,000	42,000



ANNEX D: Project Map(s) and Coordinates

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



GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. These IDs are available on the [GeoNames? geographical database](#) containing millions of placenames and allowing to freely record new ones. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com> Please see the Geocoding User Guide by clicking [here](#).

Location Name Latitude Longitude Geo Name ID Location & Activity Description

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USD)									Total (USD)	Responsible Entity	
		Component 1			Component 2		Component 3		Sub-Total	PMC			M&E
		Outcome 1.1	Outcome 1.2	Outcome 1.3	Outcome 2.1	Outcome 2.2	Outcome 3.1	Outcome 3.2					
Contractual Services ? Company	Services offered by hired companies	100,000							100,000			100,000	AFDB
Contractual Services ? Individual	Services offered by individuals	360,000	615,000	100,000			100,000	100,000	1,275,000			1,275,000	AFDB

Goods	Computers and associated equipment	50,000						400,000	450,000			450,000	AFDB
Other Operating Costs	Supplies, office maintenance, contingencies								-	284,000		284,000	AFDB
Revolving funds/Seed funds / Equity	Funds for establishment of premium guarantee facility					4,000,000			4,000,000			4,000,000	AFDB
Salary and benefits / Staff costs	Benefits of locally recruited staff		365,000					50,000	415,000			415,000	AFDB
Trainings, Workshops, Meetings	All capacity building activities	996,000	610,768					110,000	1,716,768		250,000	1,966,768	AFDB
Travel	Mission travels								-	150,000		150,000	AFDB
Works	Establishment of weather stations						300,000		300,000			300,000	AFDB
Grand Total		1,506,000	1,590,768	100,000	-	4,000,000	400,000	660,000	8,256,768	434,000	250,000	8,940,768	

GEF (USD)						
	Total	Comoros	Djibouti	Somalia	South Sudan	Regional
Component 1	3,446,768	635,000	250,000	250,000	1,446,000	865,768
Component 2	4,000,000					4,000,000
Component 3	1,060,000	60,000	300,000	300,000	400,000	0
Program management	434,000	50,000			354,000	30,000
Sum	8,940,768	745,000	550,000	550,000	2,200,000	4,895,768

ADRIFI MDTF (USD)						
	Total	Comoros	Djibouti	Somalia	South Sudan	Regional
Component 1	!	!	!	!	!	!
Component 2	6,800,000	2,000,000	800,000	4,000,000		
Component 3	!	!	!	!	!	!
Program management	!	!	!	!	!	!
Sum	6,800,000	2,000,000	800,000	4,000,000	!	!

ADF (USD)						
	Total	Comoros	Djibouti	Somalia	South Sudan	Regional
Component 1	1,470,000	60,000	660,000	750,000	!	!
Component 2	4,140,000	500,000	1,640,000	2,000,000	!	!
Component 3	-852,010	-157,010	-395,000	300,000	!	!

Program management	2,293,555	630,000	672,525	991,030	-	-
Sum	8,755,565	1,347,010	3,367,525	4,041,030	-	-

TSF (USD)

	Total	Comoros	Djibouti	Somalia	South Sudan	Regional
Component 1	912,196	-	-	-	912,196	-
Component 2	2,100,000	-	-	-	2,100,000	-
Component 3	2,405,000	-	-	-	2,405,000	-
Program management	379,204	-	-	-	379,204	-
Sum	5,796,400	-	-	-	5,796,400	-

TOTAL

	Total	Comoros	Djibouti	Somalia	South Sudan	Regional
Component 1	5,828,964	695,000	910,000	1,000,000	2,358,196	865,768
Component 2	17,040,000	2,500,000	2,440,000	6,000,000	2,100,000	4,000,000
Component 3	4,317,010	217,010	695,000	600,000	2,805,000	0-
Program management	4,280,460	884,601	1,102,075	1,420,580	843,204	30.000
SUM	31,466,434	4,296,611	5,147,075	9,020,580	8,106,400	4,895,768

Total Budget Allocation by Country by Year (USD)

Country	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Comoros	932,611	906,000	936,000	771,000	751,000	4,296,611
Djibouti	693,435	1,488,410	1,083,410	793,410	1,088,410	5,147,075

Somalia	3,660,940	3,969,910	789,910	299,910	299,910	9,020,580
South Sudan	758,150	3,257,225	1,884,535	1,685,490	521,000	8,106,400
Regional Component	4,180,000	180,000	180,000	180,000	175,768	4,895,768
Total	10,225,136	9,801,545	4,873,855	3,729,810	2,836,088	31,466,434

Comoros - Detailed Budget Table

Component	Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Component 1: Setting the enabling environment for the adoption of climate risk financing instruments in Comoros	115,000	150,000	260,000	95,000	75,000	695,000
	Sub- Component 1.1: Strengthening the country's capacities in terms of understanding its climate risks and developing contingency plans	100,000	5,000	50,000	5,000	25,000	185,000
Component 1	Country risk profiling for climate disaster risks	5,000	5,000	5,000	5,000	5,000	25,000
Component 1	Equipment for early warning communication and dissemination of multi-hazard early warning information: Computer, Monitor, UPS terminal	50,000					50,000
Component 1	Developing contingency plans: Plan ORSEC	20,000		20,000		20,000	60,000
Component 1	Training Formation en GRC des techniciens/agents qui seront d?ploy?s dans les iles en tant que cellules d?analyse des donn?es collect?es et mise ? jour permanente de la base de donn?es*	25,000		25,000			50,000

	Sub-component 1.2: Enhance understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in Comoros (government, insurance regulators, private insurance companies, farmers' associations and cooperatives, etc.)	15,000	145,000	210,000	90,000	50,000	510,000
Component 1	Advocacy and awareness campaign on DRM and DRF		30,000		30,000		60,000
Component 1	Undertake DRF Diagnostics to understand the historical impacts of climate disasters in Comoros		100,000				100,000
Component 1	Development of comprehensive gender sensitive disaster risk financing strategies to complement ARC's coverage with different instruments			200,000			200,000
Component 1	Dissemination of disaster risk financing strategies				50,000	50,000	100,000
Component 1	Gender Action Plan	15,000					15,000
Component 1	Gender Action Plan		15,000	10,000	10,000		35,000
	Component 2: Improving uptake of climate and disaster risk financing in Comoros	500,000	500,000	500,000	500,000	500,000	2,500,000
	Sub-Component 2.1: Support premium payment for insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028)	500,000	500,000	500,000	500,000	500,000	2,500,000

Component 2	Support premium payment for tropical cyclone/flood hazards to ARC Ltd (2024 to 2028)	500,000	500,000	500,000	500,000		2,000,000
Component 2	Support premium payment for tropical cyclone/flood hazards to ARC Ltd (2024 to 2028)					500,000	500,000
	Component 3: Strengthening adaptation and resilience of Comoros against climate risks	130,000	80,000	0	0	0	210,000
	Sub-Component 3.1: Development and maintenance of climate information system	0	0	0	0	0	0
	Sub-Component 3.2: Support to risk data communication and dissemination	130,000	80,000	0	0	0	210,000
Component 3	Operationalization of Hydrological service	30,000	30,000				60,000
Component 3	Development of knowledge on hazards		50,000				50,000
Component 3	Strengthening technical capacities for hydrometeorological risk	107,010					107,010
	Program management	168,000	168,000	168,000	168,000	168,000	840,000
Component 4	PMU allowances	80,000	80,000	80,000	80,000	80,000	400,000
Component 4	Accounting Consultant	20,000	20,000	20,000	20,000	20,000	100,000
Component 4	Miscellaneous	10,000	10,000	10,000	10,000	10,000	50,000
Component 4	Financial Audit	18,000	18,000	18,000	18,000	18,000	90,000
Component 4	Government in-kind contribution	44,601	40,000	40,000	40,000	40,000	204,601
	Contingencies	8,000	8,000	8,000	8,000	8,000	40,000
Component 4	Physical contingencies	0	0	0	0	0	0
Component 4	Price contingencies	8,000	8,000	8,000	8,000	8,000	40,000

	Total (USD)	932,611	906,000	936,000	771,000	751,000	4,296,611
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Djibouti ? Detailed Budget Table

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Component 1: Setting the enabling environment for the adoption of climate risk financing instruments in Djibouti	20,000	495,000	295,000	95,000	5,000	910,000
	Sub-component 1.1: Strengthen the institutional climate risk management architecture and foster understanding of climate risk exposure to facilitate recovery from climate shocks	15,000	370,000	120,000	70,000	0	575,000
Component 1	Training of staff of the Executive Secretariat on Disaster Risk Management and relief operations		20,000	20,000	20,000		60,000
Component 1	Elaboration of a database and inventory of human and material capital for safety and emergency operations	15,000					15,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	Training of members of the Intersectoral Technical Committee and Regional Disaster Management Committees on rapid post disaster needs assessment		20,000		20,000		40,000
Component 1	Organization of a Test Evacuation Exercise in case of a Flood in the city of Djibouti		30,000		30,000		60,000
Component 1	Supply of office and IT equipment for the Emergency Operations Center built by the United States		300,000	100,000			400,000
1	Sub-component 1.2: Enhance understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in Djibouti (Government, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)	5,000	125,000	175,000	25,000	5,000	335,000
Component 1	Support to the operations of the ARC Technical Working Group	5000	5000	5000	5000	5000	25000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of DRF instruments and their complementarity		20,000	20,000	20,000		60,000
Component 1	Undertake DRF Diagnostics to understand the historical impacts of climate disasters in Djibouti		50,000				50,000
Component 1	Support the development and implementation of a comprehensive gender sensitive disaster risk financing strategy to complement ARC's coverage with different instruments			150,000			150,000
Component 1	Study on gendered impacts of climate risks on women and girls		50,000				50,000
	Component 2: Improving uptake of climate and disaster risk financing in Djibouti	400,000	440,000	400,000	400,000	800,000	2,440,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 2	Study on the increase of the insurance coverage and relevant modelling		40,000				40000
Component 2	Support premium payment for drought and flood risk insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028)	400,000	400,000				800,000
Component 2	Support premium payment for drought and flood risk insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028)			400,000	400,000	800,000	1,600,000
I	Component 3: Strengthening adaptation and resilience of Djibouti against climate risks	110,000	315,000	150,000	60,000	60,000	695,000
I	Sub-component 3.1: Establishment and maintenance of climate information systems	95,000	265,000	40,000	10,000	10,000	420,000
Component 3	Acquisition and installation of 5 automatic weather stations		150,000				150,000
Component 3	Acquisition and installation of 40 rain gauge stations	75,000	75,000				150,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Acquisition of internet connectivity for the transmission of climate data from the stations		10,000	10,000	10,000	10,000	40,000
Component 3	Acquisition of 5 high performance computers	20,000					20,000
Component 3	Training of Meteorologists on climate previsions		30,000	30,000			60,000
	Sub-component 3.2: Support communication and dissemination of risk data.	15,000	50,000	110,000	50,000	50,000	275,000
Component 3	Workshop on the establishment of an Early Warning System for Floods in Djibouti	15,000					15,000
Component 3	Support for two Doctoral Research thesis on the establishment of an Early Warning System for Floods in Djibouti		50,000	50,000	50,000	50,000	200,000
Component 3	Establish a comprehensive and functional Early Warning System for Floods in Djibouti			50,000			50,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Design a portal to promote sharing of information regarding process and progress in Climate service delivery across Djibouti			10,000			10,000
	Program management	158,435	228,410	228,410	228,410	213,410	1,057,075
Component 4	Audit		20,000	20,000	20,000	20,000	80,000
Component 4	Office Maintenance and Travel Budget	35,000	45,000	45,000	45,000	45,000	215,000
Component 4	Local staff	37,525	77,500	77,500	77,500	62,500	332,525
Component 4	In-kind contribution	85,910	85,910	85,910	85,910	85,910	429,550
	Contingencies	5,000	10,000	10,000	10,000	10,000	45,000
Component 4	Physical contingencies	0	0	0	0	0	0
Component 4	Price contingencies	5,000	10,000	10,000	10,000	10,000	45,000
	Total (USD)	693,435	1,488,410	1,083,410	793,410	1,088,410	5,147,075

Somalia ? Detailed Budget Table

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Component 1: Setting the enabling environment for the adoption of climate risk financing instruments in Somalia	136,000	466,000	286,000	56,000	56,000	1,000,000
	Sub-component 1.1: Strengthen understanding of climate risk exposure and establish institutional climate risk management processes and frameworks to facilitate quicker recovery from climate shocks	56,000	266,000	106,000	56,000	56,000	540,000
Component 1	Support multi-hazard early warning coordination fora at national and regional levels	44,000	44,000	44,000	44,000	44,000	220,000
Component 1	Support the acquisition of equipment for operational sustainability of the multi-hazard early warning system		60,000				60,000
Component 1	Support production, communication and dissemination of multi-hazard early warning information including bulletins, maps	12,000	12,000	12,000	12,000	12,000	60,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	Undertake country risk profiling for climate disaster risks and disseminate the country climate disaster risk profile		50,000	50,000			100,000
Component 1	Develop an Impact-Based Forecasting System for climate risks in Somalia		100,000				100,000
	Sub-component 1.2: Enhance understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in Somalia (Government, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)	80,000	150,000	150,000	0	0	380,000
Component 1	Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of DRF instruments and their complementarity	80,000					80,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	Undertake DRF Diagnostics to understand the historical impacts of climate disasters in Somalia		80,000				80,000
Component 1	Support the development and implementation of comprehensive gender sensitive disaster risk financing strategies to complement ARC's coverage with different instruments			150,000			150,000
Component 1	Study on gendered impacts of climate risks on women and girls		50,000				50,000
Component 1	Gender audit of SODMA and MoECC		20,000				20,000
	Sub-component 1.3: Feasibility studies on private sector participation in providing private climate risk insurance products undertaken	0	50,000	30,000	0	0	80,000
Component 1	Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products		50,000	30,000			80,000
	Component 2: Improving uptake of climate and disaster risk financing in Somalia	3,000,000	3,000,000	-	-	-	6,000,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Sub-component 2.1: Sovereign climate risk insurance premiums supported over a multi-year period	3,000,000	3,000,000	0	0	0	6,000,000
Component 2	Support premium payment for drought risk insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028)	3,000,000	3,000,000				6,000,000
	Component 3: Strengthening adaptation and resilience of Somalia against climate risks	200,000	200,000	200,000	0	0	600,000
	Sub-component 3.1: Establishment and maintenance of climate information systems	150,000	100,000	100,000	0	0	350,000
	Support maintenance and rehabilitation of automatic weather stations						
Component 3	Develop action plans on implementing and maintaining for existing automatic weather stations networks and services at sides - this would include observation equipment, data transmission networks, etc.	100,000					100,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Build human resources capacity at FGS level to enable data and systems management, analytical processes, and methods to be applied.		50,000	50,000			100,000
Component 3	Support at least 12 Month for Operational sustainability for Infrastructure (Include Protective Equipment?s)	50,000	50,000	50,000			150,000
I	Sub-component 3.2: Support communication and dissemination of risk data.	50,000	100,000	100,000	0	0	250,000
I	Investment in equipment and systems to improve communication and dissemination channels (often multiple channels), including software and hardware and comm systems, and promote community engagement and awareness campaigns through public meetings, seminars, workshops, education in school, villages, etc.						

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Establish the baseline local knowledge, opportunities for monitoring, evaluation and early warning at community-level, and manner in which information dissemination and communication can be done effectively to support appropriate actioning.	50,000					50,000
Component 3	Establish a Gender equity and Inclusivity oversight function within the FGS Climate Data and services institutional framework, to ensure oversight of all processes and products, to ensure gender equity and principles related, is integrated.		50,000				50,000
Component 3	Test Climate Data product information transfer and integration into local knowledge and practices through surveys at community-level.		50,000				50,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Establish a suggestion-line/portal where open communication can be made, anonymously if so desired, to promote sharing of ideas and comments regarding process and progress in Climate service delivery across Somalia (promote open communication)			50,000			50,000
Component 3	Build capacity at FGS level to enable effective communication and information packaging and sharing for services across the value chain			50,000			50,000
	Program management	314,940	293,910	293,910	233,910	233,910	1,370,580
Component 4	Audit	20,000	20,000	20,000	20,000	20,000	100,000
Component 4	Office Maintenance and Travel Budget	41,030	20,000	20,000	20,000	20,000	121,030
Component 4	Local staff	168,000	168,000	168,000	108,000	108,000	720,000
Component 4	In-kind contribution	85,910	85,910	85,910	85,910	85,910	429,550
	Contingencies	10,000	10,000	10,000	10,000	10,000	50,000
Component 4	Physical contingencies	0	0	0	0	0	0
Component 4	Price contingencies	10,000	10,000	10,000	10,000	10,000	50,000
	Total (USD)	2,660,940	2,969,910	789,910	299,910	299,910	9,020,580

South Sudan ? Detailed Budget Table (GEF Funded)

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Component 1: Setting the enabling environment for the adoption of climate risk financing instruments in South Sudan	303,200	353,200	333,200	303,200	153,200	1,446,000
	Sub-component 1.1: Strengthen understanding of climate risk exposure and establish institutional climate risk management processes and frameworks to facilitate quicker recovery from climate shocks	203,200	303,200	283,200	203,200	153,200	1,146,000
Component 1	Support the strengthening of institutional and technical capacities for effective climate related risk planning, preparedness, response and recovery by facilitating high-level dialogues for awareness building, knowledge exchange and institutional cooperation and linkages between the various line ministries in developing climate-resilient guidelines, strategies and innovative technologies that can be adopted at national, state and county levels.	50,000	50,000	50,000	50,000	50,000	250,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	Establish a multi-hazard national climate monitoring and reporting framework at both national and state level and produce quarterly national multi-hazard bulletin	50,000	50,000	50,000	50,000		200,000
Component 1	Create awareness and support the implementation of the National Disaster Risk Management Policy	50,000	50,000	50,000	50,000	50,000	250,000
Component 1	Provide technical assistance and capacity building to improve exposure and vulnerability data collection, including trainings on information management, food security and nutrition indicators, data quality and collection (methodologies, methods, tools), data analysis (including hazard/risk analysis), and vulnerability assessments with emphasis on the common hazards.	0	100,000	80,000		0	180,000
Component 1	Activity Coordination - Ministry of Humanitarian Affairs and Disaster Management	53,200	53,200	53,200	53,200	53,200	266,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Sub-component 1.2: Enhance understanding of climate risk financing instruments including index-based insurance by - relevant stakeholders in South Sudan (Government, insurance regulators, private insurance companies, farmers associations and cooperatives, etc.)	100,000	0	0	100,000	0	200,000
Component 1	Technical assistance and capacity building for all relevant ministries and agencies in charge of Disaster Risk Financing to enhance the knowledge and understanding of risk financing instruments and their complementarity	100,000					100,000
Component 1	Support the country in the understanding of the critical elements of catastrophe risk insurance, including the choice of the types of risk transfer instruments, what choices and at what levels of attachment probabilities, managing basis risk with reserves and contingent lines, managing emergency coverage versus recovery and reconstruction.				100,000		100,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	Sub-component 1.3: Feasibility studies on private sector participation in providing private climate risk insurance products undertaken	0	50000	50000	0	0	100,000
Component 1	Mapping of and feasibility studies of private sector participation in providing private climate risk insurance products	0	50,000	50,000	0	0	100,000
Component 1							0
	Component 2: Improving uptake of climate and disaster risk financing in South Sudan	-	-	-	-	-	0
	Sub-component 2.1: Sovereign climate risk insurance premiums supported over a multi-year period	-	-	-	-	-	0
Component 2	Support premium payment for drought risk insurance to ARC Ltd over a multi-year period (indicatively 2024 to 2028)						0
	Component 3: Strengthening adaptation and resilience of South Sudan against climate risks	100,000	75,000	75,000	100,000	50,000	400,000
	Sub-component 3.1: Establishment and maintenance of climate information systems.	0	0	0	0	0	0
Component 3							
	Sub-component 3.2: Support communication and dissemination of risk data	100,000	75,000	75,000	100,000	50,000	400,000

Component	Components and Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 3	Investment in equipment and systems to improve communication and dissemination channels (often multiple channels) for risk data, including software and hardware and comm systems, and promote community engagement and awareness campaigns through public meetings, seminars, workshops, education in school, etc.	100,000	75,000	75,000	100,000	50,000	400,000
	Project management	30,000	30,000	30,000	30,000	30,000	150,000
Component 4	Audit	0	0	0	0	0	0
Component 4	Office and Travel Budget	30,000	30,000	30,000	30,000	30,000	150,000
	Total	433,200	458,200	438,200	433,200	233,200	1,996,000
Component 4	Price Contingencies	10,000	10,000	10,000	10,000	10,000	50,000
Component 4	GOSS - In-kind	22,000	22,000	22,000	22,000	22,000	110,000
Component 4	TPIA Fees	30,800	30,800	30,800	30,800	30,800	154,000
	TOTAL	496,000	521,000	501,000	496,000	296,000	2,310,000

South Sudan ? Detailed Budget Table (TSF Funded)

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
Component 3: Strengthening Agropastoral Communities? Capacity to Adapt to Climate Change							
Sub-component 3.1: Enhancing climate services infrastructure							

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
	<i>Improving the climate and weather observation networks, infrastructure and data processing for enhanced provision of hydromet services.</i>	-				-	-
TSF	Purchase, installation, and maintenance of 20 AWS (10 state, 3 Administrative Areas capitals and 2 productive areas) to increase coverage of the country and address climate data gaps		1,000,000			1,000,000	741,840
TSF	Provide internet connection to transfer the data from AWS to a central server		45,000	45,000	45,000	135,000	100,148
TSF	Purchase and install cluster server and data storage equipment including aggregation software and computers		60,000			60,000	44,510
TSF	Support the establishment of a multi-sectoral data and agro-meteorological information exchange and dissemination platform		20,000	20,000	20,000	60,000	44,510
TSF	Downscaling and dissemination of climate information		10,000	10,000	10,000	30,000	22,255

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
TSF	Purchase two vehicles to facilitate the maintenance of observation equipment		120,000			120,000	89,021
TSF	Purchase 15 motorcycles to facilitate the monitoring and maintenance of observational equipment at the State and administrative area level		60,000			60,000	44,510
	<i>Undertake tailored trainings in collaboration with ICPAC to facilitate modelling and climate data generation</i>					-	-
TSF	Four trainings on climate modelling and prediction	50,000	50,000	50,000	50,000	200,000	148,368
TSF	Training on equipment maintenance and calibration		50,000	50,000		100,000	74,184
TSF	Training in generation of agro-climatological products and services		50,000	50,000		100,000	74,184
TSF	Training in GIS and Remote Sensing for SSMD, MHDAM, MAFS, MEF		50,000		50,000	100,000	74,184

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
TSF	Procure eight GIS licenses and relevant extensions for SSMD, MAFS, MHADM, MEF (2 licenses per entity)		40,000			40,000	29,674
						-	-
Total 3.1		50,000	1,555,000	225,000	175,000	2,005,000	1,487,389
Sub-component 3.2: Providing climate risk finance and insurance							-
TSF	Support premium payment for climate risk insurance for floods to ARC Ltd over a three-year period (2024 to 2026)	-	700,000	700,000	700,000	2,100,000	1,557,864
	<i>Capacity Development - Ministry of Humanitarian Affairs and Disaster Management</i>					-	-
TSF	Undertake development of a national flood emergency response plan		100,000			100,000	74,184
TSF	Undertake training on the fundamentals of ex-ante disaster risk financing and risk layering		38,000		38,000	76,000	56,380
TSF	Undertake a Disaster Risk Finance Diagnostic study for South Sudan		50,000			50,000	37,092
TSF	Develop a Disaster Risk Financing Strategy for South Sudan			100,000		100,000	74,184

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
TSF	Mainstream DRR and DRF in Budgeting and Planning			40,000		40,000	29,674
TSF	Mainstream gender in Climate Disaster Risk Management and Response		30,000	38,252		68,252	50,632
TSF	Carryout research to map disaster prone areas /hotspots in the country		100,000			100,000	74,184
						-	-
	<i>Capacity Development - Ministry of Agriculture and Food Security</i>					-	-
TSF	Mainstream climate risk management into agricultural sector plans and strategies					-	-
TSF	Build capacity of private sector actors (insurance companies and food security actors) on agricultural/index insurance					-	-
						-	-
Total 3.2		-	1,018,000	878,252	738,000	2,634,252	1,954,193
Total Component 3		50,000	2,573,000	1,103,252	913,000	4,639,252	3,441,582
Component 4: Programme Management and coordination							-
FAO	Direct Operating Costs	-	-	-	-	-	-
FAO	Human Resources	117,094	117,094	117,094	117,094	468,376	347,460
GOSS	Human Resources	80,000	80,000	80,000	80,000	320,000-	237,389-
Total Component 4		117,094	117,094	117,094	117,094	468,376	347,460
TSF	Price contingencies	100,000	100,000	100,000	100,000	400,000	296,736

Components / Funding Sources	Activities	2023	2024	2025	2026	Total Cost US \$	Total Cost UA
TSF	Physical contingencies	95,000	94,500	94,444	94,000	377,944	280,374
Total Direct Costs - Bank		245,000	2,767,500	1,297,696	1,107,000	5,417,196	4,018,691
Total Direct Costs - FAO		117,094	117,094	117,094	117,094	468,376	347,460
FAO Management Fees (7% of Bank Contribution)		10,500	187,110	84,228	70,910	352,748	261,682
Total Bank Contribution		262,150	2,961,225	1,388,535	1,184,490	5,796,400	4,300,000
Total Project Cost		459,244	3,158,319	1,585,629	1,381,584	6,584,776	4,884,848

Regional						
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Component 1	100,768	100,000	100,000	100,000	100,000	500,768
Outcome 1.2	100,768	100,000	100,000	100,000	100,000	500,768
Regional peer learning workshops for sharing information and experiences across countries, including experience with ACRIF, disaster risk management and financing strategies, etc.	50,768	50,000	50,000	50,000	50,000	250,768
Regional monitoring and evaluation activities	50,000	50,000	50,000	50,000	50,000	250,000
Regional project coordination	73,000	73,000	73,000	73,000	73,000	365,000
Component 2	1,000,000	1,000,000	1,000,000	1,000,000	-	4,000,000
Outcome 2.1	1,000,000	1,000,000	1,000,000	1,000,000	-	4,000,000
A 6-month liquidity facility to guarantee the payment of the premium by the Government of South Sudan to address delays and policy cancellations, which have anecdotally experienced variability and instability, and resulted in increased rates on-line and insurance multiples	1,000,000	1,000,000	1,000,000	1,000,000	-	4,000,000
	-	-	-	-	-	-
Component 3	-	-	-	-	-	-
Component 4: Program management	6,000	6,000	6,000	6,000	6,000	30,000
Office and Travel Budget	6,000	6,000	6,000	6,000	6,000	30,000
Total	1,179,768	1,179,000	1,179,000	1,179,000	179,000	4,895,768

ANNEX F: (For NGI only) Termsheet

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

ANNEX G: (For NGI only) Reflows

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

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

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