



Sustainable Natural Resource and Livelihood Adaptive Programme (SNRLAP)

Part I: Project Information

GEF ID

10350

Project Type

MSP

Type of Trust Fund

LDCF

CBIT/NGI

☐ CBIT

☐ NGI

Project Title

Sustainable Natural Resource and Livelihood Adaptive Programme (SNRLAP)

Countries

Sudan

Agency(ies)

IFAD

Other Executing Partner(s)

Federal Ministry of Agriculture and Forestry (FMoAF)

Executing Partner Type

Government

GEF Focal Area

Climate Change

Taxonomy

Land Degradation, Focal Areas, Food Security, Climate Change, Climate Change Adaptation, Least Developed Countries, Climate resilience, Influencing models, Strengthen institutional capacity and decision-

making, Stakeholders, Type of Engagement, Information Dissemination, Participation, Consultation, Local Communities, Communications, Awareness Raising, Beneficiaries, Gender Equality, Gender results areas, Participation and leadership, Access and control over natural resources, Gender Mainstreaming, Sex-disaggregated indicators, Capacity, Knowledge and Research, Enabling Activities, Capacity Development

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Submission Date

11/6/2020

Expected Implementation Start

6/1/2021

Expected Completion Date

5/31/2027

Duration

72In Months

Agency Fee(\$)

190,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	Objective 1: Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	LDC F	1,668,000.00	40,480,000.00
CCA-2	Objective 2: Mainstream Climate Change Adaptation and Resilience for Systemic Impact	LDC F	332,000.00	9,450,000.00
Total Project Cost(\$)			2,000,000.00	49,930,000.00

B. Project description summary

Project Objective

Strengthening resilience of local communities to climate change in the Butana, Sennar and Kordofan regions

Project Compo nent	Finan cing Type	Expected Outcomes	Expected Outputs	Tr ust Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1 Scaling up climate adaptation and resilient community based natural resources management and businesses models	Technical Assistance	<p>Outcome 1</p> <p>Increased production and resilience of targeted communities and households</p> <p>99200 household reports a sustained increase in production</p>	<p>Output 1.1 Inter-community framework for adaptation and NR management^[1]effectively implemented using the ecosystem approach</p> <p>- 150 cluster/ network NR and Land-Use Management Plans (NRLMP) with CCA mainstreamed developed and implemented</p> <p>- 72,000 community members (50% women) have their NR ownership or user rights secured via registration of community forests and rangelands) and report reduction in dispute over use of land and NR</p> <p>_____</p> <p>^[1] The inter-community framework is a comprehensive approach to facilitate engaging and inclusive inter-community discussions for land-use planning, negotiation of joint resources management through building networks of Community Development Committees (CDCs) or clusters of villages.</p> <p>_____</p> <p>Output 1.2 Access to technical assistance and finance facilitated to support climate -smart agriculture (CSA) and the implementation of</p>	LD CF	1,560,00 0.00	33,400,00 0.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2 Strengthening the institutional framework for scaling up community based NRM	Technical Assistance	<p>Outcome 2</p> <p>Legal, policy and institutional framework for scaling up climate change adaptation and community based NRM improved and adopted</p> <p><i>- At least 10 institutions at federal, state and locality level have their NR regulations and policies well integrated, coordinated and coherent both at the vertical and the horizontal level of governance.</i></p>	<p>Output 2.1</p> <p>NR and CCA institutional and policy frameworks strengthened with climate data and knowledge</p> <p><i>- Existing Early Warning Systems strengthened and expanded to cover SNRLP beneficiaries.</i></p> <p><i>- 10 policy relevant knowledge products.</i></p>	LD CF	311,000.00	7,800,000.00
			<p>Output 2.2</p> <p>Institutions capacitated on community-based climate change adaptation and NR governance, management and suitable technology related issues.</p>			

Project Compo nent	Finan cing Type	Expected Outcomes	Expected Outputs	Tr ust Fu nd	GEF Project Financin g(\$)	Confirme d Co- Financin g(\$)
				Sub Total (\$)	1,871,000.00	41,200,000.00
Project Management Cost (PMC)						
LDCF			129,000.00	8,730,000.00		
Sub Total(\$)			129,000.00	8,730,000.00		
Total Project Cost(\$)			2,000,000.00	49,930,000.00		

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	IFAD	Grant	Investment mobilized	39,944,000.00
GEF Agency	IFAD	Loans	Investment mobilized	9,986,000.00
Total Co-Financing(\$)				49,930,000.00

Describe how any "Investment Mobilized" was identified

The volume and expected composition of IFAD's triannual Programme of Loans and Grants (PoLG) is determined through replenishment consultations, based on the Fund's expected resource flows as contained in its financial framework, including Member States' agreed contributions and the expected concessionality of IFAD's financial instruments for borrowing the Member States. Currently, 6.5 per cent of PoLG is allocated to the grants programme which may be provided to developing Member States including Sudan. The exceeding amount of programme budget will be financed through a loan. Describe how any "Investment Mobilized" was identified. The LDCF funding was identified by IFAD together with the Government of Sudan to support the SNRL programme on climate change adaptation. Activities funded by the LDCF were identified at design as part of the whole SNRLP. The activities under LDCF target the same regions as the activities under IFAD funded activities, they are mainly blended with IFAD funding and do not expand the programme area. The LDCF complement well the IFAD investments and is a value added to IFAD on specific activities related to climate change adaptation. IFAD mobilizes resources from its Trust Fund, replenished every three years and allocated per country according to its PBAS (Performance-Based Allocation System), a calculation method analogous to GEF's STAR allocations. Government contribution of EUR 11.7 million to the SNRLP comes in the form of "Taxes and custom duties" and is therefore not shown in the above table or counted as cofinancing for the GEF SRNLAP.

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(\$)
IFAD	LDC F	Sudan	Climate Change	NA	2,000,000	190,000
Total Grant Resources(\$)					2,000,000.00	190,000.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required

☐

PPG Amount (\$)

PPG Agency Fee (\$)

Agenc y	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)
Total Project Costs(\$)					0.00	0.00

Core Indicators

Indicator 3 Area of land restored

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

Indicator 3.1 Area of degraded agricultural land restored

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

Indicator 3.2 Area of Forest and Forest Land restored

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

Indicator 3.3 Area of natural grass and shrublands restored

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

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

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

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

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

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
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Documents (Please upload document(s) that justifies the HCVF)

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

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female				
Male				
Total	0	0	0	0

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

Since the original PIF, the Project Design has included the risks related to the COVID 19 crisis in the implementation of the project. For more information please refer to the Risks section.

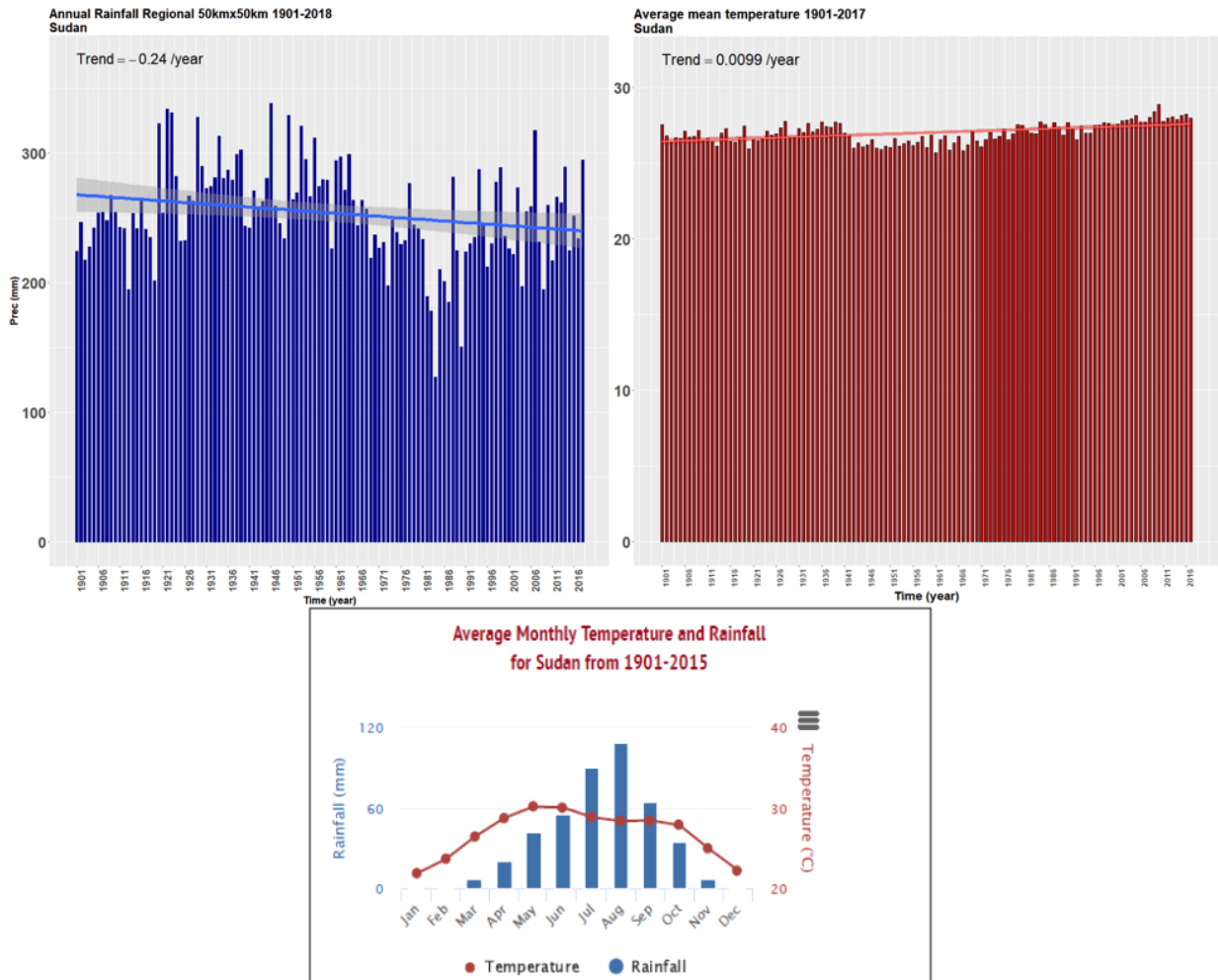
1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

Sudan is the third largest country in Africa. The total land area is 1,765,048 Km² and stretches over land between latitudes 10°N and 23°N and longitudes 21°45 'E and 38°30 'E. Most of the land is composed of vast arid plains interrupted by a few widely separated ranges of hills and mountains. The current population is 41.5 million, of which 64.7% is rural, 50.4% male population and 49.6% female population. The Nile River basin contributes most of Sudan's available surface water. Water resources outside the Nile basin are limited, soil fertility is low, and recurrent drought is common. Arable land constitutes about one third of the total area of the country, with about 21% of this land under cultivation. Over 35% of the total area of Sudan consists of pasture and rangelands (FAO, SIFSIA2012), (RPGD, 2015). The agriculture sector is dominated by small-scale farmers (settled crop farmers, pastoralists and agropastoralists) who employ largely rain-fed and traditional agricultural practices. Pastoralism is widespread and contributes 60% of the total agriculture revenue through livestock exports. Over 70% of the population is dependent upon crop production and/or livestock husbandry to support their livelihoods (INCD, 2016). Its human development index of 0.47% in 2015 ranked the country 167 out of 188 countries assessed. Sudan's major environmental problems are deforestation (aggravated by mining, conversion to rangeland and the increasing food and energy needs of the Sudanese population), overgrazing, soil erosion, desertification and land degradation due to negative rainfall trends and increased incidence of droughts in recent decades. In arid areas, drought and anthropogenic pressures have led to declining soil fertility and water resources, low agricultural productivity and persistent food insecurity (NAP, 2015).

Sudan's vulnerability to Climate Change has been highlighted in different documents and reports such as the 1st National Communication (2003), the National Adaptation Programme of Action (NAPA, 2007), the 2nd National Communication on Climate Change (2013) and the National Adaptation Plan (NAP, 2016).

The figure below shows the average monthly temperature and precipitation between 1901 and 2015 for Sudan. Precipitation is concentrated during summer months when temperature is at its peak. Annual historical precipitation (1901-2018) and annual mean temperature (1901-2017) for Sudan from the Climatic Research Unit (CRU) are also presented below. The data analysis indicates that air temperatures have been steadily increasing in Sudan over the period 1901-2017, by 0.0099 degrees/year average, or by 1.16 degrees since 1901. According to the 2nd National Communication, during both the March to June and June to September periods, temperatures have been increasing between 0.2°C and 0.4°C per decade, depending on the locations within the country since 1960. When averaged across all seasons, temperatures in the 2000-2009 periods are roughly between 0.8°C and 1.6°C warmer than they were in the 1960-1969 period. Even if we note an increase since mid-1980's in precipitation, it is decreasing by 0.24mm/year average, or by 28,3mm since 1901.

Map of the Project Area



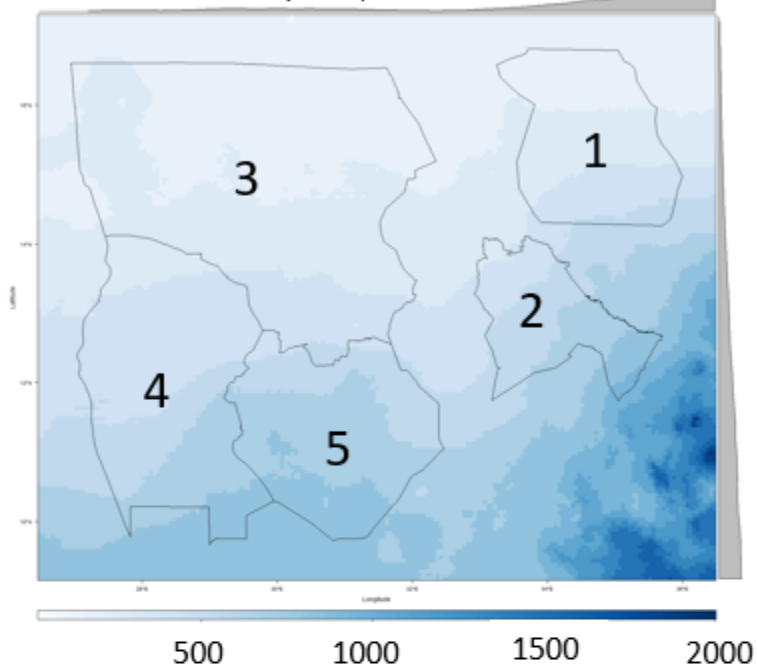
Average monthly temperature and precipitation (1901-2015), the annual historical precipitation (1901-2018) and the annual mean temperature (1901-2017) for Sudan. Sources: World Bank Climate Portal^[1], Climatic Research Unit and CoMon tool.

The climate change analysis for Sudan highlights the following characteristics:

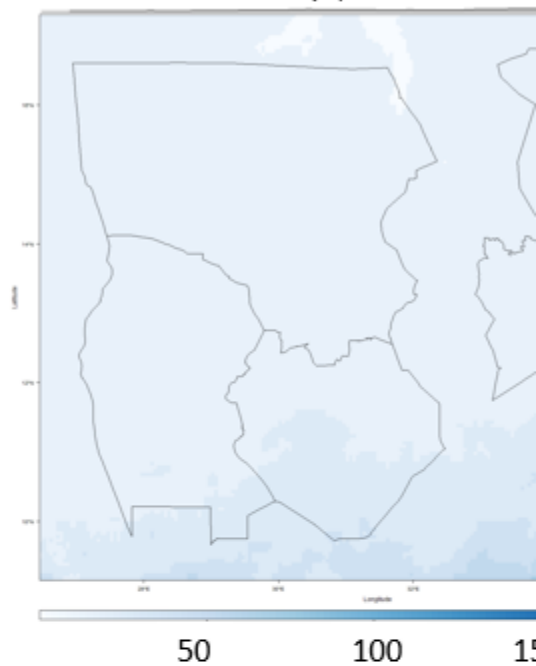
- ? There is a gradient of precipitation from North to South, the North being drier than the South;
- ? As shown in the figures below, variability is intra-annual with two seasons, May-October wet and November-April dry. The variability is also inter-annual with a significant increase in wet season precipitation since 1981 in most of the regions. However, in the Southern part of South Kordofan the precipitation trend is significantly negative during the wet season (which could have a negative impact on water recharge of the soil and subsequently on agriculture and people). Precipitation is measured in mm.

Map of the Project Area

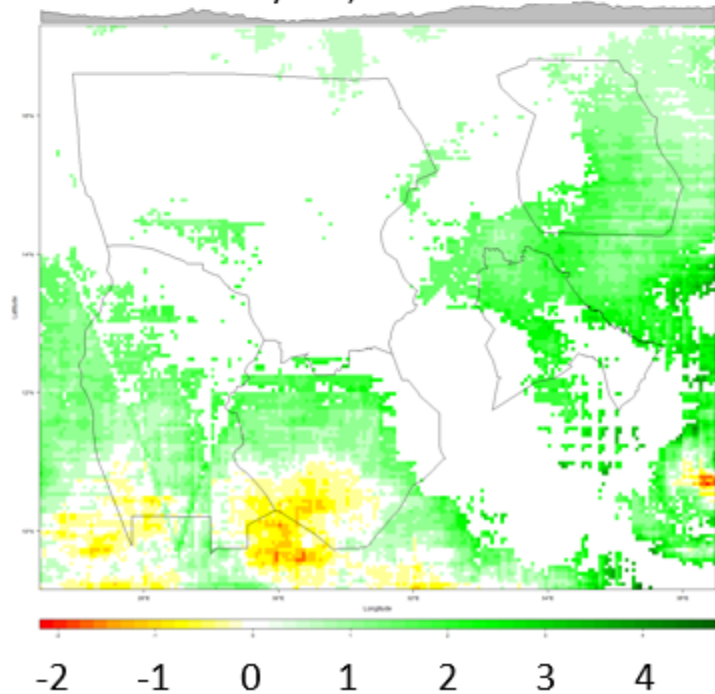
Average precipitation
May-Oct, 1981-2018



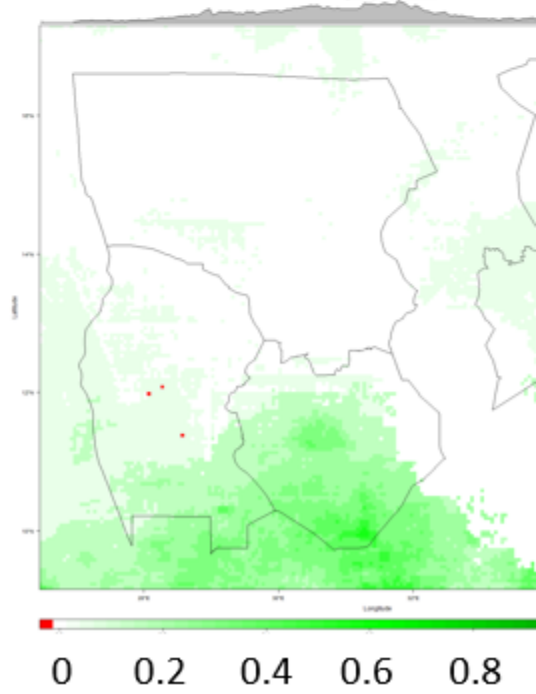
Average precipitation
Nov-Apr, 1981-2018



Trend in precipitation
May-Oct, 1981-2018



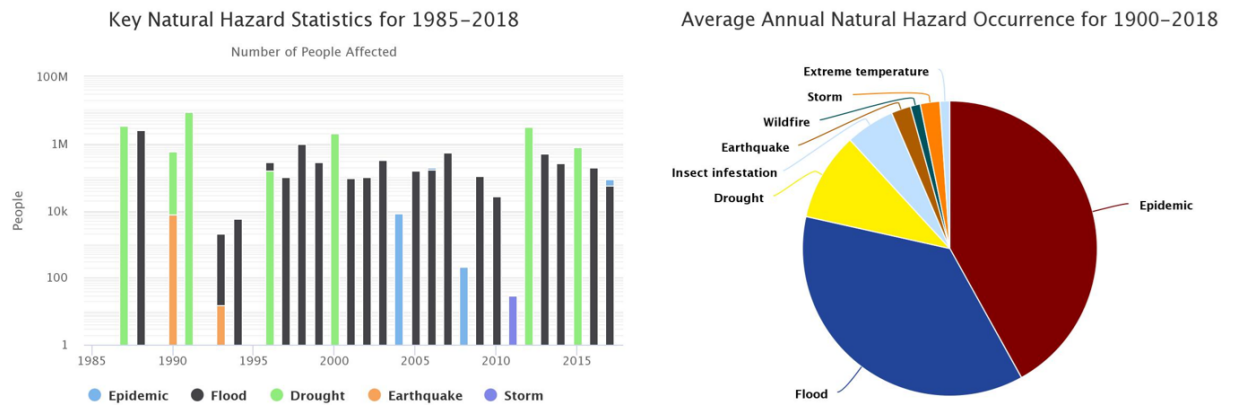
Trend in precipitation
Nov-Apr, 1981-2018



Zones of study: 1: Butana; 2: Sennar; 3: North Kordofan; 4: West Kordofan; 5: South Kordofan.
Sources: CHIRPS/Climate Hazards Group-USGS; University of East Anglia Climatic Research Unit

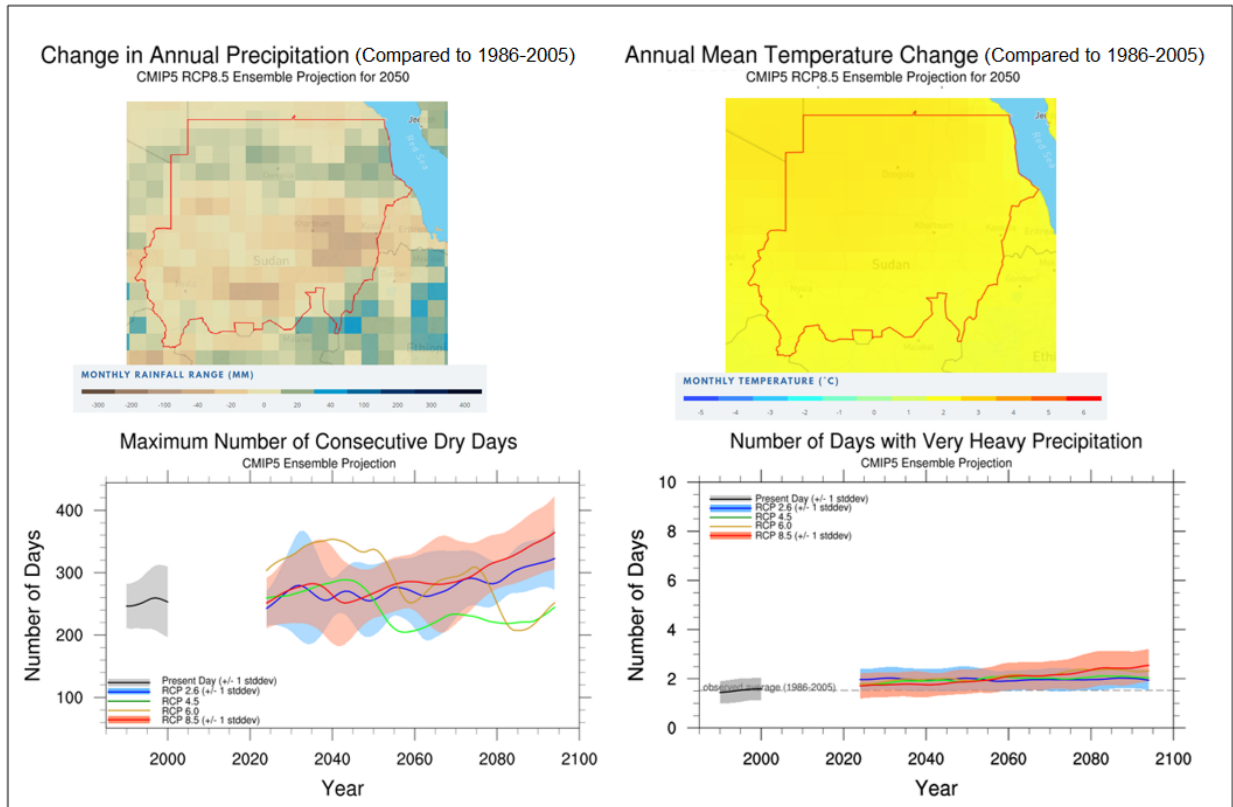
(CRU)

The charts below provide overview of the most frequent natural disasters in Sudan and understand the impacts of those disasters on human populations. Floods and droughts represent an important part of the natural hazard occurred since 1900 and are affecting repeatedly the population since the 1980's.



Key Natural Hazard Statistics for 1985-2018 in Sudan and Average Annual Natural Hazard Occurrence for 1900-2018 in Sudan. Source: Climate Change Knowledge Portal, World Bank.

For the elaboration of future scenarios, the most recent GCM outputs were obtained from the IPCC Assessment Report-5 (AR5). The Climate Model Intercomparison Project-5 (CMIP-5) data was collected for 22 GCMs for a region including Sudan (NAP, 2015).



Climate Change in Sudan. CMIP5 RCP8.5 Ensemble Projection for Sudan. Source: World Bank

Climate scenario analyses indicated that average temperatures are expected to rise significantly relative to baseline expectations. Projections of rainfall under climate change conditions also show sharp deviations from baseline expectations.

By 2060, projected warming will range from 1.5°C to 3.1°C during August and between 1.1°C to 2.1°C during January. Results of the Ensemble Projection for the scenario RCP8.5 show average rainfall will decrease in the West of the country but will mainly increase in the South and East by 2050. The maximum consecutive dry days will increase as for the number of days with very heavy precipitation by 2050. This can be interpreted by a concentration of precipitation in a short period of time during the year, and consequently, the increase of precipitation over the years may not be as positive as it could be but bring even more erosion and flood disasters.

The consequences could be a shifting of agroclimatic zones southwards with accompanying water deficits, declining crop production with more frequent crop failures, as well as loss of range resources and livestock. There would also be increasing risks of desertification, poverty, food insecurity and famines, leading to mounting competition over resources and conflicts, human displacement and suffering (INDC, 2015).

With reduced groundwater recharge, due to decreased precipitation or increased temperature and evaporation, soil moisture would further decline under future climate change. Climate change may drastically increase the variability in Nile's annual output and could lead to more droughts and floods^[2].

For the three regions where the project will be implemented (Butana, Sennar and Kordofan regions) a number of climate scenarios have been developed. For Kordofan states, climate scenarios for 2030 and 2060 in Sudan's INDC project a decrease in average precipitation and an increase in average temperatures, with pronounced changes expected for Northern Kordofan (INC 2003). Alam et al (2012) confirmed these findings in modeling future climate change scenarios through 2080 in 5 locations in the Kordofan States, with the exception that rainfall and evapotranspiration rates may decrease in some localities. The major sectors impacted by climate change are agriculture, and water and health, in both Northern and Southern Kordofan. However, Northern Kordofan is considered more vulnerable due to a climate that is already prone to low rainfall and extreme temperatures.

The centrally located Kassala state is in the semi desert zone; and Al Gedarif state is a low rainfall savannah ecological zone both in the Butana area. Of these states, Kassala is considered highly vulnerable due to high rainfall variability and increasing temperatures.

With an average annual rainfall of 613 mm/yr Gedarif state receives enough rain to sustain a healthy agricultural sector. However, Gedarif's agricultural economy, 90% of which is rainfed, is already affected by increasing rainfall variability, rising temperatures, and decreasing average rainfall. Although once one of the major producers of gum Arabic, Gedarif state has lost significant vegetation cover over the past few decades. The Butana area holds vast areas of common open access rangeland, that suffers from lack of governance and overgrazing with truckloads of cattle being brought to the area in the grazing season by big herds of livestock keepers from around Khartoum.

Sennar is a low rainfall savannah in the southeastern part of Sudan, with an average maximum temperature of 37°C; an annual minimum temperature of 20°C, and an annual rainfall of 427 mm/yr (baseline 1971-2000). Its economy depends on a mix of rainfed and irrigated agriculture, forestry, grazing and fishing. The state is vulnerable to rainfall variability, rising temperatures, increasing wind speeds and a frequent cycle of floods and drought. This combined with inadequate natural resources governance and management, increase in tensions over land with traditional agropastoralists communities under pressure from the expansion of medium scale mechanized farming, has led to blocking of stock routes and the deterioration of rangeland and vegetation cover.

Climate variability and climate change are intensifying the ongoing process of desertification of arable areas. The shift of humid agro-climatic zones southward is rendering vast arable lands unsuitable for agriculture production. Pastoral systems are becoming less productive and losing their ability to support livelihoods of natural resources dependent communities.

Barriers. Crop producing smallholder farmers, agro-pastoralists and pastoralists, are the main target groups in the areas of intervention of the project, and they are also the most vulnerable groups according to the NAPA. They encounter major development challenges related to constraints in access to and lack of governance and management of NR, climate change causing more water stress, and a poor enabling environment for sustainable development. These challenges are driving high levels of poverty and periodic food insecurity and fragility among the target groups. Productivity in rainfed cropping systems is declining due to land degradation, reduced soil fertility, inappropriate tillage practices, deteriorating seed quality, climate change induced stress and lack of knowledge on adaptation options and improved management practices. The carrying capacity of most of the rangeland areas can hardly support the large number of livestock: overgrazing combined with increasing temperatures and rainfall variability are the most prevalent cause of desertification in almost all over Sudan. Rural youth suffer from high unemployment rates, affecting young women even more than young men. They have no access to basic services or sustainable livelihood opportunities, limited or no employment opportunities, as well as limited access to capacity building or microfinance services that would enable them to establish their own businesses.

Capacity of local communities and local institutions to anticipate, and effectively respond to, climate change-induced disasters continue to be quite limited. Vulnerability of local communities to climate change is also exacerbated by the lack of information on state of natural resources, as well as lack of climate information for effective adaptation planning. In the same spirit there is no sustained process of awareness building among policymakers regarding climate-related risks.

Native Administration (NA) systems for natural resources governance and conflict management have over time been partly broken and replaced by inefficient legal and regulatory frameworks for effective natural resources governance and management. Currently, there are multiple parallel systems for NR management and governance resulting in confused land tenure arrangements, inconsistencies in laws and policies and unclear institutional arrangements leaving user rights open to dispute and sometimes causing severe conflicts between farmers, agropastoralists, pastoralists and investors in medium scale mechanized farming and mining.

These challenges are driving high levels of poverty and periodic food insecurity and fragility among the target groups. In addition, the lack of accessible rural financial services impeded diversification of economic activities and business development for increasing resilience.

For more information on Climate Change in Sudan and the impact on agriculture, with analysis of main crops yield under the scenario RCP8.5 (CARD) please consult the Annex 5 ??Design Climate Change in depth analysis of SNRLP?.

2) the baseline scenario and any associated baseline projects

Business-as-usual (BAU). The BAU baseline assumes that future development trends will follow those of the past. For the LDCF the BAU consists of the different projects implemented by IFAD in the region as well as projects developed by other partners and institutions. The proposed project will build first of all on the on-going IFAD supported projects:

i) The Great Green Wall for the Sahel and Sahara Initiative (GGWSSI) in Sudan

Originally the concept of Great Green Wall Initiative (GGWI) was limited to a tree planting initiative; however, it then evolved to improve the resilience of human and natural systems in Sahel and Saharan areas faced with climate change through healthy ecosystem management and sustainable development of natural resources, protection of tangible and intangible rural heritage, the development of rural production and sustainable development hubs, improvement of living conditions and livelihoods of people living in these areas. Indeed, the following projects are contributing to the GGWSSI in Sudan.

The World Bank project entitled **Sudan Sustainable Natural Resources Management Project - SSNRMP** (2013-2019) of the GGWSSI in Sudan. This project is implemented in the Butana, Kordofan and the White Nile regions. The SSNRMP is a USD 7,7 million project aiming at increasing the adoption of sustainable land and water management practices in targeted landscape. Additional funding of USD 5,9 million has been allocated to the SSNRMP by the GEF for a four-year period starting in 2018. The SSNRMP has the following objectives: (i) assist communities in preparing and implementing investments under integrated land management and resilience planning; (ii) manage, monitor and maintain soil and water conservation structures in collaboration with Village Development Committees (VDCs) and (iii) address climate-induced diseases including malaria. As the SSNRMP and the SNRLP will be implemented in the same regions, strong collaboration between the two projects is envisaged.

The project area covered by **Integrated Carbon Sequestration Project in Sudan (Butana area)**, a joint IFAD/FNC project (2011), falls within the SSNRMP. The IFAD/Forestry National Corporation (FNC) project has an energy saving component based on the use of improved cook stoves in over a thousand households in Gezira state and (Butana locality, Gedaref and Kassala states) within REDD project. Collaboration between these two projects was possible and useful particularly that in both projects FNC is a key institute. The use of energy alternatives such as liquefied petroleum gas (LPG) and kerosene may be important to reduce wood energy consumption and therefore to be one of the priority measures to be implemented within the GGWSSI in Sudan.

Lastly, improving the resilience of communities is an important element which appears in the development objectives of the Sudan. Indeed, one of the 5 components of **the National Action Plan for The implementation of the Great Green Wall for the Sahel and Sahara initiative** (the Republic of Sudan, 2015) is to ?Support to livelihoods and resilience of local communities?. Potential projects and activities are identified in the action plan, and the IFAD Country Strategic Opportunity Programme (COSOP) should be aligned to them in order to respond to community needs and respond to Sudan?s

agenda on environment and biodiversity. For instance, **Revitalizing the Sudan Gum Arabic Production and Marketing Project** funded by multi-donor Trust and IFAD has demonstrated good results in supporting the production of Gum Arabic and could respond to the Act. 3.1.4 of the action plan 'Production and commercialization of gum Arabic' while adopting an agroecological approach to build more resilience at a local and regional level. Work with Gum Arabic Production Associations is the fundamental aspect of the project's sustainability strategy. This, together with community forest activities, could contribute to the REDD+ implementation in Sudan at the national level.

As one of the leading agencies, IFAD has been actively promoting GGWSSI in Sudan by financing various projects and will continue to do so with the SNRLP contributing to the restoration of degraded lands; forest and rangeland sustainable management; support to livelihoods and resilience of local communities; capacity development through research and knowledge management and dissemination of best practices; implementation and monitoring framework.

ii) The **Butana Integrated Rural Development Project - BIRDP** (entered into force in July 2008, completion date September 2019) The project aims at achieving sustainable improvement in the livelihoods and drought-resilience of rural poor households and pastoralists (540 communities) in the project target area ('Butana') through establishing an effective natural resources governance framework; improving the access and bargaining position of women and men in livestock value chains marketing; and developing the capacity of communities to form networks and engage in development initiatives and management of shared natural resources. The total project costs are US\$29.85 million. An additional financing of US\$13.3 million was approved in 2016. The project has four main components: (i) Policy and Institution Building; (ii) Natural Resources Management; (iii) Livestock and Marketing Development; and (iv) Community Development, Business Options. BIRDP has so far made tangible achievements in terms of food security, resilience and poverty reduction, due to successful interventions in areas like water infrastructure, range and forest rehabilitation and community development.

The project's intervention around homesteads, Jubraka's (women's community or individual vegetable and fodder farms), goat feeding and communal gardens are diversifying diets, and the project has been particularly successful in strengthening Community Development Committees (CDC) and through them active community participation in project interventions, especially by women.

A characteristic feature of the population in Butana is enhanced awareness about the importance of natural resources. Communities also reflect strong commitment and determination to protect and manage these resources. Voluntary forest guards and the youth groups organized to enhance sustainability of natural resources are in place. Mapping of community land and natural resources and the establishment of community networks around the issue of shared natural resource management indicate that commitment. The natural resource forums and conferences held together with the community networks established around NRs have provided for social harmony while bringing people together around the shared interest of improved management and protection of resources involving stakeholders and the local, state and interstate levels.

Recognizing the high levels of vulnerability and risks to the impacts of climate change and vicissitudes of nature among the Butana population, the project has effectively managed to enhance and strengthen population adaptation to climate change. Building on indigenous knowledge and cultural heritage the Project successfully managed to engage communities in climate resilient interventions that proved effective in reducing their vulnerabilities, especially to drought. Addressing water scarcity by focusing on water harvesting and management for human and animal consumption, cultivation of crops and fodder, particularly guar, has demonstrated its social, economic and environmental value. The capacity building in crop production, animal raising, community mobilization and awareness raising about the importance of managing and protecting natural resources remain important inputs. The development of Climate Resilient Community Village Plans and the mapping exercise involved has further contributed to enhance the awareness of communities about their natural resources and the importance of their protection.

Improved nutrition, particularly among children and women is another remarkable achievement of the project. The project improved food availability, both self-produced (Jubraaka) and purchased (IGA), ensuring a minimum necessary intake for households members and increase their resilience to climatic shocks. This is the result of enhanced awareness and health education, improved availability of food and its diversity, and enhanced levels of employability and income generation.

There is a clear need to upscale the most successful activities implemented by BIRDP listed above to the entire Butana region, other States and regions in Sudan and to build on lessons learned, particularly from CDCs and Jubrakas activities.

iii) **Supporting Traditional Rainfed Small-Scale Producers in Sinnar State - SUSTAIN**, (2011-2018) is financed by an IFAD DSF grant of USD 13.54 million. SUSTAIN responds to the alarming levels of land degradation in Sinnar State by introducing environmentally friendly and productivity enhancing technical packages and mobilizing concerted efforts to formulate a regulatory framework for the development of both smallholder and large-scale farming in a way that conserves the environment. The project comprises 3 components: 1) Technology transfer (on-farm demonstrations, home garden (jubraka) cultivation, range rehabilitation, forestry enrichment and forage production, animal health and production, scaling up of conservation agriculture (CA)); 2) Market access and post-harvest management (improvement of traditional grain storage facilities, demonstration of sun dryers); 3) Capacity building and institutions strengthening (mobilization and formation of VDCs, community training, community environmental conservation fund, land use and investment map (LUIM)).

The project has done an excellent job in implementing activities such as on-farm demonstrations, Jubraka cultivation, forestry development, animal health, community development, but failed in scaling up of Conservation Agriculture (CA) technologies at the level of smallholder farmers, which is a major activity. Much remains to be done in order to ensure sustainability, scalability, effectiveness, and efficiency of the achievements.

iv) The **Livestock Marketing and Resilience Programme - LMRP** (entered into force in March 2015, completion date March 2022) is a USD 119.2 million programme aiming at Increasing food security, incomes and climate resilience for poor households in pastoralist communities. Its development objective is to increase earning opportunities and improve living conditions in livestock-based communities. LMRP is concentrated on the heartland of the semi-arid livestock producing areas in the south of Sudan. The three complementary components of the LMRP are (i) Livestock business development, (ii) Community-led natural resource management and enhanced adaptive capacities and (iii) Rural enterprise and social development. The geographical coverage of the Programme is national with respect to policy aspects of livestock sector development and natural resource management in the context of climate change, and area-specific for direct community-level interventions, initially in selected Localities in the five States of West Kordofan, North Kordofan, White Nile, Sennar and Blue Nile. The Adaptation for Smallholder Agriculture Programme (ASAP) component of the project allowed some clear results in terms of increase in rangeland productivity in target areas, in number of ha of rangelands under climate-resilient management practices, and in community groups engaged in climate risk management planning.

Under LMRP's component two, the set-up of a Drought Monitoring, Preparedness and Early Response System (DMPERS) is under preparation. After initial delays, the University of Khartoum Consultancy Corporation has recently been selected to build a system for weather and hazard prediction, specifically geared towards the livestock and pasture sector in Sudan. The DMPERS will provide policymakers, technicians, village development committees, pastoralists and other rural stakeholders with the most up-to-date and accurate information available on meteorological-related risks, so that disasters can be minimized or avoided. DMPERS will comprise four components: (1) an Automated Weather Forecasting System (AWFS); (2) an Integrated model of derived variables (DVM); (3) a GIS (Geographical Information System) platform to adapt the information to the user's needs and to facilitate its management; as well as a (4) product dissemination system, including radio, community organizations, SMS and the THABIT service of the Sudanese Mobile Company. LMRP is currently waiting for the Technical and Financial Proposal of the mentioned service provider.

v) The **Integrated Agriculture and Marketing Development Project ? IAMDP** (entered into force in February 2018, completion date March 2024) is a US\$ 47.5 million project implemented in the four

states of Sinnar, North Kordofan, South Kordofan, and West Kordofan. The goal of the IAMDP is to enhance food security and reduce poverty in poor rural households, through investment in crop production, marketing and capacity building of public and private service providers. Project objectives would be met through better access to improved agricultural inputs and services, enhanced business skills, access to rural finance and appropriate marketing support, and better organisation of producer's associations. Building on achievements and lessons learned from implementation of SUSTAIN and other IFAD past projects the rationale for IAMDP is to consolidate the investment activities supported by the ending projects; and (ii) move from demonstration to scale-up in the same and additional geographical areas where other smallholder farmers face similar challenges such as low crop productivity, limited access to market and finance, and vulnerability to climate change. *Although based on SUSTAIN results the IAMDP doesn't address the issue of upscaling the successful results of SUSTAIN regarding the implementation of natural resource investment plans.*

vi) The **Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral Systems Project** (2014 ? 2020) is a US\$ 24.6 million project, funded by GEF and LDCF and supervised by UNDP, operating in the states of North Kordofan, River Nile, White Nile, Gedaref, Kassala and South Darfur. It aims to create an enabling environment for climate risk management of smallholder farmers and pastoralists in rain-fed areas. This will include the establishment of an effective climate observation and early warning infrastructure to enable climate change resilient decision-making in local communities. At the same time, the project will create a regulatory framework to develop and deliver micro-credit and climate risk insurance services. Therefore, it cooperates, inter alia, with the Meteorological Authority, the Remote Sensing Authority, the Ministry of Agriculture and Ministry of Irrigation and the Agricultural Research Corporation. The project's three components are: (i) Creation of the institutional framework and capacity for sustainable climate observation and early warning; (ii) Design and deployment of weather index-based insurance to address residual risk and promote long term adaptation; (iii) Provision of financial services for farmers and pastoralists to increase adaptive capacity of rural livelihoods. Interest has been expressed in a cooperation with IFAD to carry forward the project's legacy after its end in 2020. It has been suggested that IFAD could help expanding the project geographically (to other localities in the states or to new states) and/or to new insurance products for other crops. Also, IFAD could finance additional weather stations to improve the accuracy of information, organize more capacity building training events, and organize international exchange visits to other countries with similar experiences.

vii) The Food and Agriculture Organization project entitled **Landscape Approach to Riverine Forest Restoration, Biodiversity Conservation and Livelihood Improvement** (2019-2022). The project will target the riverine forest landscapes located in Gezira, Khartoum and Northern States along the Blue Nile and River Nile. These landscapes are characterized by 33 unique forest reserves of 5 878 ha. The forest reserves are surrounded by a mixture of different land uses, including 45 000 ha irrigated and degraded agricultural land, abandoned lands and rangelands. Over 200 villages depend upon the ecosystem services provided by these ecosystems and are included in the area targeted by the project. The activities will be initially implemented in 6 demonstration forest reserves in the Gezira State and surrounding agricultural and/or degraded land. Management plans, management structures and investment strategies for the other forest landscapes will facilitate outscaling by FNC. Eventually, the basis will be laid in order to reconnect the forest reserves, disconnected and degraded remnants of a once rich riparian forest productive ecosystem conferring valuable ecosystem services locally and at scale. The project proposes an alternative modus operandi, tackling the root causes of the degradation of the forests, i.e. unsustainable agricultural practices and forest encroachment, and single-focused outdated forest management plans that do not address needs of local forest-dependent populations and the rich ecosystem services and goods provided by the riparian forest ecosystems. IFAD and FAO exchanged during the process of finalizing the SNRLAP document. Both IFAD and FAO agreed to work together on targeting during the first phase of implementation to better integrate the forest reserves within their surrounding land uses (irrigated and degraded agricultural land, abandoned lands and rangelands) where applicable. Both IFAD and FAO would benefit from coordinating and exploring the possibility of joint missions and their staff in Sudan will continue exchange frequently during implementation. FAO agreed to ensure that IFAD is duly informed when the launching of the PPG phases takes place.

The BAU scenario leaves significant adaptation gaps unaddressed, however good practices for up-scaling exist. There are various but fragmented approaches but lack of overall coordination of interventions at state and interstate level is still a barrier for coherent up-scaling. Because of the different sectoral and thematic approaches taken by the various projects, climate change adaptation is not being addressed in a holistic and integrated way as a general constraint affecting all the regions.

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

Theory of Change - Climate change adverse impacts identified in Section 1 and detailed in Annex 5 inform on the current baseline in Sudan. Increasing temperatures, variability in rainfall (leading to increasing frequency of both droughts and floods), land degradation and topsoil erosion are among the main issues. Production systems are not well adapted to climate change and, as a result, a majority of ecosystem services from forests and rangelands are declining because of unsustainable management and climate change. Despite increasingly obvious consequences of climate change on vulnerable communities, there is still a limited understanding of its impacts. Rural communities experience increasing losses due to climate-induced extreme weather events but land-use pressures from mining and large and medium scale crop farming, the multiplicity of parallel systems for NR management and governance, confused land tenure arrangements, disputes and low incentives for engagement represent additional significant constraints for rural communities to adapt. The limited economic alternatives and financial options in rural areas and the low level of inter-community networks restrain appropriate adaptation investment opportunities. A Business as Usual scenario will lead to a situation where Climate change continues to expose the rural communities to increasing risks of climate-induced hazards increasingly reducing resilience of rural communities and ecosystems.

LCDF/GEF and IFAD's enabling investments to respond to the baseline situation are detailed below in Section 3.1, drawing lessons from best practice identified through IFAD, World Bank, FAO and other partners' interventions in support of the Government of Sudan. SNRLP/SNRLAP will scale-up tried and tested approaches for community NR management and CC adaptation, increasing production and incomes and reducing conflicts. This support will reach a critical mass of 72,000 persons through implementation of 150 Natural Resources and Land-Use Management Plans featuring climate adaption objectives, and establishment of 27,200 jubrakas (homestead gardens) for the benefit of an additional 27,200 beneficiaries (women and other highly vulnerable beneficiaries), bringing over 2,850 ha of land under a management model more resilient to climate. SNRLP/SNRLAP will strengthen existing early-warning systems to ensure project beneficiaries access and avail the benefits of climate information. In order to ensure institutionalization of knowledge for long-term benefits and out-scaling, the project will develop policy-relevant knowledge products support institutional capacity development on community-based climate change adaptation and NR governance.

The adaptation to climate change and resilience benefits to rural communities delivered by the investments are presented in Section 6. These include increased capacity to address climate-related shocks and maintain productivity of ecosystems (rangeland, water, etc.), reduced occurrence of land-use conflict through improved local governance resulting in more resilient livelihoods and incomes. The vertical integration of the project, addressing requirements at policy and institutional levels enhances the probability of sustainable outcomes and outscaling.

The theory of change is presented in Annex 7, and provides a clear framework of how the project will deliver resilience benefits building on the baseline.

3.1. The Sustainable Natural Resources and Livelihoods Adaptive Programme (SNRLAP): the added value of the LDCF

The BAU scenario leaves significant adaptation gaps unaddressed, in particular the need for scaling up of existing successful practices, and a more integrated approach. The proposed alternative will be

supported by IFAD through the Sustainable Natural Resources and Livelihoods Programme (SNRLP) and by the LDCF funding Sustainable Natural Resources and Livelihoods Adaptive Programme (SNRLAP).

The LDCF resources will finance strategic actions that will allow the structuring and orienting of the SNRLP investments in accordance with NAPA priorities along with the broader Country Strategic Opportunity Programme (COSOP) of Sudan. To this end, the LDCF resources will be targeted upstream and support technical assistance and capacity building to ensure that climate change vulnerability analysis will be included in the preparation of the natural resource and land-use management plans (NRLMPs) for each cluster or network of villages. Likewise, the LDCF resources will support the subsequent livelihood investments plans under the NRLMPs to ensure that they adequately address climate change adaptation priorities. The LDCF project will also build local actors' capacities to play a proactive and qualitative role in the formulation of the NRLMP, and identifying and ensuring investments that build resilience and reduce vulnerability to climate change impacts. Using the gender transformative approach, the LDCF resources will be focused on supporting women and women-headed households, identified in the NAPA as one of the most vulnerable groups to climate change impacts. The LDCF resources will also complement the SNRLP by strengthening the resilience of local communities through the implementation of a drought and flood monitoring system.

Ultimately, LDCF resources will support Sudan in integrating adaptation and climate change considerations into development planning, strengthening institutional capacities at the local, state and national levels, and promote the implementation and scaling up of climate smart agricultural practices. Through these interventions, the LDCF project will support Sudan in achieving its NDCs and enhancing the climate resilience of the most vulnerable and least resilient. The Annex 9: 'Alignment of the Sudan's INDC to the SGDs targets and SNRLAP interventions to respond to them' elaborates the alignment of the LDCF/SNRLAP to the Sustainable Development Goals and Sudan's Intended Nationally Determined Contribution.

The following elaborate more details of LDCF's contributions to each project component.

Component 1. Upscaling of community based natural resources management practices, technologies and business models

Under this component, the SNRLAP will support Community Development Committees (CDCs) and networks or clusters of CDCs in strengthening their natural resource management capacities, as well as investing in rehabilitation, adoption of new technologies and the development of small businesses.

Outcome 1. Increased production and resilience of targeted communities and households

The LDCF resources will support building community capacities and institutions (Village Development Committees (VDC), CDCs, networks of CDCs or clusters of villages) for developing Natural Resource and Land-Use Management Plans (NRLMPs) where CCA is mainstreamed. To this end, the LDCF will build on the on-going and previous IFAD projects developed in the region by supporting the consolidation of the results achieved so far.

Output 1.1 Inter-community framework for NR and land-use governance effectively implemented using the ecosystem approach

The LDCF funding will support VDCs and their network and clusters in adopting ecosystem-based approaches and integrating climate vulnerability and adaptation measures in the development of NRLMPs. The ecosystem based approach will be used for identifying networks/clusters of communities sharing and using a common (agro-) ecosystem, including rangelands, forests, water resources or farmland. This approach will be incorporated with participatory planning to develop a plan which addresses vulnerability of agriculture and other natural resources based livelihoods. Also, by deploying a drought and flood monitoring system (under output 2.1), the project will support

communities in factoring in local climate impacts to build adaptation solutions. For instance, the component will support communities in land registration in community forests, hemas (common areas outside traditional village managed land) and community range enclosures which will provide them with better tenures and rights which will avoid exacerbation of tenure insecurity due to climate change. Overall, the integration of CCA into the development planning process will be realized along with identification of existing land and natural resource use and users, analysis of the main challenges and opportunities associated with these uses, identification and prioritization of interventions and investments for improving productivity and sustainability, including improvements of livelihoods opportunities. With the added value of the LDCF, the SNRLP will be implemented in networks or clusters with high poverty levels where the natural resources base is under pressure due to high dependence on natural resources for livelihoods, climate change, desertification and conflicts.

Output 1.2 Access to technical assistance and finance facilitated to support climate-smart agriculture (CSA) and the implementation of Livelihood Investment Plans (LIP) aligned with NRLMPs

The LDCF funding will increase women's accessibility to technical assistance and finance for enhancing their climate resilience through climate-smart agriculture (CSA) and Livelihood Investment Plans (LIPs) aligned with NRLMPs. Based on the experience gained by IFAD in previous projects, the LDCF will target women, and women-headed households, as a specific vulnerable group and key actors in adaptation to climate change and food security at the household level. Women members of the household have home garden land or women's community groups' garden land (jubraka) and usually cultivate horticulture crops and sorghum for home consumption and sale of small surpluses. It is a main source of income for the women. The cost of construction of jubraka consists on fencing, supplementary irrigation (drop irrigation and/or small cistern), seeds and water fees if needed. The LDCF will support the construction and promotion of climate-smart jubraka cultivation for enhanced climate resilience and thereby leading to enhanced well-being, nutrition and food security of women and children in particular:

- The LDCF will support an in-depth contextual analysis fed by lessons learned from past IFAD projects such as SUSTAIN. By addressing the specific needs and realities of women and men in the particular social and environmental context of the region, the project will seek to transform gender roles and promote more gender-equitable relationships between men and women. The approach will go beyond the individual level to focus on interpersonal, social, structural, and institutional practices to address gender inequalities, which place women in an ever more vulnerable position in the face of climate urgency. In the context of adaptation to climate change, this action will be carried out together with the promotion of Climate Smart Agriculture (CSA). CSA appears to be the most promising approach to developing the technical, policy, and investment conditions - the enabling environment - to support actions aimed at achieving sustainable agricultural development for food and nutrition security under a changing climate. With a successful targeting process, it is expected at the end of the project to cultivate 27,200 Jubraka specifically for 23,600 women and 3,600 men including 7,200 vulnerable persons.
- The programme's Economic and Financial analysis of Jubraka with size of 0.25 feddan (includes main production of cucumber (0.075 feddan), tomato (0.075 feddan), okra (0.05 feddan) and watermelon (0.05 feddan)) with investment costs including fencing, supplementary irrigation (drop irrigation and/or small cistern) and the recurrent costs including seeds and water fees evaluated the average incremental income at EUR 23. Compared with the model of jubraka used without CSA, the CSA model of jubraka presents a higher financial efficiency in terms of financial Net Present Value (NPV) estimated at EUR 39, financial internal rate of return (IRR) accounting for 20%, and the financial benefits-cost ratio (BCR) of 1.2.
- The LDCF will support technical assistance and training of female and young farmers groups in CSA practices. In particular, young community extension/Integrated Pest Management (IPM) agents

will promote an ecosystem approach to integrated, climate-resilient crop production. Activities will be designed to facilitate self-targeting through gender-sensitive delivery systems (e.g. delivering training at village level) and capacity-building tailored to the needs of women. The support will include: organization of women in farmer field schools (FFS) groups for experimental learning in jubrakas: cultivation of vegetable, fodder and other crops, the use of climate adapted soil and water management techniques, intercropping, tree windbreaks with nitrogen fixing fodder trees species or other species with food or economic value, and integrated pest management (IPM); investment in the establishment of community jubrakas including fencing and water source using solar pumps; training crop producer groups in the introduction of trees, soil and water management practices, IPM and drought resilient varieties in open field farming; and construction of small soil management and water harvesting structures e.g. stone or earth bunds and planting terraces; small businesses related to processing and marketing of crop products and provision of quality seeds inputs, biopesticides and machinery services.

A bottom-up approach to adaptation will need to be sought so as to take into account the needs of the most vulnerable populations. To this end, IFAD will seek the collaboration with experienced partners (e.g. Slow Food International, with its initiative '10,000 Gardens in Africa') to work specifically with grassroots organizations and communities in an innovative way. The approach will build networks of gardens (jubrakas) and promote knowledge sharing on sustainable local food production and nutritional local food consumption. The partnership will be set as a pilot in parallel with the business-as-usual approach of the IFAD projects (which showed already good results in similar projects) and could be upscale in other projects in Sudan if positive results are demonstrated.

Outcome 2: Legal, policy and institutional framework for scaling up climate change adaptation and community based NRM improved

Since the 'ecosystem approach' will be the driver for network or cluster selection, the LDCF project will support the mapping of ecosystems zones in the targeted area, including agroecological zones, livestock routes, as well as climate change and environmental vulnerability. A specific focus will be given to mapping livestock routes, as a tool for conflict resolution and support to decision making.

Output 2.1: NR and CCA institutional and policy frameworks strengthened with climate data and knowledge

LDCF investments will be in measures to increase data collection and existing data accessibility, and provide improved historical evidence, trends and possibly early warning of flood and drought episodes to be considered in NRM decision making. This work is really needed for adaptation planning in the integrated management of water resources. By combining fieldwork and remote sensing on both local and national scales, and, validating and disseminating climate change findings together with desertification findings could be used as a benchmark for climate risk management and land use and adaptation planning.

In this regard, the LDCF project will strengthen the existing Early Warning System (EWS) infrastructure in Sudan as a central element of disaster risk reduction. The aim of the activity is to directly support the participatory review of land and NR governance policies and frameworks by getting a clear picture of the vulnerability of the different pastoral and other agricultural zones, as a tool for negotiation and sustainable solutions. The LDCF activity, in order to support this process, will gather essential data and will document them to serve as a knowledge base for the formulation of focused strategies and revision of policies and regulations (i.e. through policy briefs, information notes, workshops and other relevant media). The system will be used to inform localities and communities in the project area to better plan adaptive responses to Climate Change impacts through the NRLMPs.

SNRLAP will support NRM decision making at locality, state, inter-state and federal levels by accompanying the NR consultation fora for policy formulation and implementation. The information of

the system in place will be presented together with the findings from the reviews of land and NR governance frameworks. The system will inform the CACCs, responsible for lobbying, advocacy and communicating cluster level NR governance and management issues (identified in the NRLMP formulation and implementation process) with the local authorities, different levels of government and the private sector. At the state level, the system will give useful information to the State Cluster Stakeholder Platform (SCSP) that will be developed under the SNRLP with representation from: all concerned CACCs and CDC/NECs; mobile pastoralists communities; Localities; NR related technical departments of ministries at the State level; NGOs supporting NR issues in the state; parliamentarians; private sector; and experts from research institutions and other development partners.

The LDCF will build on previous experiences of early warning infrastructure built by the GEF-funded Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral Systems Project as well as LMRP's Drought Monitoring, Preparedness and Early Response System (DMPERS), strengthen their capacities and expand them to the whole SNRLP area. The proposed information and response system should not be developed as a stand-alone initiative that will likely end up being ineffective and unused after programme closure. Besides the two above mention systems, the Programme will search for synergies with agencies working on similar systems in Sudan (i.e. Famine Early Warning Systems Network (FEWSNET) USAID, FAO Global Information and Early Warning System (GIEWS), UNDP Early Warning Systems, ICRAF which is undertaking the same exercise in Chad in two IFAD funded projects (PARSAT and RePER)) to reduce time related to the development of the system, relying on an existing system's infrastructure, and to secure use and sustainability. The information produced by those agencies is mostly in line with the need of SNRLP and covering Sudan nationwide. Nevertheless the information will need to be interpreted, downscaled at a local level and diffused in the localities to effectively reach the Programme beneficiaries and serve as support for policy and adaptation planning. At the end of the project it is expected:

- A reliable flood and drought early warning system covering the SNRLP area.
- A functioning Geographic Information System (GIS) to support the EWS.
- Other potential minor interventions to strengthen the capacities of existing early warning systems in Sudan depending on the outcomes of the needs assessment.

As a first step, a thorough needs assessment will identify existing gaps and potential interventions to improve the existing infrastructure built by the two above-mentioned projects and the potentiality to have more synergy with similar existing systems developed in Sudan, focusing on the four inter-related elements: (i) risk knowledge; (ii) monitoring and warning service; (iii) dissemination and communication; (iv) and response capability. Data should be systematically collected from national level systems (e.g. FEWSNET), analyzed and risk assessments performed. The system should be in place to monitor historical and present hazards, climate trends and shocks and provide early warning services. Dissemination to the beneficiaries of the SNRLP will be done through SNRLP's SPCU staff and local extension services, directly to the Village Development Committees and clusters developed during the creation and implementation of NRLMPs. Production and dissemination of relevant information at higher levels and in other States and nationally will be done through policy briefs, information notes, workshops and other relevant media in order to influence public policies related to NR management, institutional and governance frameworks. Response capability will be done at two levels through the NRLMPs and through creation and revision of policies and regulations.

The project will establish an integrated GIS system for early warning purposes and support the mapping of land uses, agro-ecological zones, livestock routes, climatic changes and environmental vulnerability. Such tools, besides the obvious usefulness for planners, will allow inserting the local actions within an integrated and ecosystem vision of natural resources management and adaptation to climate change. Special attention will be given to mapping the livestock routes, pastoralists being one of the most vulnerable groups. Indeed, the region targeted by the programme is crossed by many livestock routes, which pass through vulnerable areas which have been affected by drought and rainfall reduction, negatively impacting the quality of livestock production. It is thus important to get a clear picture of the vulnerability of the different zones traversed by the livestock routes, as a tool for negotiation and sustainable solutions. This will lead to enhance climate resilience of livestock routes and pastoralists through sustainable rangeland and water management investments. In this regards,

SNRLP will investigate the opportunity of scaling up an on-going pilot technology called the Social Tenure Domain Model (STDM) that IFAD developed together with the Resource Conflict Institute (RECONCILE) launched under the ASAP-2 grant to support the Livestock Marketing and Resilience Programme (LMRP).

Depending on the outcomes of the needs assessment, other potential minor interventions to strengthen the capacities of existing early warning systems in Sudan, could focus, inter alia, on improving the data analysis and forecasting capacities (e.g. by providing better or additional hardware and software components, capacity building measures for the Meteorological Authority and other institutions, etc.) and/or existing communication and response capacities (e.g. by providing better infrastructure, capacity-building measures, international exchange visits, etc.). The project will partner with the Meteorological Authority, the Remote Sensing Authority, the Ministry of Agriculture and Ministry of Irrigation and the Agricultural Research Corporation to identify and address the needs in the existing early warning infrastructure.

Output 2.2 Institutions capacitated on community-based climate change adaptation and NR governance, management and suitable technology related issues.

The activities funded by LDCF will be disseminated as knowledge products and promoted through dialogues during the implementation of SNRLP to support institutional capacity building on adaptation to climate change. The SNRLP will build institutional capacities by generating and disseminating knowledge products and fostering dialogue. Training will be provided to public and private extension service providers and Locality, State and Federal government staff. Training will also be provided in knowledge management, communication, monitoring and impact evaluation for documenting and disseminating lessons from the programme. The Programme will also foster multi-stakeholder knowledge sharing platforms at and between local, state and interstate levels.

3.2. Sustainable Natural Resources and Livelihoods Programme (SNRLP)

In order to address critical gaps identified in the adaptation baseline, IFAD and the GoS have agreed on the **Sustainable Natural Resources and Livelihoods Programme (SNRLP, 2020-2026)**, a 64 Million USD (80% grant, 20% loan) from IFAD. As agreed with the GEF and the World Bank after the approval of the PIF, out of the 64 million USD, 14 million USD will co-finance the phase 3 of the SSNRMP and 50 Million USD will co-finance the SNRLAP.

The programme goal is to enhance food security, incomes and resilience of pastoralist, agro-pastoralist and crop producing smallholder farmers. The Development Objective of the project is to increase the adoption of natural resources management practices, technologies and business models enhancing NR sustainable use and securing access for vulnerable resources users.

The SNRLP, with the support of the LDCF under the SNRLAP (the SNRLP and SNRLAP will be implemented jointly), will develop an innovative ecosystem approach that goes beyond sectoral approaches as developed in the previous LMRP and IAMDP IFAD projects. The SNRLP aims at upscaling successful results achieved by the different projects and developing an integrated approach at the landscape level, as well as linking local actors to national and federal institutions in the decision-making processes related to harmonizing natural resource management frameworks. The SNRLP will support mainstreaming of natural resource management and climate change issues into development planning processes, for strengthening the resilience of poor farmers, agropastoralists and pastoralists. The joint planning of resources governance and implementation of activities to improve their production under the increased stress from climate change will ensure shared and commonly agreed sustainable management approaches for the resources sustaining their livelihoods. Regarding the target groups, the SNRLP will directly target the most vulnerable groups - women, youth and pastoralists - through

improving access to economic assets and strengthening their involvement in decision making processes at the different levels.

The gender mainstreaming strategy of SNRLP ensure that women will constitute 50% of the SNRLP target group. SNRLP will support the involvement of women in a range of NR related livelihood activities including jubraka farming, home gardens, and nurseries. They will be involved in savings groups and will have access to seed capital and credit to engage in a range of youth and pastoralist enterprises. Their access to gas stoves will replace dependence on firewood and will ease their work and also reduce the pressure on NRs. Out of the 50% outreach to women, around 14% will be vulnerable women headed households. Women-headed households include women left by/divorced from the husband, women in polygamous households who are no longer supported, widows, single women responsible for dependents, married women whose husband is incapable of functioning as an income earner, married women who have been abandoned by their husbands for any reason. In Sudan, these households are still under the nominal supervision of a male head, although it is up to the women to earn a livelihood and look after the children which makes them particularly vulnerable. SNRLP will support vulnerable women by providing them with access to revolving funds for supporting gas stove financing and jubraka farming.

Similarly, gender representation in programme management will be ensured through steps such as ensuring sufficient number of women staff specially at the community development level; including gender mainstreaming responsibilities in the ToRs of all staff members and exposing staff to gender training including in the Gender Action Learning System (GALS) orientation training. The staff members trained on GALS will include the community development officers who will be responsible for disseminating these inputs at the community level, both directly and indirectly through young professionals and young extension agents. More information related to gender is presented in the section 3. *Gender Equality and Women's Empowerment*.

The SNLRP will be implemented mainly in the rainfed parts of nine states in the Butana, Sennar and Kordofan regions. In the Butana region the project will cover the Kassala, River Nile, Khartoum, Al Jazirah, and Gadaref States. In the Sennar region the project will focus on the Sennar State and in the Kordofan region it will be implemented in the North, South and West Kordofan States. In addition to these nine states the project will engage with the White Nile and the Blue Nile States in the Sennar region regarding inter-state NR governance and regulatory issues.

The programme will have two interlinked technical components (C1 and C2) and a project management component.

C1: Scaling up community-based NR management and businesses: C1 will focus at consolidating and upscaling existing good practices in Sudan for empowering communities and networks or clusters of communities and build their capacities in land-use planning and NR governance and management, that takes into account climate change risks.

SC 1.1 Community mobilization, NR and land-use management planning will support the development of an estimated 1,000 Village Development Committees (VDCs), other relevant community organizations and networks or clusters of VDCs with the objective to strengthen their organization in Cluster Development Committees or Network Executive Committees (CDC/NECs) and their land and NR governance systems and institutions. Support will be provided through several activities: i) for mobilizing VDCs and CDC/NECs sharing NRs in common ecosystems and with common interests in addressing governance and management issues which will consolidate and scale up the development of community institutions already started in previous and on-going IFAD projects; ii) participatory development of NR and land-use management plans (NRLMPs) for village networks or clusters which will provide a framework for the communities to address NR governance issues, invest in their NR and derived livelihoods, and enhance their food and nutrition security and resilience.; iii) development of co-management arrangement for the "open access" common areas outside traditional village managed

land (hema): joint land and NR use governance and management plans will be developed between CDC/NECs and other mobile users of the areas and clear management responsibilities will be identified and assigned by the relevant State governments.; iv) land registration to support the CDC/NECs in having them authorized and registered by the respective State governments and incorporated into State-level land use zoning and planning frameworks (component 2).; and v) mitigation and resolution of conflict over access to and use of NR to support the strengthening of rules and bylaws and conflict resolution procedures and institutions, and the reinforcement and establishment of existing and of new of conflict resolution centers in all project regions in relation to the co-management of "open access" common areas which may include other stock routes.

SC 1.2 Implementation of NR-based Livelihood Investment Plans will support the formulation of livelihoods investment plans (LIPs) for different NR livelihood groups (NRLG) and will support the groups to implement their LIP activities eligible within the areas of rangeland and livestock rearing; forestland conservation and related businesses; catchment and water point management; cropland development and climate adaptation in farming practices; and stock routes management and livelihoods of pastoralists. Within these categories SNRLP will provide technical assistance (TA) and seed capital financing for four ownership and investment types: i) public or common good investments managed by CDC/NECs or VDCs in partnership with NRLGs ii) common good investments for group enterprises managed by NRLGs, VSCGs or VWGs; iii) small start-up inputs for individual household owned production activities supported through NRLGs or VSCGs groups; and iv) Community Investment Funds (CIF) managed by VDCs as revolving funds in particular supporting organized vulnerable women (VWGs) who cannot meet requirements for accessing micro finance institutions. SNRLP will support enterprise training and business development activities in the clusters or networks in order to develop the capacity of the groups and individuals to implement the NR related enterprises successfully. Finally, the sub-component will support extension services to VDCs, CDC/NECs and various NR and common interest groups the SNRLP will scale up the good experiences of the BIRD Project in engaging young graduates as extension resource persons and young professionals stationed in the communities.

The expected outcome is increased agricultural production and enhanced resilience of targeted communities and households, measured by two indicators: 1) 84,000 household reporting an increase in production of milk, meat, crop and/or forest products; and 2) 60% of targeted households have increased score in the resilience score cards.

C2: Improving the institutional framework for upscaling community based NRM: This component will support institutional capacity strengthening and policy engagement from local to State and Federal levels in order to institutionalize and scale up proven community and inter-community land and NR governance and management models. The expected outcome is an improved legal, policy and institutional framework for scaling up climate change adaptation and community based natural resource management. It will build on models proven to secure access and benefits to poorer rural communities from previous IFAD projects and build on and complement the activities supported under C1. It will create an enabling environment for community institutions, native administrations, locality governments and civil society organizations to better engage in policy formulation and implementation processes at State and Federal level. Simultaneously, it will strengthen the capacity of the latter levels for facilitating these processes.

SC 2.1 focusing on strengthening of legal and policy framework will support a participatory review of land and NR governance policies and frameworks, strengthen early warning infrastructure, and establish an institutional structure for a comprehensive multisector and multilevel consultation and discussion process which will lead to the formulation of focused strategies and revision of policies and regulations. Indeed, the first activity will support four systematic reviews (one federal and three regional) by independent consultants of existing studies and other knowledge products on the status of land and NR governance frameworks. Findings from the reviews will be presented and analysed in a series of NR consultative forums/multi-stakeholder platforms at Locality, State, Inter-state and Federal levels. The cluster advocacy and communication committees (CACC) created under each CDC/NEC facilitated by subcomponent 1.1 will be the voice of the communities in this consultation process. Based on the four reviews of NR governance frameworks widely discussed and enhanced in the multilevel and multisector consultation process, recommendations will be made for revising policies and legislation, developing guidelines, and strengthening associated implementation strategies. It will strengthen the existing Early Warning System (EWS) infrastructure to directly support the participatory review of land and NR governance policies and frameworks. The sub-component will also complement and support ongoing or proposed policy engagement processes supported by Federal and State government and other development partners, including in particular those of other IFAD supported projects, FAO, UNEP, UNDP, and the World Bank and national and international research institutions.

SC 2.2, building institutional capacities will focus on generating and disseminating knowledge products, fostering dialogue and establishing or supporting multi-stakeholder platforms. Training will be provided to public and private extension service providers and Locality, State and Federal government staff. Training will also be provided in knowledge management, communication, monitoring and impact evaluation for documenting and disseminating lessons from programme interventions.

The principal target group of SNRLP/SNRLAP will be poor men and women smallholder farmers, settled agro-pastoralists, and pastoralists whose main source of livelihoods is traditional rainfed agriculture, livestock and forest-based activities, especially gum Arabic. Pastoralists and mobile communities will be treated as a priority target group wherever relevant. It is worth noting that these groups correspond to the most vulnerable groups according to the NAPA, for which rainfed farmers and pastoralists are typically the least able to cope with climate-related shocks in Sudan.

SNRLP will be implemented in 200-300 networks or clusters of villages reaching at least 1000 villages of which 40-50% will be previously supported IFAD project villages and the remaining will be new. In the clusters or networks of previously supported villages the project will consolidate and fill gaps in previous project investments in particular in relation to social infrastructure development and strengthening of NR governance and management arrangements and mechanisms.

The expected key outcomes of the programme are as follow: 1) Increased production from scaling up community-based natural resources governance arrangements and management practices, technologies and businesses; 2) Institutional framework for upscaling community based NRM improved.

Conflict resolution mechanism.

The SNRLP will address the conflicts issues directly under its subcomponent 1.2 ?Implementation of NR-based Livelihood Investment Plans - Stock routes management and livelihoods of pastoralists?. This will include: training of conflict mediators and establishment of conflict resolution centers in conflict prone areas along the stock routs (SR); establishment and management of water points outside Hemas including water management committees with representation of all SR users; training of young community para veterinarians and establishment of veterinary services centers with access for mobile pastoralists; organisation of Pastoral Field Schools (PFS) for capacity building and investments with

pastoralists in their livelihoods; and nutrition training for pastoralist women and facilitation of exchange of food and recipe among pastoralist, agropastoralist and smallholder farmers along the routes.

Moreover the subcomponent 2.1 of the SNRLP 'Strengthening of legal and policy frameworks' will perform a revision of locality level land-use zoning plans and related regulations to incorporate community cluster/network NRLMPs as part of the revision of policy and legislative frameworks. A priority state for this activity will be the Gedaff state where mechanised farming is causing rapid land-use changes, exclusion and potential conflicts. Maps and information on the revised associated land use regulatory frameworks will be disseminated widely, including at Locality and community levels. Mechanisms will be set up for monitoring and providing feedback on any further encroachment of livestock routes and 'open access' rangeland or forest areas. This will link to the institutional strengthening described in the subcomponent 2.2 of the SNRLP.

Likewise state level land use zoning plans and related regulations will be revised with particular attention given to identifying 'open access' common rangeland and forest areas and livestock routes, especially those that are being encroached on by semi-mechanized or mechanized crop farming or urban expansion. The project will support an appropriately costed (affordable) updating or revision of these plans. Information from cluster/network and Locality NR governance and spatial planning processes will also be incorporated.

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

The project is fully aligned with the Objective 1 'Objective 1: Reduce Vulnerability and Increase Resilience through Innovation and Technology Transfer for Climate Change Adaptation'. The SNRLAP project will address vulnerability and security concerns related to climate adaptation by supporting the implementation of an early warning system to inform decision and policy making. The LDCF is also contributing to CCA Objective 1 in terms of support to women, the most vulnerable group identified by the NAPA, to improve their access to new technologies and economic assets linked to the development of home gardens (jubraka).

The LDCF support is also aligned with Objective 2: 'Mainstream Climate Change Adaptation and Resilience for Systemic Impact'. The LDCF will ensure the systematic integration of climate change adaptation into the Natural Resources and Livelihood Management Plans which will contribute to reducing vulnerability to climate change. The SNRAP will finance the implementation of the adopted NRLMP including mainstreaming of climate change adaptation. This is aligned with the Objective 2, emphasizing the ability to prepare for and respond to the concrete risks and losses related to climate change and variability. The data collected through the early warning system will feed into the M&E system put in place by the SNRLP. This will help decision makers and stakeholders to monitor and evaluate progress of adaptation processes at the sub-national and sectoral levels, and to review and strengthen their adaptation strategies.

The project is aligned with the national priorities of the NAPA, the NAP and the three National Communications to UNFCCC. The project will contribute to the achievement of Sudan's INDCs related to integrating adaption into development planning, strengthening institutional capacities and implementating adaptation initiatives. The LDCF project will build on the SNRLP IFAD programme and its activities will be blended with the components and subcomponents of the SNRLP.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTE, LDCF, SCCF, and co-financing

The SNRLAP programme is expected to have a positive impact on strengthening climate resilience of the beneficiaries by driving synergy not only with SNRLP but also with other activities and projects under the new COSOP. More specifically, Component 1 of the SNRLP on 'Upscaling of community based natural resources management practices, technologies and businesses' aims at supporting

different NRM and interest groups in implementing livelihood investment plans improving benefit streams derived from natural resources and integrated production systems and related small businesses.

Within this component the LDCF/SNRLAP will focus its financial resources on key priorities that affect the effectiveness and efficiency of the overall SNRLP investments. The first priority is related to the integration of climate change adaptation into the local natural resource management plans. By funding this activity, the LDCF ensures that all the investments from the SNRLP take into account climate change adaptation and are contributing to strengthening of the resilience of local population to climate change.

The LDCF/SNRLAP will also target one of the most vulnerable groups, women, and ensure that they will fully benefit from SNRLP investments. Women will be supported through specific and tailored trainings, access to technologies and economic assets, in view of empowering them as full economic actors. Concerning pastoralists, an increasingly marginalized group in Sudan, the LDCF resources will support a diagnostic analysis which maps their movements and characteristics in the selected localities, analyzing their specific priorities and issues and identifying strategies and investment opportunities benefitting them.

The Component 2 of the SNRLP, 'Improving the institutional framework for upscaling community based NRM', will create an enabling environment for community institutions and organizations, native administrations, Local Governments and civil society organizations to better engage in policy formulation and implementation at State and Federal level while at the same time strengthening the capacity of the latter to facilitate land and NRM policy formulation and implementation.

In this perspective the additional funds provided by the LDCF/SNRLAP will support development of information systems, and analytical studies as vital tools for creating sustainable development, for analysis and assessment of results and impacts in the field. The GIS will allow the systematic data collection and analysis, as well as the dissemination of information products (maps, reports, etc.) for decision makers at all levels. The LDCF will also support baseline mapping of environmental governance and Climate change in project areas in order to allow the monitoring and evaluation of the SNRLP results.

Aligned with the new COSOP, the LDCF/SNRLAP will also build on previous experiences of early warning infrastructure built by other initiatives, among others the GEF-funded Climate Risk Finance for Sustainable and Climate Resilient Rainfed Farming and Pastoral System Project and LMRP's Drought Monitoring, Preparedness and Early Response System (DMPERS). The LDCF funded EWS will aim at strengthening the capacities of these existing systems and expand their reach to other areas still not covered.

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

The SNRLAP is expected to increase the climate resilience of pastoralist, agro-pastoralist and small crop farmers engaging in joint natural resources governance and management. The project areas suffer from degraded natural resources threatening the sustainability of livelihoods and lack of climate resilience capacity which result in high poverty levels and periodic food insecurity and fragility among small crop farmers, agro-pastoralists and pastoralists. Apart from challenges from climate change such as increasing temperature and rainfall variability, frequent occurrence of prolonged dry spells and droughts, there are various constraints in access to and lack of management of NR needs to be addressed: for example, pressure from land-use competition from mining and large and medium scale crop farming, multiple and parallel systems for NR management and governance resulting in confused land tenure arrangements, disputes and low incentives for engagement and limited knowledge on sustainable use of the range-, forest- and crop-land resources leading to soil erosion and low productivity.

Under LDCF/SNRLAP activities, the targeted communities and households will have increased resilience and adaptation capacity, and institutional and policy framework is expected to be enhanced through upscaling existing EWSs and developing and disseminating knowledge products and training

of 1,600 government, extension and community group staff. First, climate adaptation and resilience in the project area will be enhanced through sustainable NR management. The prolonged dispute over the use of land and NR will be reduced with CCA mainstreamed NRLMPs developed and implemented among 150 clusters/network. Also, technical assistance and finance on CCA and LIP will strengthen the adaptive capacity of the beneficiaries, particularly women and women headed households. In addition, NR and CCA institutional and policy framework will be strengthened with climate data from early warning systems and policy and knowledge products. Overall, LCDF/SNRLAP is expected to have a positive impact on the resilience of local communities to climate change, thereby increasing food security and nutrition.

The specific adaptation benefits of the SNRLAP include:

- i) increasing the resilience of agricultural production system against climate change impacts;
- ii) improved rangeland management through the development and implementation of land-use management plans and registration of community forests and rangelands;
- iii) increased water availability by promoting sustainable water management within the Natural Resources and Land-Use Management Plans;
- iv) 72,000 persons through implementation of 150 Natural Resources and Land-Use Management Plans featuring climate adaption objectives, and an additional 27,200 persons (women and other highly vulnerable beneficiaries) through establishment of 27,200 jubrakas (homestead gardens) will benefit directly from the LDCF investment;
- v) 2,850 hectares of land brought under climate resilient management;
- vi) potential for scaling up with the IFAD-related investments will be maximized;
- vii) local, state and national capacities will be built to incorporate climate change adaptation into land-use management plans and implement them, inter alia through the training of 1,600 government, extension and community group staff (760 men and 840 women);
- viii) NR and CCA institutional and policy framework will be strengthened with climate data from early warning systems and policy and knowledge products.

In order to illustrate the project's adaptation benefits, the SNRLAP ? Theory of Change is presented in Annex 7.

7) innovativeness, sustainability and potential for scaling up.

The LDCF/SNRLAP project is embedded in the IFAD SNRLP programme which will build on the lessons learned and experiences from previous initiatives supported by IFAD, government and other development partners. The programme will focus on upscaling and consolidating NR governance, management and business models for wider adoption with emphasis on activities and strategies that increase the participation and opportunities for women and youth and more vulnerable resources users. To support extension services to CDCs, network or cluster committees and common interest investment groups, the project will upscale successful approaches where young people from the villages are trained as extension resource persons in the different activities prioritized by their communities.

In particular, the LDCF/SNRLAP will build on previous experiences of early warning systems developed by other initiatives as part of the national information system and expand their reach to other project areas still not covered yet. This will support GoS in providing climate risks information at a local level as support to adaptation plans, spatial mapping of historical and future climate change and climatic hazards and rehabilitation of the stocking routes. Under the new COSOP guidance, EWSs will not be developed as a stand-alone initiative that will likely end up being ineffective and unused after programme closure. The upgraded EWSs will seek for synergies with agencies working on similar

systems in Sudan (e.g. USAID FEWSNET, FAO GIEWS, UNDP EWS) to reduce time related to the development of the system relying on an existing system's infrastructure, and to secure use and sustainability.

At the same time the project will bring innovations contributing in particular to community resilience through alternative livelihoods, income streams and by addressing adaptation needs to the increasing challenges from climate change impacts. UN-Water reports that reducing both the impacts and drivers of climate change will require major shifts in the way we use and reuse the Earth's limited water resources. In this regard the LDCF project will support the valorization of traditional knowledge and best practices on land and water management by documenting them and ensuring their dissemination through diverse means such as trainings, information sessions and learning tours. The project will bring innovations in alternative livelihoods and technologies by promoting new activities such as aquaculture, as well as use of renewable energy: solar energy, small scale community biogas systems with co-benefits for manure and nutrient recycling. Also, building on good results from previous IFAD projects (e.g. BIRDP), the project will scale up the initiative and develop networks of community gardens (Jubarka) that would enhance nutrition, generate revenue and be women-led. The project will also innovate by seeking the collaboration with experienced partners such as Slow Food International, to work specifically with grass-roots organizations. The approach will build networks of gardens and promote knowledge sharing on sustainable local food production and nutritional local food consumption.

In terms of local development and natural resource management the village network/cluster approach to improved landscape level NR governance and management and livelihood investments is an innovation already proven to be effective in empowering poor rural communities and build their capacities for more resilient livelihoods. The project will use the village network/cluster approach, identifying and including villages using common natural resources and strengthening or creating institutions at the village and inter village level to promote collective management. These networks or clusters will become models of NR governance and management, showcasing the sustainability of previous investments and acting as catalysts for change for other clusters. In addition, the project will adopt an ecosystem approach: the common ecosystem approach will be the driver for network or cluster selection. Thanks to this approach it will be possible to select the clusters or networks across the administrative boundaries of the localities.

Various interventions, including previous and current IFAD projects, investing in water infrastructures in rural areas have built community-based models for water management and revenue generation for O&M costs, depreciation costs and reinvestment in further expanding water distribution infrastructures. Likewise, different models have also been developed and implemented for the management of other NRs including rangeland and forest. To capitalize on these experiences and in order to facilitate their scaling up, the programme will support the relevant government institutions in each region in the establishment of a framework and guidelines for revenue generation for O&M and depreciation costs but also for reinvestment in land and NR use and management by communities. This could include collecting of fees and tariffs for water use, harvesting of non-timber forest products, sustainable harvesting of wood from community forests, access to grazing and community forest fodder buffer, etc. Guidance would include percentage allocation of revenue generated to community, cluster/network, Locality and higher levels and safeguards for ensuring that an adequate proportion is re-invested in measures for improving sustainable land and NR use. The capitalization of the work will be part of the knowledge products that will be developed as local level climate change adaptation strategies. They would include all the O&M arrangements and revenue generation as part of sustainable community NR governance and management arrangements.

Furthermore, one year before the project completion the project coordination unit will with state and local stakeholder prepare and implement a project exit strategy, that will focus on areas that needs further strengthening for sustainability of project outcomes, instruments, approaches and knowledge products that needs to be handed over to permanent institutions for future updating and use, and building partnerships for pathways for upsacaling. Finally, the programme completion review is a process undertaken by the Government of Sudan in close coordination with IFAD at the end of the implementation cycle in order to report on the results achieved through programme interventions. The learning dimension of this process should be emphasized since it provides useful information for

improvements in future programme/project designs and programming. The completion review process is also critical for identifying opportunities for scaling-up of best practices. This phase is crucial particularly to enhance the sustainability of programme interventions. The Completion exercise provides all stakeholders with a unique opportunity to reflect on overall programme design and performance, and generate useful lessons learnt from implementation. Key findings of the completion review will be reported and analysed in the Programme Completion Report (PCR).

[1]http://sdwebx.worldbank.org/climateportal/index.cfm?page=country_historical_climate&ThisRegion=Africa&ThisCcode=SDN, Last Accessed = 31/3/2020

[2] Mohamed S. Siam, Elfatih A. B. Eltahir. Climate change enhances interannual variability of the Nile river flow. Nature Climate Change, 2017; DOI: 10.1038/nclimate3273

1b. Project Map and Coordinates

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

Map of the project:

Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.
 Final status of the Abyei area is not yet determined.
 Map compiled by IFAD | 31-05-2019

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 Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The design team consulted communities during the identification phase in Gadaref, Khartoum, Gazera, Sennar and North Kordofan States. Consultations were held with government staff of current IFAD projects in these states, local government officials and at least two communities in each state. The agenda of the meetings covered previous experiences of NRM in IFAD projects, remaining gaps, institutional capacity needs, and NRM policy adjustments and harmonization for further consolidation and upscaling of good community-led climate resilient NRM practices and approaches. The agenda in the community level focused on i) traditional NRM arrangements ii) collaboration of communities with the government for enforcing NRM policies iii) NRM based enterprises and incomes iv) gender involvement in NRM aspects. Consultations were also held with Civil Society organizations and private sector entities and other development partners.

The detailed design mission of SNRLP/SNRLAP visited Sudan from 30 November ? 21 December 2018. It met stakeholders at the national level, participated in an experience sharing workshop with past and active IFAD projects (BIRDP, SUSTAIN, LMRP, WSRMP, IAMDP), participated in an intersectoral meeting with government institutions to discuss proposals and needs for the policy component, and carried out field visits to the Butana, Sennar and Kordofan regions.

At the community level, the mission met smallholder farmers, rural women, youth, pastoralists, agro-pastoralists, representatives of village development committees (VDC), cluster development committees (CDCs), village networks and farmers associations. The mission also met Federal and State Government representatives at the Ministry of Finance and Economic Planning, Ministry of Agriculture and Forestry, Ministry of Production and Economic Resources, Forest National Corporation, National Water Corporation, Bureau of Federal Government, Higher Council of Environment and Natural Resources, UN agencies (FAO, UNDP, UNEP), the coordinator of the World Bank and GEF supported SSNRMP project and other donors initiatives. The Mission benefitted from the participation of relevant staff from the Federal Ministries of Finance and Economic Planning, Ministry of Animal Resources and Fisheries, and Ministry of Agriculture and Forestry. Below is a list of the visited institutions and a list of Officials met from the Higher Council for Environment and Ministry of Environment. The list of institutions and persons met during the SNRLP Design Mission can be found in the Annex 4 ? ?List of Institutions Visited and Officials met during the SNRLP Design Mission?.

The principal target group of the project will be poor men and women smallholder farmers, settled agro-pastoralists whose main source of livelihoods is traditional rain-fed agriculture, livestock and forest-based activities, especially gum Arabic. Pastoralists and mobile communities will be treated as a

priority target group wherever relevant. This target group will be continuously involved in all the phases of the project, from the design to the implementation and its monitoring and evaluation. In addition, the table below presents the other different stakeholders with their respective role in the project.

Stakeholder Engagement Plan	
Stakeholder	Role in the project
The Higher Council of Environment and Natural resources (HCENR)	The HCENR is the central institution concerned with policies, legislation and strategic planning in relation to environmental and natural resources conservation and management. The HCENR is specifically responsible for planning, coordination and control of implementation of policies in the fields of land management, forestry, environment, conservation areas and rural development. The HCENR will particularly assess the compliance of the project activities with the relevant national policies on environment and climate change.
The Federal Ministry of Finance and Economic Planning (MoFEP)	The MoFEP will be the recipient of the IFAD grant/loan and will carry out annually joint missions with IFAD on the performance and fiduciary aspects of the project
The Federal Ministry of Agriculture and Forestry (FMoAF)	The FMoAF will be the technical lead agency and will chair the Inter-ministerial Committee, which oversees and supports all IFAD-Co-financed projects
The local Governments in the States where the project will be implemented.	The focus will be on strengthening their role in facilitating linkages between communities and the State governments around land and natural resource policy issues and development services but also in facilitating linkages between communities across Localities
Native administrations	Attention will be given to identifying and strengthening their traditional and existing roles in supporting the governance of land and natural resources (especially in dispute and conflict resolution)
Communities	Past experiences proved that communities are active agents of change. Their capacities will be strengthened on climate risk management in production activities, NRM and land-use governance within and between communities. They will play a key role in solving conflicts over resources and land use. The project will raise communities awareness of the new legal opportunities for securing their land rights.
The private sector	Will be involved as service providers of machinery, veterinary, input supply, innovation and alternative livelihoods and technologies and other services.
The CBOs	They will be instrumental in project implementation and policy dialogue at local level.
Women and youth groups	See section 3 on gender below.

The World Bank	<p>IFAD is co-financing the GEF/World Bank project Sudan Sustainable Natural Resource Management Project. The project will enter in its phase 3 with additional financing from the GEF and co-financing from IFAD (14 millions USD).</p> <p>During project appraisal, the World Bank conducted consultations with the ongoing relevant projects in the targeted areas to ensure effective coordination and harmonization of activities. These projects include well proven interventions by IFAD's project ??Butana Integrated Rural Development Project, BIRD?? which has covered five states including Khartoum and Gadarif states. The outputs of the DRSLP's and BIRD's components provide key guidelines for Phase 3 implementation.</p> <p>Accordingly, and beyond the best practices of SSNRMP Phase 1, the project design of SSNRMP Phase 3 is considering the lessons learnt from the implementation of previous projects.</p> <p>Phase 3 will be co-financed by a US\$ 3.0 million equivalent in-kind contribution from the State of Khartoum, US\$ 600,000 ? from the federal Ministry of Finance meant for both states and from IFAD's Sustainable Natural Resource and Livelihood program which allocates US\$ 7 million in each of the project's states. The total sum of associated co-financing for GEF incremental purposes constitutes US\$ 17.6 million.</p> <p>To avoid any overlaps among the different activities and interventions as well as to ensure that there is no duplication of efforts the project will continue its regular consultations and dialogue with the relevant partners, donors and specifically with IFAD. In this regard, IFAD and the World Bank will ensure a smooth collaboration and complementary work in the overlapping governorates. It is noteworthy to mention that SSNRMP is part of Sudan's Natural Resources Management Network which is a coordination platform that involves all the governmental institutions, NGOs, INGOs, donors, and projects that are working in NRM. The network provides a good platform to exchange lessons learned and ensure that the different projects' interventions complement each other.</p>
Slow Food International	<p>Slow Food International is a proposed partner of IFAD to implement specific activities with communities. A bottom-up approach to adaptation will need to be sought so as to take into account the needs of the most vulnerable populations. To this end, IFAD will seek the collaboration with experienced partners and Slow Food International, with its initiative ?10,000 Gardens in Africa? has demonstrated really good results on the field working specifically with grass-roots organizations and communities in an innovative way. IFAD and Slow Food International met several times during the design of the SNRLAP to establish the basis for collaboration.</p>

Food and Agriculture Organization of the United Nations (FAO)	<p>FAO is implementing the Landscape Approach to Riverine Forest Restoration, Biodiversity Conservation and Livelihood Improvement Project (2019-2022). The project will target the riverine forest landscapes located in Gezira, Khartoum and Northern States along the Blue Nile and River Nile. IFAD and FAO exchanged during the process of finalizing the SNRLAP document. Both IFAD and FAO agreed to work together on targeting during the first phase of implementation to better integrate the forest reserves within their surrounding land uses (irrigated and degraded agricultural land, abandoned lands and rangelands) where applicable. Both IFAD and FAO would benefit from coordinating and exploring the possibility of joint missions and their staff in Sudan will continue exchange frequently during implementation. FAO agreed to ensure that IFAD is duly informed when the launching of the PPG phases takes place. IFAD and FAO have also agreed to exchange results from the SNRLAP and the project Resilience of Pastoral and Farming Communities to Climate Change in North Darfur. The two projects have similarities in activities and can learn from each other even though they are separated in space.</p> <p>In the Kordofan region the project will also seek cooperation with the future FAO project 'Gums for Adaptation and Mitigation in Sudan (GAMS)', which is about to be submitted to the Green Climate Fund (GCF). FAO has a rich experience in land tenure governance, conflict resolution and legalizing customary institutions in Darfur that the SNRLP can learn from. Finally, is supporting the government in the development of the REDD+ Strategy under which IFAD project beneficiaries, who has well established community forest management, could be supported in accessing carbon benefits financing.</p>
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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

SNRLP will rely on several committees to consult all the stakeholders of the Programme during execution. The consultation process is presented in the section 6 below institutional and implementation arrangements.

Communities, apart of being part of the SSC, are direct stakeholders of the Programme. Indeed, self-targeting measures offering activities suitable enough and of interest to the target households will be ensured through participatory formulation of Natural Resources and Land-use Management Plans (NRLMP) and Livelihood Investment Plans (LIP) the two key planning and investment tools for the clusters or networks and the communities. Participatory development of these planning and investment tools will ensure that the activities which are identified correspond to the priorities and capacities of the programme's target group; Self-targeting will be facilitated through use of gender sensitive delivery systems (e.g. delivering training at village level), capacity-building tailored to the needs of women, youth and pastoralists and an on-going consultative process with beneficiaries through committees and forums. Furthermore, on annual basis the **Procedures for preparation and approval of the Annual**

Work Programme and Budget (AWPB) will involve all stakeholders of the project. The details are described in the M&E section which includes preparation of AWPBs.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier; Yes

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

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Gender Analysis.

3.1. State of government policies.

Institutional framework:

There are multiple institutions and ministries involved in gender relates issues in Sudan. The Ministry of Welfare and Social security (MoWSS) is the main ministry in charge of social protection and responsible for the protection of the protection, prevention and promotion of the poor and vulnerable. The ministry has 5 main streams of work[1] that are implemented by eight directorates and ten semi-autonomous agencies[2]. The General Directorate of Women and Family Affairs (GDWFA), which is part of MoWSS develops national programmes in the field of childhood and motherhood social care. Its mandate entails developing and implementing women empowerment and family policies, developing women's capacities and enhancing their skills, and coordinating efforts related to women's empowerment and family affairs. The Directorate led the development of the Women Empowerment Policy and an action plan. A recent Unicef evaluations notes that the staff of the directorate is familiar with concepts of gender and gender equality. However, the challenge is to articulate these concepts in daily practices and in the coordination with other ministries and departments[3]³. This is an interesting conclusion, especially since all Ministries in Sudan claim to have gender focal points who are

responsible for the integration of all gender related activities within the ministries. GDWFA is supported by several international organisations for programme development and implementation. Among the institutions, supporting the GDWFA is the in 2006 established Women's Centre for Human Rights. This unit specifically reports on issues related to women and human rights both within the MoWSS as well as the Ministry of Justice.

International legislation.

Over the course of the past years, Sudan aligned it self with the following international treaties on concerning gender and human rights[4]⁴:

- ? Sudan has signed, but has not ratified, the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women (Maputo Protocol). The Ministry of Justice and the Ministry of Welfare and Social Security are conducting a study on the Protocol to be submitted for approval to the Council of Ministers.
- ? Sudan is a signatory to the Universal Declaration of Human Rights and has ratified the two international covenants on human rights (International Covenant on Civil and Political Rights and International Covenant on Economic, Social and Cultural Rights).
- ? In 2013, Sudan ratified the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime.
- ? Sudan has ratified the Convention on the Rights of the Child, including its Optional Protocol on the involvement of children in armed conflict and its Optional Protocol on the sale of children, child prostitution, and child pornography. Sudan has also ratified the African Charter on the Rights and Welfare of the Child.
- ? Sudan recognizes the international obligations, principles, and standards on gender equality and the human rights of women and girls arising from the above treaties, as well as from the Platform for Action of the 4th World Conference on Women, Beijing, 1995. Sudan has not yet signed the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

National legislative framework.

The national legislative framework provides for the following gender related issues. This section specifically focuses on personal status and labour laws[5]⁵.

Labour laws. In general, according to the fifth census (2008), the rate of female labour participation remains below that of men. The census reveals that the percentage of female breadwinners has

increased from 12 percent in 1993 to 28 percent in 2008. In general, women's economic participation in urban communities is higher than in rural areas. With the exception of some elite professional females working in urban societies, women are mainly seen in the informal economy, e.g., selling street food and tea. Although some legal protections for female workers are provided by the Interim Constitution of 2005, Labour Act of 1997, and National Civil Service Act of 2007, many women work in sectors that are not well regulated. Hence due to the nature of the work that most women are involved in, women are not always thoroughly protected by the law. In addition, many lack social insurance and other types of workplace protections systems especially when they are involved in work on for example agricultural farms and domestic work.

Personal status laws. Overall, equal gender rights are not uniformly codified in all aspects of Sudanese law. For example, although the interim constitution protects children from marriage under 18 years of age, there are other pieces of legislation that allow for marriage under 18 in some cases. In a similar vein, women require the permission of a guardian to marry. A woman must also provide consent for the marriage to be legal. However, a woman's consent can be sought after the marriage has been concluded. Other aspects of personal law are even more deplorable. For example, men will always be the main guardians of children and polygamy is legal according to the law. Sudan introduced unified personal status law for Muslims in 1991. The general legislation refers to the Hanafi Islamic law for lacking provisions. There is also a Personal Status Law for Non-Muslims of 1926, which is for Christian denominations, such as Copts, Catholics, and Protestants. Customary laws remain important for other sects. The Civil Procedure Act provides that personal status matters in Sudan are to be determined either through Islamic Sharia provisions or prevailing customs among litigants, provided that justice and sound conscience are not violated.¹⁶ Therefore, customary law applies to personal status matters for non-Muslims.

National policies and strategies.

General awareness about women's rights and equality started in the beginning of the 1900's with the opening of the first girls' school in Sudan as it promoted an equal access to education for boys and girls. The following decades, the evolution of women's rights movements continued and a first women's league was established in 1947. Since the 1950s, several programmes targeting women's welfare were undertaken by the Government, women's unions and non governmental organizations (NGOs). In addition, programmes were developed that provided political, economical and social support to girls and women in different areas such as literacy, education, reproductive health, capacity building, women's empowerment and elimination of harmful practices.

A recent evaluation executed by UNICEF notes that the country currently does not have a wide compassing strategy to promote gender equality^[6]. Sudan is currently implementing a Twenty-Five-Year National Strategy aims at generating a prosperous life for the entire Sudanese population. The economic dimension of this strategy aims at advancing 'justice' and 'equality' in the distribution of wealth and work opportunities based on 'personal merits' without isolation or seclusion. One of the strategy objectives is to provide a 'freedom to earn' to the population without being subjected to any

discrimination practices. The strategy states that "all economic ministries shall undertake to meet the basic needs of citizens in justifiably and equitably realizing social justice and well-being." The capacity building and community improvement dimension of the strategy pledges for an equal opportunity to excellent education in a healthy environment to all. In addition, the strategy prioritizes the realization of balanced educational opportunities for the population. Interestingly, the Youth and Sports strategy set among its objectives to "make sport compulsory in the education syllabus for both sexes." In addition, the Non-Governmental Organisations Strategy recognises the challenge to activate the women's sector and develop women's capacity to play an active role in family and community building. Therefore, the strategy seeks to prepare and implement special programmes in the area of balanced and sustainable capacity building with "all sectors" equally. The National Women Empowerment Policy, endorsed by the President in 2007, focused on six pillars for empowering women: education, health (including environment and hygiene), political participation, peace and conflict resolution, economic empowerment, and human rights. The General Directorate for Women and Family Affairs in the federal Ministry of Welfare and Social Security was named for coordinating and providing technical assistance for gender mainstreaming and implementation of the Women Empowerment Policy throughout the government institutions and civil society. The Directorate was replicated at state level. The two Five Year Plans of 2007 - 2011 and 2012 - 2016 concentrate on economic empowerment, combating poverty, creating opportunity for work and equal opportunity for women in the fields of agriculture, industry and commerce, supported by microfinance schemes which tackle the poverty of rural women and generates small business opportunities for women, poorer families and female-headed households. In the formal sector, women have access to the social insurance funds, health insurance and pensions. Social assistance has been introduced for families in need, including in-kind support and cash transfers. Promotion of water projects is regarded as essential for economic empowerment of women. The two Five Year National Plans entailed different activities including; conducting surveys to identify gender gaps, in macro-policies of the State; developing a national strategy to combat violence against women; preventing negative discrimination against women and combat harmful traditional practices; developing national policies for the protection of women with disabilities; and incorporating the national strategy to combat HIV/ AIDS.

3.2. Gender equality.

Demographics.

Overall, there is room for improvement of the gender situation in Sudan. The country is ranked 140 out of 159 countries in the UNDP Gender Inequality Index (GII). In general, Women live longer than men (65 years versus 62.2 for men) but spend on average 3 years in school (compares in 4.1 years for men). In addition, Women earn significantly less than men (1,902 compared to 5,775 GNI per capita for men). The MICS 2014 survey shows that 11.9% of women aged 15-49 years were married before the age of 15. About 59.8% of young women in Sudan are literate and the literacy status varies greatly by area (79.8% in urban areas and 50% in rural areas). Women's participation in the labor market is 24.3% compared to 72.2% for men. At the same time, women comprise 78% of the economically active population who work in agriculture compared to only 57% of men.

Women in agriculture.

As mentioned earlier already, women are significantly under represented in the labour force. In fact, women comprise only 23 percent of the formal economy. An overall risk of this fact is that they are not adequately protected by labor regulations. This specifically applies to women working in the agricultural sector. Still, a large percentage of household depend on agriculture as their main source of income. A relatively high percentage of women (roughly 70% in this sector) are engaged in agricultural production. Women contribute to the household's wellbeing and food security. A recent study by JICA indicates that although women are the main responsible for agricultural activities, men are controlling the majority of the monetary resources that are created through agriculture[7]⁷. Also, women suffer from unequal access to land, credit and other agricultural services or resources.. Women are more likely than men to be landless with the limited rights over agricultural land, and other reproductive resources. This is mainly due to the male dominated society, which is also main influential factor for women's responsibility and activities relevant to agricultural sectors in rural community. While women are responsible for production, it is men who are selling or even exporting the produce. Besides primary production, women have also responsibilities for herding, feeding, milking, and processing of animal products. It is expected that these responsibilities are more significant in pastoral communities. Besides income generating activities, women also bear a significant responsibility within the household. The activities of pastoral households are varied and depend on the number of animals a family has. Although men are usually the main responsible for looking after the animals, here we see more and more that men decide to move out of pastoralism due to war and a need for diversifying their livelihoods. In addition the civil war and droughts had 'pushed' the pastoralists to modify their livelihood strategies which ultimately contributing additional unpaid work tasks for women to ensure family income.

Constraints to empowerment in Sudan.

According to the Interim Constitution of 2005, both males and females have equal rights in relation to economic activities, political participation, education and all other human rights. Although constitutionally no barriers against women exist, cultural norms still hinder empowerment. In specific women's empowerment is hindered by[8]⁸: (i) a high rate of illiteracy; (ii) deeply rooted patriarchal values, customary laws and practices that limit women's freedoms and choices (iii) early marriages; (iv) heavy workloads among rural women; (v) lack of financial resources, and knowledge to increase agricultural production; (vi) women's limited capacity and skills to embark on viable agro-based and entrepreneurial activities; (vii) lack of ownership and control over key resources like land and modern agricultural equipment and capital; (viii) limited access to markets; and (ix) limited access to off-farm activities. Moreover, different ethnic and cultural groups have some traditional practices, customs and value systems which remain a serious challenge in addressing gender issues on the political, economic or cultural levels.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes /no) If yes, please upload gender action plan or equivalent here.

Background: In the IFAD Strategic Framework 2016-2025, gender equality is identified as one of the five principles of engagement at the core of IFAD's identity and values. IFAD complies with the United Nations commitments on gender mainstreaming, including the United Nations System-wide Action Plan (UN-SWAP) on gender equality and the empowerment of women. In IFAD's development activities, gender mainstreaming ensures that the differentiated needs and priorities of rural women and men are identified and taken fully into account in the design, implementation, monitoring and evaluation of all activities.

In this framework, the Sudan Country Strategic Opportunities Programme (COSOP) for the period 2013 ? 2020, which is the IFAD strategy with the government of Sudan for the engagement of IFAD funding, provides an overview of poverty and its gender dimensions and outline targeting and gender strategies. Implementing the COSOP, the SNRLP has identified needs and priorities of rural poor women and men (with age dimension). A full Gender Action plan will be developed at the start of the project by the Senior Gender and Community Development Expert at the Central Project Coordination Unit. The gender strategy developed during the design of the Programme is in line with the GEF Policy on Gender Equality Guidance and is structured around the following components:

Strategies and Activities: The SNRLP/SNRAP will allow a better participation of women as well as strengthening their capacity to face the risk of male takeover if women's economic activities increase in value and/or become more profitable. To address this risk the programme will develop a gender-sensitive programming and the inclusion of women in defining access to resources ensuring their rights. To ensure women's access to economic activities the SNRLP/SNRAP includes training of women's groups in production of seedlings and operation of tree nurseries, and overall farming practices. Because gender-transformative approaches seek to change rigid gender roles and relations, the project will identify and analyze the underlying causes of gender inequality that is rooted in socioeconomic and cultural structures. The LDCF will promote an integrated, gender transformative approach going beyond women's empowerment, to promoting women's greater equality, responsibilities, status and access to and control over resources, services and decision-making. The SNRLP/SNRAP will support: i) women groups (80% women headed-households) for setting up farms to generate income and increase food availability in villages which have the highest rates of malnutrition; (ii) women groups to set up nurseries (iii) women and youth groups to set up businesses through matching grants and business mentorship with priority given to businesses that reduce pressure on natural resources such as production of green charcoal, manufacturing bricks, LPG refilling services, etc. The Environmental and Social Management Plan (ESMP) developed at design (see Annex 2 ? ?Environmental and social management plan for SNRLP?) describes the environmental and social mitigation measures, environmental and social management, and supervision and monitoring in details. The ESMP is serving as the guiding document for the implementation of these activities.

Monitoring and Evaluation: A gender-responsive approach is applied throughout the identification, design, implementation, monitoring, and evaluation of the SNRLP/SNRAP. The M&E system will be participatory, decentralized and relevant data, analysis and reporting will be disaggregated by gender and age, and with specific gender indicators. The results will also be disaggregated by gender. The implementation of the ESMP will be monitored and it includes a preliminary scorecard to monitor the increase in household resilience, the questions and the weight of each of them will be revised at the Programme Start-up.

Resources: The central technical support team, will be responsible for overall technical planning, implementation oversight, technical guidance to the State Programme Coordination Units (SPCU). It will comprise, among others, a Senior Gender and Community Development Expert (SGCDE). The programme will have nine SPCUs, one in each State, which will lead programme implementation in the States. Each SPCUs will comprise one Community Development and Gender Officer (CDGO). A central activity financed by the LDCF investment will be the Jubrakas, which demonstrated excellent results for women at community level in previous IFAD implemented projects and are seen as opportunities to address gender gaps and support the empowerment of women and help to achieve adaptation benefits. This activity will be implemented according to the NRLMPs and supported in time by the EWS.

The gender strategy and action plan is presented in the table below. It will be revised by the Senior Gender and Community Development Expert at the Central Project Coordination Unit when project starts (see in Annex 1 - ?Terms of reference SNRLAP? attached to this document for the ToRs).

Gender Strategy and Action Plan			
Course of Action	Gender related activity	Indicator / How to Bring it to life	Project Target
1.1	Community mobilization and sensitization Stakeholder awareness workshops	Self-targeting will be facilitated through use of gender-sensitive delivery systems (e.g. delivering training at village level), capacity building tailored to the needs of women, youth and pastoralists and an on-going consultative process with beneficiaries through committees and forums. Smallholder farmers, especially women and youth, from poorer, more deprived areas are unaware of the opportunity or lack the knowledge and confidence to apply for grants and other project activities	Gender equity and women involvement within the communities

1.2	<p>Workshop on Targeting, Gender, GALS and M&E</p>	<p>The workshops will be held for the staff of the PCU, SCU, Specialists in the Focal Units in each region. There will be three workshops in Butana and one in each in the Kordofan and Sennar region. Each workshop will have approximately 35pp</p> <p>Women and men will receive GALS training to build confidence through developing a vision for their lives, increase awareness of gender roles in the households and communities, improve their capacity to negotiate needs and interests as well as to find innovative, gender-equitable solutions in livelihoods planning and value chain development.</p>	<p>Exposing staff to gender training including in the Gender Action Learning System (GALS) orientation training The staff members trained on GALS will include the community development officers who will be responsible for disseminating these inputs at the community level, both directly and indirectly through young professionals and young extension agents.</p>
1.3	<p>Establishment and strengthening of VDCs</p> <p>Establishment of NR clusters/networks</p> <p>Training of saving and credit groups and VDCs and subcommittees</p>	<p>Women will constitute a minimum of 30% and youth will constitute a minimum of 30% of members of VDCs, interest groups and clusters. In addition women and youth subcommittees will support women and youth representatives in the clusters. Women will be facilitated to form and where possible formalize Savings and Credit Groups</p>	<p>Women participation is ensured in decision making throughout clusters and networks.</p> <p>Women empowered by Saving and Credit groups training</p>
1.4	<p>Forestland conservation and related businesses</p> <p>Infrastructure for women groups farms/nursuries</p>	<p>50% of enterprises supported with matching grant will be for women</p> <p>Women and youth groups will be supported to set up businesses through matching grants with priority given to businesses that reduce pressure on natural resources such as production of green charcoal, manufacturing bricks, LPG refilling stations, etc.</p>	<p>Women are adapting and building resilience to climate change</p>

1.5	Incentives for good practices	Jubrakas (or home/ communal, gender based, organic gardens), there will be incentives as tangible benefits for relinquishing unsustainable practices (farming, processing, etc.), reducing risk, and helping smallholders (and gender-based households) adopt adaptation and mitigation measures	Gender and nutrition values in the household: Jubrakas becoming climate - smart agriculture (CSA) preferred ground for gender - based community, multicultural and highly nutritional, home and community gardens sustainably increasing agricultural productivity and incomes ? livelihood for women through CSA
1.6	Young Professional programme	Engagement of village youth and young professionals to support extension services to VDCs, CDC/NECs and the various NR and common interest groups and to increase opportunities for youth. The SNRLP will scale up the good experiences of the BIRDP in engaging youth in supporting programme activities. Also, experience from the BIRDP shows that the vast majority interested and embarking on the YP programme are women. With their presence as articulated and supporting professionals in the villages the YP programme also has a strong impact on the mobilization of women in the villages, change in culture to more openness towards women participation, and accepting women speaking in meetings.	Women benefit from project professional opportunities
1.7	Formulation of livelihoods investment plans (LIPs) Small innovative businesses and training for women, youth and CDCs	Formulation of livelihoods investment plans (LIPs) and support of Village Savings and Credit Groups (VSCGs) involving 70% women, NR Livelihood groups (NRLGs) and Vulnerable Women's Groups (VWGs)	Smallholder farmers, especially women and youth, from poorer, more deprived areas are aware of the opportunity and have the knowledge and confidence to apply for grants and other project activities and effectively start businesses
2.1	NRM forum at locality, State and National levels	The inclusion of women and youth in forums formed for discussion on NRM will be ensured. The representation of women (50 % and youth (30 %) in NRM forums at locality, State and National level will be ensured.	Active participation of women in decision making and project activities

2.2	Establishment of savings groups, and NR livelihood groups and vulnerable women group	<ul style="list-style-type: none"> - women groups (80% women headed-households) will receive support for setting up farms to generate - income and support food availability in villages which have the highest rates of malnutrition - women groups will be supported to set up nurseries - women and youth groups will be supported to set up businesses through matching grants with priority given to businesses that reduce pressure on natural resources such as production of green charcoal, manufacturing bricks, LPG refilling stations, etc. 	Women empowered by Saving and Credit groups formed
3.1	Gender representation in programme management	<p>Gender representation in programme management will be ensured through several steps :</p> <ul style="list-style-type: none"> - Attempt to have 50 percent of programme staff as women - Include A Gender and Community Expert will at the CPCU to direct and support the mainstreaming of gender in the programme - Gender Specialists will be placed in each State Coordination Unit - The TOR of all Staff will include responsibility for mainstreaming gender - Community mobilization teams will comprise of one man and one woman - Community Extension Workers will be 50 percent youth and 50 percent women - 50% of Young Professionals recruited by the programme to support community mobilization and women's empowerment in the village will be women, 100 percent will be youth - a Gender, Targeting & GALS orientation workshop will be held for all programme staff in Year 1 of the programme with the objective of kickstarting the development of Gender & Targeting Action Plans for each State 	Gender representation in programme management is ensured

[1] (i) the Zakat Chamber that manages a compulsory charity tax, (ii) social insurance programmes, (iii) microfinance and income generating activities programmes, (iv) social services and rural development projects and (v) advocacy and social policy activities.

[2] Source: World Bank, 2014 ? Sudan Social Safety Net Assessment.

[3] Source: Unicef, 2017 ?Unicef Sudan Gender programmatic review.

[4] Source: UNFPA; UNDP; UNWOMEN & ESCWA, 2018 - Sudan, Gender Justice and the law.

[5] Source: UNFPA; UNDP; UNWOMEN & ESCWA, 2018 - Sudan, Gender Justice and the law.

[6] Unicef, 2017 ?Unicef Sudan Gender programmatic review.

[7] Source: JICA, 2012: Sudan - women gender analysis.

[8] Source: SNLP SECAP document and JICA, 2012: Sudan - women gender analysis.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

At the state level the programme will facilitate the establishment of a State Cluster Stakeholder Platform (SCSP) with representation from, among others, the private sector. Moreover, as above mentioned, the National Programme Steering Committee (NPSC) will be constituted to provide strategic guidance and facilitate linkages to government services and private sector stakeholders.

The private sector (agribusinesses, input suppliers, marketing partners, extension service providers) will be an important actor during the phase of implementation of the Community NRM and Livelihood Investment plans in Component 1 of the programme during the implementation of Community NRM and Livelihood Investment Plans. Even though their implication in the Programme is not concluded at this stage, several activities were pre-identified at design to be co-funded by private sector (e.g. support of private sector for distribution of gas stoves to households, participation in construction of fodder storage, etc.). The private sector will be strengthened, as needed, to provide services in terms of innovation and alternative livelihoods and technologies such as: aquaculture, solar energy, small scale community biogas systems, etc. The programme will also promote links between beneficiary natural resources management, business and saving groups and private service providers of machinery, veterinary, input supply and other services. Where necessary, the private sector input suppliers and marketing partners will also be capacitated to offer business development services to the target group.

Also, linkages between the government technical departments and community institutions through State and locality level forums and partnerships with private-sector service providers (financial institutions, machinery service providers) will continue even after the programme and therefore contribute to the Programme's sustainability.

5. Risks to Achieving Project Objectives

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

Risk	Risk mitigation	Rating
Climate Change related risks: Increasing temperatures, rainfall variability and prolonged dry spells and droughts resulting in crop failure and low rangeland productivity negatively affecting the livelihoods of the target group.	Promoting sustainable and climate resilient agricultural practices (rangeland rehabilitation and management preserving buffer areas for dry years, terraces, conservation agriculture, crop rotation and intercropping with climate adapted varieties, composting, water harvesting, IPM and other agroecological practices such as permaculture)	Medium
Macro-economic and financial instability, fluctuating exchange rate and inflation	Community-based implementation, using commercial bank accounts to avoid disadvantageous exchange rate of Central Bank of Sudan, mobilization of co-financing, obtaining high-level governmental support	High
Political risk	Risk of political instability following the recent revolution are considered. Working with grass-root organizations increases the sustainability of the project in case of possible subsequent shocks.	Medium
Lack of governmental commitment to policy change	Preparation of policy-relevant knowledge products based on project evidence, promoting inclusive policy dialogue, integrating perspectives of different stakeholders, proper coordination between different stakeholders, building institutional capacities	Low
Lack of implementation of policy changes	Promoting effective governance mechanisms with appropriate incentives for implementation, building institutional capacities	High
Lack of follow up, participation and ownership of the local population	Promoting participatory project approaches, organizing bottom-up community mobilization, capacity building and awareness-raising, building on best practice examples of previous successful IFAD-funded projects, using demonstrations to encourage voluntary imitation	Medium
Land conflicts between different resources users (crop farmers and pastoralists)	Community and intercommunity participatory land use mapping and planning, negotiation and agreements on user rights backed up by a conflict resolution mechanism, involvement of mobile pastoralist communities in all stages of land-use governance and management	Medium

Financial Management	Establishment of the CPCU, recruitment of qualified and experienced staff at CPCU and states level; internal and external auditing arrangements; installing an accounting software system; and carrying out effective budgetary control, facilitated in part by the accounting system, which will automatically generate accurate and reliable monthly and periodic financial reports.	High
Limited social capital and capabilities of the communities in new villages	Local capacity building, community trainings, putting emphasis on practical knowledge, demonstration and exchange with other communities with already functioning NR governance and management arrangements	Low
Gender inequality, lack of women participation, Risk of male takeover if women's economic activities increase in value and/or become more profitable	Gender-sensitive programming and inclusion of women in defining access to resources ensuring their rights	Medium
Global COVID-19 Pandemic	The global COVID-19 pandemic is having an unprecedented impact around the world, both in health and socioeconomic terms and does not spare Sudan. There is an increased risk to public health that is beyond the control of the project to prevent. During project implementation, every effort will be made to reduce and mitigate the risk of covid-19 infection. The project will work to reduce COVID-19 associated risks by following international and WHO standards for the prevention of infection and will raise awareness during all training and capacity building efforts. Should the size of public gatherings be limited, then suitable alternatives will be sought that are in compliance with best practices in reducing the risk of infection. Project beneficiaries will be taught the most up to date health and safety requirements to limit the risk of contagion.	Medium

Action framework for the COVID-19 pandemic: an analysis of risks and opportunities

1. Risk analysis and corresponding mitigation measures

1.1. Availability of technical expertise and capacity and changes in timelines

COVID-19 containment measures including restrictions on gathering, limited movement of people between and within states pose risks to timely implementation of both Component 1 and 2. This can be overcome with the support of the Project Management Unit (PMU) of IAMDP, ongoing IFAD project in Sudan, which has a team of long term experience in implementing IFAD projects and is well equipped and building capacity and experience for remote work and online interaction. All project interventions have a plan in place to manage possible re-instatement of COVID-19 containment safety measures that training programmes and meetings for building clusters/networks (Component 1, 2) will provide hand sanitisers and promote their regular use using the appropriate techniques, enforce strict social distancing and make the wearing of masks compulsory at all times. Should large public gatherings not be possible, then suitable alternatives, for example smaller (focus) group discussion and phone interview, will be sought that are in compliance with best practices in reducing the risk of infection.

The project will be directly supervised by IFAD and supervision/implementation support will follow IFAD's operational modalities and established guidelines with particular focus on changes in project implementation timelines, baseline and conditions of beneficiaries due to COVID-19 related restrictions and socio-economic impacts. Supervision and implementation support will be applied as a continuous process, consisting of continuous communication and engagement with the implementing partners, Government, and other project's stakeholders, guiding the project towards the timely achievement of strategic objectives while ensuring fiduciary compliance and responsiveness to the accountability framework. IFAD will provide technical support by recruiting technical experts as needed for the project implementation. In view of the current travel bans to and within the country because of COVID-19, and until movement restrictions are lifted, IFAD in close collaboration with the Recipient will apply IFAD new guidelines for remote supervision that will be followed by field visits for ground truthing, as soon the situation will improve. IFAD fiduciary responsibility will be exercised in terms of procurement reviews and withdrawal applications processing.

The expected implications of the COVID-19 for the production of the main field crops cultivated by small scale farmers are multitude and interrelated name: i) according to the restriction of movement, they are not able to transport their products to the markets; ii.) poor storage creates increased post-harvest loses; iii) women's participation in agriculture is high and hence they are relatively more affected; iv) it enforces them to consume all savings including the saved seed for next planting season; v) off season jobs especially for the youth are lost due to lockdown; no remittances are received to hire labour for cultivation etc.; vi) liquidity problems at the level of micro finance institution (MFI) restrict them to provide the usual loans; and vii) lack of liquidity at household (HH) level implies less diverse diets implying low food intake of a low nutritive value and less energy for farm work.

The effects of these implications are expected to be mitigated through IFAD's multi-donor COVID-19 Rural Poor Stimulus Facility (RPSF). The Rural Poor Stimulus Facility aims to improve the food security and resilience of poor rural people by supporting production, market access and employment. The ultimate goal of the RPSF is to accelerate the recovery of poor and vulnerable rural people from the COVID-19 crisis. This will be achieved through IFAD's target group having the capacity, assets and overall resilience to cope with shocks; through lessons that are incorporated into IFAD's work from the implementation and innovations of the RPSF; and through a strengthened capacity to deliver digital support. RPSF project in Sudan will benefit smallholder farmers in Kordofan and Sinnar which are the project areas of SNRLP as well. The planned interventions fall into four main categories:

- ? Providing inputs and basic assets for production of crops, livestock and fisheries
- ? Facilitating access to markets to support small-scale farmers in selling their products in conditions where market functions are restricted
- ? Targeting funds for rural financial services to ensure sufficient liquidity and to ease repayment requirements so as to maintain services, markets and jobs
- ? Promoting the use of digital services to deliver key information on production, weather, finance and markets.

1.2. Stakeholder engagement process

The need to comply with national and state requirements related to measures put in place to control the spread of COVID-19 mean that the Project might need to restrict or suspend implementation of all activities that necessitated community gatherings, which is particularly important activities for Component 1. Smallholder farmers, especially women and youth, from poorer and more deprived areas are unaware of the opportunity or lack the knowledge and confidence to apply for grants and other project activities and often neglected during decision making processes. Mitigating measures have been formulated based on the in-depth analysis on social risk factors, which include self-targeting through use of gender-sensitive

delivery systems, capacity-building tailored to the needs of women, youth and pastoralists. The inclusion of women (50%) and youth (30%) in committees and forums formed for discussion on NRM will be insured. To ensure full compliance with its social and environmental policies or commitments, the proposed project will utilise IFAD's grievance and redress mechanism. For more detail, refer to social risks and mitigating measures in Annex 2 ? Environmental and Social Management Plan (ESMP) for SNRLP.

1.3. Enabling environment

As many countries around the globe at the moment, the Government of Sudan's priority during the pandemic is to mitigate and contain spread. As of March 2020, the Government has introduced an array of prevention and containment measures to curtail the spread of the virus including curfews, transport restrictions (with the exception of humanitarian goods), border closures and the suspension of schools and public gathering.

The project activities will support the government to continuously focus on addressing environmental and natural resource management challenges ? particularly through Component 2, while fully aligned with the COVID-19 responses. Natural resource consultation for a for policy formulation and implementation, training for extension and research service providers, institutions staff on climate change adaptation and natural resource governance will be organised complying social distancing and WASH guidelines and virtually as possible to minimise movement between each governorate. In addition, COVID-19 related training (sanitation and hygiene) will be conducted in parallel during/prior to all community gathering/training/workshop to raise awareness and minimise the risks. For more detail, refer to environment/climate change risks and mitigating measures in Annex 2 ? Environmental and Social Management Plan (ESMP) for SNRLP.

1.4. Financing

Despite the political tensions after ousting the former president in April 2019, IFAD's counterparts in the line ministries have proved to be reliable partners. Irrespective of the changes at the high political level, requests and communications from the IFAD Country Office (ICO) have been treated with priority, the debt repayment has been processed as scheduled and the projects are being implemented with minimal disruptions.

Since the emergence of COVID-19, the annual inflation rate in the Sudan has climbed to its highest level in almost 25 years. Run-away inflation and unfavourable exchange rate of the SDG might lead to disrupting the procurement of goods and services. Fuel supply for operations might be reduced and become erratic and at times procured from the black market at exorbitant costs. This, in turn, might delay timely implementation of activities and cause price increase in procurement.

To minimize the effect of price increase in procurement, the SNRLP designated accounts are maintained in Euro and USD while most of the Programme expenditures are incurred in local currency. This flow of funds arrangement makes it important for the Programme to have proper controls and procedures in place to be able to:

- ? Properly account for the exchange rate and its fluctuations
- ? Mitigate any risks rising from potential exchange rate fluctuations or shock such as high rate of inflation or devaluations of the local currency.

As soon as funds are transferred from the designated account denominated in Euro or USD to the Programme account in local currency account, the converted funds may lose part of their value with respect to the designated account denomination currency resulting in an exchange rate loss. Particularly in the case of high domestic inflation or currency devaluation, the Programme may incur a substantive exchange rate loss and as a result the Programme must have proper procedures in place to mitigate the

potential financial impact. The risk of incurring an exchange rate loss can be mitigated by keeping the balance of the local currency account(s) as low as possible while keeping the funds in the designated account until these are really needed, keeping in mind the needs as identified during the cashflow forecast process.

The co-financing availability has not changed since design and is not at risk in regard of the COVID since most of the co-financing comes from IFAD as a grant.

2. Opportunity analysis

The project activities will promote and restore natural systems and their ecological functionality, decrease the risk of human/nature conflicts as well as promote circular solutions to reduce unsustainable resource extraction and environmental degradation.

The project will promote sustainable natural resource management by establishing 150 cluster / network of natural resources and developing land-use management plans (NRLMPs), which will not only take into account limiting deforestation and promoting climate change adaptation practices, but also address preventative measures against future spread of diseases (including COVID-19) from animals to humans. The project will support registering community forests and rangelands to ensure natural resource ownership and users rights. This is expected to reduce reporting in dispute over use of land and natural resources. Various capacity building and technical assistance to support climate smart agriculture and to implement livelihood investment plans aligned with NRLMPs are planned.

All project activities are designed and will be implemented to ensure the protection of participants and project staff from the spread of COVID-19, to raise awareness of water, sanitation and hygiene (WASH) practices as well as risks of wild animal consumption. As of July 2020, WHO understanding of the SARS-CoV-2 is that the main routes of transmission are respiratory droplets and direct contact. Any person who is in close contact with an infected individual is at risk of being exposed to potentially infective respiratory droplets. Droplets may also land on surfaces where the virus could remain viable; therefore, the immediate environment of an infected individual can serve as a source of transmission.

In response to the pandemic the project will meet WHO and national guidelines to protect against the virus. To this end at all project-related activities including training programmes and meetings for building clusters/networks will provide hand sanitisers and promote their regular use using the appropriate techniques, enforce strict social distancing and make the wearing of masks compulsory at all times. The project will at all times thoroughly clean all surfaces and training equipment before and after events including the toilet facilities; and ensure the safe disposal of any disposable masks. The project will also work to raise awareness during all training and capacity building efforts. Should large public gatherings not be possible, then suitable alternatives will be sought that are in compliance with best practices in reducing the risk of infection. The contingency measures will be primarily focused personal hygiene, social distancing and on remote internet-based consultations. As the SNRLAP is fully mainstreamed into the SNRLP, every precaution as outlined above will be taken throughout the SNRLP project and will be updated in compliance with required international and national safety measures applicable at the time of project implementation. Any associated costs will be absorbed by the IFAD co-financing.

Climate risk analysis on project's outcomes

As presented in the section 1a. Project Description. 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)? and complemented by the Annex 5 ?Design Climate Change in depth analysis of SNRLP?, the expected climate change impacts on agriculture in the programme area include increasing unpredictability and unreliability of rainfall, shorter rain-fed growing seasons and water deficits, shifting agro-climatic zones southwards, desertification, reduced pasture and water for livestock, loss of arable land and reduced crop yields.

Major challenges are stretching the systems of environmental governance in Sudan. For many years and up to now, the impacts of climate change and variability on natural and productive resources and their

unsustainable exploitation are the main cause of proliferation of conflicts over those resources, especially in rain-fed areas away from the banks of the Nile, in Butana. The area at greatest risk is the drought-stricken parts of Northern Kordofan and Khartoum states, and conflict- and drought-stricken Kassala state.

The most vulnerable groups would be traditional rainfed farmers and pastoralists, groups least resilient to climate change related shocks. Compounded by a range of human pressures, these underlying conditions create a state of vulnerability in Sudan to climate impacts, and a troubling picture of vulnerability to anticipated climate change.

The SNRLP has been classified as High Risk according to the IFAD classification and will operate in regions in Sudan which are characterized by being highly vulnerable to climate change, such as North Kordofan. Since 2015, most of the references on Sudan have mentioned that Sudan is highly vulnerable to climate change with some particularly fragile sectors such as food security, water resources and agriculture. Based on the findings of the Climate Risk Assessment (CRA) on climate change impacts on agriculture in Sudan presented in annex 5, the programme is clearly geared towards adaptation and featuring "no-regret/safe" kind of activities.

Indeed, climate change will increase the issues related to access to water. There is an existing risk of elite capture and demand for water infrastructures beyond the actual need of the local communities, overuse and degradation of the vegetation and land in the surrounding area and conflict over resources may erupt. To mitigate these risks, the SNRLP will ensure that the establishment of water-points is controlled with careful pre-analysis with the communities and the establishment of water and catchment management arrangements.

The CRA presents a continued increase in projections of climatic shocks. The main effect of climate change on weather patterns is the increased occurrence of extreme weather events: droughts, flooding in particular. These weather shocks can have a direct impact on crops, livelihoods and damage infrastructure. The programme will promote environmentally and climate resilient CA practices, to better manage limited resources and protect soils by, among others, avoiding cultivation of water consuming varieties of crops; supporting the plantation of more trees (forest and horticulture); practicing diversified associate crop production and mulching systems; collecting local seed varieties and preservation systems; reintroducing drought tolerant varieties and less water consuming crops. Climate Risk Assessment and Management Plan (CRAMP) will back the NRLMP in each cluster to identify the main environmental and climate risks in a cluster. The CRAMP will be developed as a part of the NRLMPs development process. The CRAMP will influence the CDC/NECs at the time of developing the NR vision for the clusters. It will also highlight the climate risks to be considered (in the NRLMPs) while identifying the interventions for attaining the NR vision of the cluster or network. Each LIP will be backed by a Climate Adaptation Investment and Management Plan (CAIMP). The CLAIMPs will identify the specific climate risk and mitigation measure association with the implementation of the activities defined in each LIP.

The lack of knowledge on CC impacts and CA practices of the extension and service providers poses also a risk to programme's outcomes. To alleviate this risk, the programme will support the training for extension and research service providers, institutions staff on CC adaptation and NR governance. Training will be provided to public and private extension service providers and locality, state and federal government staff in: community-based NR governance and management and the related roles of the Native Administrations, Localities and States; appropriate investments in sustainable land and NR use; climate risk reduction and

climate change adaptation strategies; Development of land-use zoning maps and related regulations incorporating native administration; GIS; etc.

Furthermore, there is a clear risk of mis-adaptation in developing countries such as Sudan, due to lack of knowledge about climate change risks and effects of the climate variability and change and options of adaptation practices as well as the lack of research for evidence-based impacts and decision making. The SNRLP will ensure the sensitization and participatory analysis through the development of NRLMPs of the effects of climate variability and change on productive activities, water and other livelihoods and identification of mitigation practices. As mentioned earlier, LDCF investments will be in measure to increase data collection and existing data accessibility, and provide improved historical evidence, trends and possibly early warning of flood and drought episodes to be considered in NRM decision making.

The SNRLP will feature the development of natural resource and land-use management plans (NRLMPs) prepared for each system of cluster or network of villages. Risk management, adaptation and livelihood actions will be identified and mainstreamed into the different investment plans for the 5 social - ecological systems at work using natural resources available in each region: i) rangeland and livestock rearing; ii) forestland conservation and related businesses; iii) catchment and water point management; iv) cropland and climate adaptation in farming practices; v) stock routes management and livelihoods of pastoralists. These may be complemented with LIPs (Livelihood Investment Plans).

The programme uses a resilience model focused on vulnerable rural families. This model helps to define the strategies of programme interventions to support the vulnerable rural in improving the management of natural resources and adaptive capacities to climate change. The model followed in the Programme is based on an identification and grouping of factors that contribute to the households' capacities to face climate related stresses and shocks, reducing their effects and to recover quickly avoiding persistent adverse effects.

The programme will follow this resilience model in every steps of the implementation. Indeed, one of the main considerations for the approval and the adoption of the NRLMPs and NRLIPs by the CDCs and VDCs will be the extent to which they incorporate measures to promote resilience to climate change and prevent environmental degradation. The incorporation of these steps during the implementation stages will result in the sustainability of the benefits to the environment and climate change aspects.

A full Environmental and Social Management Plan (ESMP) was prepared for the Programme and is presented in the Annex 2 - "Environmental and Social Management Plan for SNRLP" attached to this document.

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.

Implementation structure of the Programme

Lead Programme Agency

The Ministry of Agriculture and Forestry (MoAF) is the lead agency. It is a member of the Inter-Ministerial Steering Committee of the IFAD co-financed projects and the chair of the SNRLP steering committee. Through these organs, it is responsible for programme and project oversight, strategic guidance and facilitation of the implementation of necessary strategic and policy decisions to enable the sustainability of the outcome of the project.

Programme management and coordination

The Inter-Ministerial Steering Committee: An Inter-Ministerial Steering Committee, is already in place and meets two times a year to oversee all IFAD cofinanced projects in Sudan. The Minister of Agriculture and Forestry (MoAF) chairs the committee. Other representatives are from the Ministry of Finance and Economic Planning (MOFEP), Ministry of Irrigation and Water Resources (MoIWR), Ministry of Animal Resources, Fisheries and Wildlife (MARFW) and the State Ministries of Production and Economic Resources (MPER) in the programme supported States. The Central Coordination Unit (CCU) for IFAD co-financed projects is included in the committee. Specifically for SNRLP, the committee will provide an enabling environment, remove bottlenecks in the policy engagement activities at the National and State levels; review and approve NR governance and management related policy and best practice recommendations emerging from the CPCU and champion the adoption of these recommendations by National and State level agencies.

National Programme Steering Committee (NPSC): The NPSC will be constituted to meet every quarter to oversee programme planning, review progress, provide strategic guidance and facilitate linkages to government services and private sector stakeholders. The undersecretary of the MoAF will chair the NPSC. Other members will be the undersecretaries of the MOFEP; MARFW; MoIWR; Higher Council of Environment (HCE) and the Forestry National Corporation (FNC). Also, the Director Generals (DG) of the MPER of the nine programme States and the senior coordinator of the CCU will be members. The NPSC will constitute a NPSC Technical Committee from within the NPSC members to serve as a standing committee empowered to meet whenever needed to resolve implementation bottlenecks that cannot be settled at the State level.

State Steering Committee (SSC): A SSC in each State will oversee planning, review progress, facilitate linkages between programme stakeholders and removing bottlenecks affecting smooth implementation. The Director General of the MPER will Chair the SSC in each State. Other members will include representatives of the technical departments of the MPER, FNC, and the Ministry of Physical Planning and Public Works (MPPPW). The SSC will also include relevant Locality commissioners, cluster representatives and representatives from the Women's Association, Pastoralists' Association and Farmers' Association. The SSC will meet on a quarterly basis. It will constitute a SSC Technical Committee from within the SSC members to meet whenever needed to resolve any programme implementation bottlenecks encountered within the State.

SNRLP implementation will be headed by a central programme coordination unit (CPCU) in Sennar assisted by a State programme coordination Unit in each of the 9 states.

Central Programme Coordination Unit (CPCU): The CPCU, located in the former premises of the SUSTAIN project in the Singa town (Sennar State), will serve as the programme headquarters and will lead overall programme implementation. The Programme Director (PD) will head the CPCU and will implement the programme through a central technical support team and a central operations support team. An internal audit team will also be located in the CPCU.

•*Central technical support team:* The central technical support team will be responsible for overall technical planning, implementation oversight, technical guidance to the SPCUs. It will comprise the Senior NRM Expert (SNRE); Senior Livelihoods Development Expert (SLDE); Senior Gender and Community Development Expert (SGCE); Senior M&E Expert (SMEE) and a Senior KM and Communications Expert (SKCE); The GEF project coordinator; The Senior NRM Expert will be the Deputy Programme Director.

Any other member of the technical team can function as the Deputy Programme Director in the absence of the SNRE.

- Central operations support team:* This team will be responsible for programme financial planning, management and control; overseeing programme procurement, contracting and contract management and staff evaluation. Also, it will develop an internal system to monitor, record and report in detail all types of contributions from community, locality and state levels. It will consist of the Financial Manager (FM), Senior Central Programme Accountant (SCPA), Senior Central Procurement Expert (SCPE) Central Procurement Assistant (CPA), Central Programme Accountant (CPA), and the Central Administrative Assistant (CAA).

- The CPCU will also deploy 3 regional programme accountants (RPA) to strengthen the capacity at SPCUs. Each regional position will be responsible for 3 SPCUs and will be based in one of these SPCUs. The allocation of SPCUs to regional staff and the SPCU where they will be based will be finalised by the Financial Manager during programme start-up. The regional staff will be paid from the CPCU programme budget, which will be responsible for oversight and support of their allocated states. The regional programme accountants will report to the Financial Manager based at the CPCU.

- The internal audit team:* A qualified Senior Internal Auditor (SIA) will be sourced from the open market and based at the CPCU. Given the large organisational structure and geographical spread of SPCUs, the services of an internal audit firm will be procured at midterm to support the SIA. The internal audit plan will cover the CPCU and SPCUs. Both the internal auditor and firm will maintain independence by reporting directly to the NPSC.

State Programme Coordination Units (SPCU): Nine SPCUs, one in each State, will lead programme implementation in the States. The nine SPCUs will be in Kassala (Kassala State), Rufaa (Gezira State), Subagh (Gadaref State), Abu Dileg (Khartoum State); Al Damir (River Nile State); Singa (Sennar State); El Obeid (North Kordofan State), Al Foula (West Kordofan State) and Al Abbassiya (South Kordofan State). The State Coordinator (SC) heading an SPCU will be assisted by a State technical support team, a State operations support team and a set of Cluster Development Teams (CDT). The composition and functions of these teams are given below;

- State technical support team:* This team will be based in the SPCU and will be responsible for technical planning, implementation, monitoring, follow-up and reporting of all State level programme activities. It will also train, guide and backstop the CDTs, YPs and LEN volunteers during programme implementation. This team will comprise the Water Resources Management Officer (WRMO); Forestry Management Officer (FMO); Rural and Agricultural Development Officer (RADO); Community Development and Gender Officer (CDGO); and the M&E, KM and Innovations Officer (MKIO).

- State operations support team:* This team will be based in the SPCU and will be responsible for all State level financial, procurement and administrative aspects of the programme. It will comprise the State Accounts Officer (SAO); State Procurement Officer (SPO) and State Administrative and Accounts Assistant (SAAA).

- The Programme Accountants at SPCU level will report directly to the respective state coordinators and via matrix management to regional accountants. The proposed structure will allow for adequate segregation of duties.

- Cluster development teams:* Each State will have 2-4 cluster development teams. Ten Cluster Development Teams (CDT) will be deployed to the Kordofan region, 8 to the Butana Region and 2 to the Sennar region according estimated number of ecosystem-based clusters in the States. The CPCU can fine tune this distribution as the time of implementation based on the actual number of clusters selected in each state. The CDTs will carry out cluster mobilisation activities through training and capacity building of groups, VDCs and CDCs; follow-up programme activities implemented at the community level; ensure inclusion of vulnerable groups, (women,youth and pastoralists) in the programme activities; mentor YPs

and young extension agents and prepare and submit cluster reports to the SPCUs. Each CDT will consist of two Cluster Development Officers (CDO), one male and one female. The CDTs will be based in the Localities close to the programme clusters. The YPs and young extension agents, will be considered as informal part of the CDTs based in the clusters or networks on voluntary basis.

•*Cluster or network procurement committee (CPC)*: Each cluster or network will form a cluster procurement committee consisting about 5-8 members drawn in a manner that all the communities are represented. The CPC will be trained in procurement and carry out all cluster or network level procurement activities with supervision from the SPCU. The CPC members will be volunteers and not paid by the programme.

Regional Policy Coordination Centers: SNRLP will establish three Regional Policy Coordination Centers (RPCC), one in each sector, to anchor the programme activities related to NR policy, laws, governance and regulations in the sector. The Gazera SPCU in Rufaa, the Sennar SPCU in Singa and the North Kordofan SPCU in El Obeid will host the SPCCs in the Butana, Sennar and Kordofan regions respectively. A Regional Policy Specialist (RPS) will lead each SPCC supported by a team of State Policy Officers (SPoO) one from each State in the sector. However, the Sennar SPCC will have a slightly different configuration with one SPO from the Sennar State and two SPOs from the neighbouring Blue Nile and White Nile States in order to ensure coordination and harmonisation of inter-state policies, laws and regulations mainly targeting pastoralists using the same stock-routes running across the three states.

Recruitment of staff: All staff members in the CPCU will be recruited competitively from the open market. All SPCU staff will also be recruited competitively. Interested Government staff can apply and get selected through the competitive recruitment process. Since project management and technical capacity staff members have remained a challenge in the Sudan country programme, SNRLP will mitigate the risk by retaining the qualified staff on the ground from previous projects. Supervision missions will assess staff capacity on a regular basis and recommend steps to address capacity gaps. IFAD has a Complaints Procedure to receive and facilitate resolution of concerns and complaints with respect to alleged sexual exploitation and abuse (SEA). For more information, visit the IFAD webpage: <https://www.ifad.org/en/documentdetail/asset/40738506>

The Central Coordination Unit of the MoAF (CCU): The CCU is based in Khartoum. It is an autonomous unit that reports to the Federal MoAF, and fulfils support services to the Programmes. The CPCU contract the CCU to undertake the following;

- Technical assistance during the start-up as needed;
- National and international procurement of goods, works and services;
- Follow-up on the budgeting of counterpart funds in the Government development budget for the year and release of funds from the MOFEP to the Programme.

Programme Supervision - IFAD will carry out the following:

- Assessment of the adherence of the Borrower and Programme management to the fiduciary requirements;
- Carry out annual supervision mission and follow up mission;
- Provision of implementation support, based on assessment of progress against agreed indicators (Programme logframe and AWPB);
- Identification of problems and reaching agreement on suitable actions with the Government for improved results on the ground;
- Assessment of Programme poverty targeting and mainstreaming of gender and youth issues with special attention to poor women.
- Facilitating self-evaluation by Programme management on their experiences in the implementation of community-based governance and management of natural resources, poverty targeting and women and youth development, and achieving sustainability and up-scaling of good practices through institutionalisation and policy adjustments and enforcement/implementation;
- Documentation of lessons learned from Programme implementation;

- Dissemination of lessons learned

The Ministry of Finance and Economic Planning

The Ministry of Finance and Economic Planning (MoFEP) is the recipient of the IFAD and LDCF grants. It carries out joint supervision missions with IFAD according to the supervision plan to assess the performance and the fiduciary aspects of the Programme. It allocates annually the Government contribution to the Programme and facilitates the exemption of duties and taxes on goods, works and services procured by the Programme.

The MoFEP will focus on the following aspects of Programme implementation:

- Progress in implementation according to the physical and result targets;
- Cost efficiency of Programme service delivery to the communities;
- Sustainability of Programme activities by assessing effectiveness of cost recovery mechanisms in place,
- Sharing and discussion of findings with the supervision missions undertaken by the Cooperating Institution.
-
- The LDCF related activities in SNLRP are fully blended in the programme to strengthen LDCF's additionality. The activities will be coordinated by the same coordination units as for SNLRP's with the support of a SNRAP project coordinator and will report on specific LDCF activities and targets. The detailed costs for the SRNLAP project coordinator is presented below. The terms of reference of the GEF project coordinator are presented in the Annex 1 ? ?Terms of reference SNRLAP? attached to this document.

Project Management and Coordination Unit Detailed Costs																
CPCU Salaries and Allowances		Unit	Quantities							Unit Cost (USD)	Total Cost (USD '000)					
			2021	2022	2023	2024	2025	2026	Total		2021	2022	2023	2024	2025	2026
Salaries	LDCF/GEF project coordinator	per annum	1	1	1	1	1	1	6	20,000	20	20	20	20	20	20
Field and Travel Allowances		per annum	1	1	1	1	1	1	6	1,500	1.5	1.5	1.5	1.5	1.5	1.5

The full SNRLAP budget is presented in in Annex 8: ?SNRLAP Budget?.

Partnerships. With regard to the cooperation and synergies with other relevant GEF-funded projects the SNRLP will develop synergies with the Sudan Sustainable Natural resources Management Project (SSNRMP), financed by the GEF and implemented by the World Bank in the Butana and the Kordofan regions. In the Kordofan region the project will also seek cooperation with the future FAO project ?Gums for Adaptation and Mitigation in Sudan (GAMS)?, which is about to be submitted to the Green Climate Fund (GCF). FAO and UN Habitat have a rich experience in land tenure governance, conflict resolution and legalizing customary institutions in Darfur that the SNRLP can learn from. Finally, FAO and the World Bank are supporting the government in the development of the REDD+ Strategy under which IFAD project beneficiaries, who has well established community forest management, could be supported in

accessing carbon benefits financing. The LDCF/SNRLAP will also collaborate with the projects under GGWSSI in Sudan, in particular with the World Bank project entitled Sudan Sustainable Natural Resources Management Project ? SSNRMP. IFAD will also partner with ICRAF on mapping the agroecological zones and developing information support tools for decision makers, and will seek collaboration and coordination with the other relevant institutions active on environment and climate change issues, such UNEP.

•Please find the implementation structure flowcharts of the Programme in the attached Annex 6 - "Implementation structure of the Programme SNRLP".

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 proposed project is in line with Sudan's National Agriculture Investment Plan (SDNAIP 2016-2020) which is a five-year investment plan which maps the investments needed to achieve the Sudan Comprehensive Africa Agriculture Development Project (CAADP). Among other objectives the SUDNAIP is expected to boost food production (SDG 2), address food and nutritional insecurity and agricultural entrepreneurship (SDG 8), and enhance sustainable land and water management practices to address climate change (SDG 13). The SDNAIP was prepared on the basis of the Five - Year Programme for Economic Reform (2015-2019). In this framework the proposed project will be aligned with the Agricultural Revival Programme and the Integrated Solutions to Agricultural Sector Programme which are currently being implemented at the national level.

The proposed LDCF project is also closely in line with recommendations of the NAPA prepared in 2007. It targets the most vulnerable groups to climate risks identified by the NAPA, the traditional farmers depending on rainfed agriculture and pastoralists. The proposed project responds to key recommendations of the NAPA for adaptation activities in agriculture and water resource management, mainly: Promote awareness of climate change and its potential impacts within government ministries, in schools and universities, and at the local community level, and; Continue to build and strengthen human capacity (training) indigenous knowledge. The proposed project is aligned with the First National Communication to UNFCCC (2003), the Second National Communication (2012) and is fully consistent with the two objectives of the National Adaptation Plan (NAP, 2016), which aim to: 1) Reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience among state- and national-level institutions; and 2) Promote the integration of climate change adaptation perspectives into existing and new policies, programmes and activities. The Intended Nationally Determined Contribution (INDC, 2015) entails intended contributions around cross-cutting issues that the proposed project will contribute to, such as: Strengthening institutional capacity at the state and federal level; Implementation of adaptation initiatives; Implementation of adaptation programmes and projects in the most vulnerable sectors and states as identified in the NAP; and: Increasing public awareness

There are synergies between the UNFCCC and the two other Rio Conventions, the UNCCD and the CBD, on issues related to sustainable land management, including food security, climate change adaptation and land degradation. These synergies will also be harnessed by this project and contribute to the achievement of the Sustainable Development Goals, including those related to poverty (SDG 1), hunger (SDG 2), water (SDG 6), energy (SDG 7), economic growth (SDG 8), climate action (SDG 13), and life on land (SDG 15).

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 overall purpose of KM is to enable the country programme to build a credible knowledge base of practical and actionable know-how that can be used to better address challenges related to the community adaptation in their governance of natural resources in Sudan.

Community Management teams will play a crucial role in liaising with Village Development Clusters to identify lessons learned and best practices from the field, collected in the form of stories from the field and/or cases studies with a specific focus on women, youth and pastoralists. Such an analysis will be carried out by promoting broad consultation process aimed to identify and address knowledge and capacity priorities, needs, gaps and solutions. On the basis of this information, ad hoc information materials and training for target groups based on needs assessments will be produced always counting on the support of the State Implementation Units (SCUs) M&E, KM and Innovation officer. The latter will transmit to the state level (Programme Implementation Unit) the lessons learned and best practices collected at the field level and will have to identify those experiences or innovations that can be potentially useful to broader audiences and use it as inputs for the preparation of Knowledge Products (KPs). The PCU M&E, KM and Innovation Officer will arrange and prepare these products for a wider sharing among all the stakeholders of current IFAD funded interventions in Sudan.

More specifically, the project's overall learning and knowledge management strategy will capture and disseminate knowledge at various levels and will focus on the following priorities: i) generating trust and fostering linkages between partners; ii) managing and sharing information, knowledge and experiences; iii) improving the effectiveness and efficiency of the private sector in adding value and innovating; iv) conducting analysis that can provide the evidence base for policy dialogue and reform; and v) creating conditions for replication, upscaling and sustainability. The project will benefit from the experience of previous IFAD projects in Sudan and in the region by identifying, analyzing, and sharing lessons learned and promoting learning tools that might be beneficial for the different stakeholders, such as ?the learning routes?.

SCUs will regularly provide the CCPU with KPs. The CPCU M&E, KM and Innovation Officer will arrange and prepare these products for a wider sharing among all the stakeholders of current IFAD funded interventions in Sudan. The reason for the choice of the CPCU as the main collector of KPs being the reliance on the dissemination tools already developed by the CPCU during the implementation of the previous IFAD funded interventions. Among this, it is worth mentioning the CCU web page already containing all the relevant information of all IFAD projects in the country (both ongoing and closed). The web page is in Arabic but includes a tab in English. It provides detailed information about IFAD funded programmes, it holds studies and reports on topics which are relevant to IFAD programmes domains of intervention and includes a special section on procurement. Finally, a further page is fully dedicated to videos and stories form the field.

To increase the visibility, a specific hyperlink to this web should be added in the IFAD intranet page covering operations in Sudan. This action should be carried out in close liaise with NEN KM focal point in Rome by the first of year of implementation. Also, an online forum linked to this web page should be set up: access to it by potential members should be granted by the CPCU M&E, KM and Innovation officer. The forum has to promote the exchange of ideas and comments on NRM related issues and attempt to establish a thematic network involving a broad audience of stakeholders dealing with/interested in community management of natural resources. These stakeholders can be based not in Sudan, but also in other countries. This will allow the promotion of a lively debate and a wider sharing of experience referring to this domain. The idea is to gradually capture the attention not only of IFAD projects traditional stakeholders but also of any professional engaged and active in this sector.

The forum should be regularly monitored by the CPCU M&E, KM and Innovation Officer who should also promote the debate over specific issues at least twice a month and who will be the moderator of the network.

Also, the possibility to open a specific Facebook page for SNRLP should be explored in the first phase of programme implementation. Access to the page will be granted by the CPCU M&E, KM and Innovation

Officer after a careful check of the identity and of the genuine interest in the topic by the person asking to join the community. Also in this case, a close collaboration with the NEN KM officer based in Rome should be envisaged. The latter could advise the CPCU M&E, KM and Innovation officer also about the possibility to establish linkages with other ongoing knowledge platforms such as FIDAFrique-IFADAfrica and IFADAsia.

Another task which should be regularly performed by the CPCU M&E, KM and Innovation officer refers to the promotion of specific learning events to the benefit of the project teams in the nine States such as project learning days: this will allow all the participants to get training on specific issues, but also to have the possibility to interact and exchange ideas and experiences on a regular basis. Documentation containing the main points arisen during these events should be produced shortly after their implementation, distributed among participants and but also shared at a wider level with all relevant stakeholders.

The LDCF/GEF project coordinator will work closely on KM with the Programme Senior KM and Communication Expert, specifically on the SNRLAP results. The budget of the KM is essentially covered by the SNRLP through the funding of the Senior KM and Communication Expert, the nine M&E, KM and Innovation Officers (under SNRLP component 3) and the training packages for locality, state, and federal government staff on M&E, KM, Legislations, etc. (under SNRLP component 2).

The LDCF will particularly support the capitalization, valorization and dissemination of indigenous knowledge to address climatic stress. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums.

Specific costs related to Knowledge management, apart from the Programme staff costs, are extracted from the COSTAB of the Programme and are presented in the in Annex 8: 'SNRLAP Budget?', sheet 'KM' with a table in USD. All the activities described in the Annex are under the IFAD co-financement.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The M&E system will be established and managed by the CPCU and the SCPU with support from IFAD in accordance with established IFAD procedures. It will be built around the set of selected indicators outlined in the logical framework taking into account key IFAD corporate indicators and project specific indicators. The CPCU will have the overall responsibility for M&E and follow a participatory approach. The Senior M&E Expert at CPCU will be responsible for the proper functioning of the overall M&E system and will guide the deployment of the M&E system at the SPCU level. The person will also be responsible for oversight of the data collected and consolidation of the data from different states. Standardized data collection formats will be designed based on which the YPs, young extension agents, VDCs and the CDC/NECs will collect data about programme performance in the cluster or network levels. The CDOs will validate the results and submit the reports to the SPCU where the M&E, KM and Innovation Officer will consolidate and report the results to the CPCUs for programme level consolidation and reporting against the logframe indicators and preparation of monthly and semi annual reports submitted to IFAD.

Development and the continuous update of the M&E Plan is the responsibility of the CPCU M&E, KM and Innovation Officer in close liaison with the SCUs M&E, KM and Innovation Officers. The plan must provide, as a minimum: i) information on the programme's objectives, ii) the activities that will be carried out to achieve these objectives and the procedures that will be implemented to determine whether or not the objectives are met. The plan must show how the expected results of the programme relate to its goals and objectives, to the Logframe Indicators and to the Theory of Change of the Programme. It must identify: i) which type of data is needed; ii) how this will be collected and analyzed; iii) how this information will be used; iv) the resources that will be needed for M&E and; v) how the programme will be accountable to stakeholders.

Outputs from M&E activities must inform the CPU, the International Fund for Agricultural Development (IFAD), the Government of Sudan (GoS), and all key stakeholders on programme progress towards

achieving the development objectives as well as indicate the impact that the project is having on the target groups.

The cornerstone of the M&E is the logframe. The latter articulates the Theory of Change (ToC) of the project. The Theory of Change is a roadmap, providing a pathway of outputs and outcomes leading to the achievement of the programme development objectives. Any M&E arrangement made should be in line with the main log frame requirements.

In accordance with the participatory approach adopted by the programme, also M&E system (understood as a coherent set of IT tools, M&E methods, key M&E staff) will foster the participation of stakeholders, not just as sources of information, but as active participants in checking the progress over the attainment of the Programme development objectives.

The M&E system is supposed to provide at any time of the implementation the following information:

- the use of Programme resources
- the eventual problems in achieving Programme objectives, expected outcomes and targets;
- the compliance during the implementation with the Programme's targeting strategy.

The ultimate responsible for the proper functioning of the overall M&E system of the Programme is the M&E, KM and Innovation Officer at CPCU. She/he will be the main responsible for: a) the monthly and the semi annual Progress Reports, ii) the compliance with the ORMS indicators, and iii) the consolidation of the data transmitted from the SCUs into the main logframe. She/he will also responsible for ensuring the quality of these data by: i) checking the sources of information used, ii) the appropriateness and the trustworthiness of the data collection methods employed; iii) the adherence and consistency with the indicators proposed in the main logframe. She/he will be also the main responsible for the continuous entry and update of the logframe information in the ORMS.

At the start up, she/he will meet with all the M&E, KM and Innovation officers to establish the Participatory Monitoring and Evaluation system (PM&E). She/he will explain the log frame results hierarchy and Theory of Change, the indicators used and their main disaggregation dimensions. She/he will devote particular attention to clarify the role of the CIs and the necessity to have sound information to report against the latter.

During latter Start up, the reason why the M&E system is a key tool to achieve the established targets and to ensure the regular and the detailed reporting against the selected indicators will be set out. Moreover, the M&E, KM and Innovation Officers will stimulate an in depth discussion about the most effective data collection methods to be used within the communities. On the basis of the outcome of this discussion, she/he will identify - in close connection with CM teams- the most appropriate tools and techniques for data collection (e.g focus groups, community surveys, interviews, observations) at the field level which will be employed in the framework of the programme. Such a participatory approach will be used to maximum extent possible also in the phase of data analysis: the latter should be an opportunity to actively involve various categories of programme stakeholders in the critical examination of successes and constraints and, wherever, possible in the formulation of conclusions and lessons learned.

The Programme staff will report to IFAD during the whole Programme's lifespan. Monthly report: The SPCUs will prepare monthly status reports with quantitative information on progress against the planned targets. The status report will include technical reports prepared by the technical officers in the SPCUs. The SPCUs will submit these reports to the CPCU Director for review no later than five (5) working days after the end of the month. Semi-annual progress reports: The CPCU will develop semi-annual Progress Report based on the monthly reports received from the SPCUs and submit these reports to IFAD no later than forty-five (45) days after the end of the period. The Senior M&E expert in the CPCU will be responsible for the preparation of the semi-annual reports. Semi-annual M&E reports will be updated prior to IFAD supervision missions. Updates to the progress on IFAD Logframe Core Indicators (CIs) will be provided during supervision missions and at any other time as requested by IFAD. The same process will be followed for the GEF indicators selected in the Tracking Tool Climate Adaptation Result Framework, directly through the tracking tool at MTR and Completion and through the PIF annually. Furthermore, the

Senior M&E Expert together with the LDCF/GEF project coordinator will ensure that the annual monitoring of SNRLAP progress toward its development objective/outcomes and implementation are reflected in the Project Implementation Report (PIR).

Furthermore, **on annual basis the Procedures for preparation and approval of the Annual Work Programme and Budget (AWPB)** will involve all stakeholders of the project. The AWPB coincides with the GoS annual budget period from January to december. The AWPB will be prepared by the States by using a participatory approach. The SPCU M&E KM and Innovation officer, assisted by the Water Resources Management Officer, Forestry Management Officer, Rural and Agriculture development officer, Community Development and Gender Officer, the Finance Officer and the Procurement Officer, will organize consultation sessions with the respective Community Management (CM) teams to discuss ongoing activities, challenges being faced (including potential solutions) in the implementation and the outlook for activities to be implemented during the upcoming Programme year. This information, along with the overall Programme targets, is used to identify the outputs to be achieved, the activities to be implemented and the resources (financial, technical assistance and other) that are required to achieve the planned outputs during the new work plan period. Since the programme is adopting a participatory approach also in relation to planning, arrangements for a timely and preliminary groundwork will be made so as to allow all the stakeholders to actively participate in this process. The reason for this being the necessity to ensure that the planned activities not only effectively address the issues being faced in the field but also foster stakeholders' ownership.

Baseline studies: Baselines will be carried out only in those areas which were not previously covered by IFAD-funded interventions. For all the other areas, data available from impact studies and PCRs will be used. If needed, researches will be carried out to investigate aspects which are relevant for implementation, but not reported by previous IFAD interventions documentation. An initial baseline assessment, conducted in the first few months after project start by a qualified service provider in a representative sample of communities within the targeted localities, will provide the reference data for later comparison and target measurement. At inception, the CPCU will review and update the Logical Framework during start-up workshops with the participation of representatives from all stakeholder groups, prepare the Overall Work Plan & Budget and the first Annual Work Plan & Budget (AWPB). Thereafter, the PMU will prepare each year a consolidated AWPB incorporating the State AWPBs generated by State Coordination Units and submit it in advance of the GoS annual budgeting process to ensure that sufficient counterpart funds are made available. The M&E system will be established including formats and assigned roles for data gathering using the Logical Framework as a basis and will generate comprehensive and reliable information to support planning and decision-making for results-based project management. The system will be participatory, decentralised, and compliant with IFAD requirements, and relevant data, analysis and reporting will be disaggregated by gender and age. The gathered data will inform the preparation of above mentioned AWPBs and annual progress reports, reporting on: i) Physical progress made in achieving the targets; ii) Financial progress; iii) Number of beneficiaries disaggregated by gender and socio-economic groups; iv) beneficiary assessment of the project activities; v) Failure and success stories; and vi) Constraints and problems from the previous year and how to address them.

For later impact measurement, post implementation evaluation studies will be carried out by a contracted independent body under the overall responsibility of the State cadres. A final impact evaluation will be commissioned from an independent service provider at the end of implementation.

The SCU M&E, KM and Innovation officer will be responsible to consolidate information gathered during this phase (data collection and analysis) and to send it to the CPCU, where the M&E, KM and Innovation officer will analyze and use it to report against the main logframe indicators as well as to inform the monthly and semi annual reports to be submitted to IFAD.

As already mentioned in the chapter devoted to planning, the SCU M&E officers will constantly backstop the CM teams in their monitoring activities by undertaking monthly field visits aimed to identify the main issues arising during the implementation

M&E system and instruments

The costs related to the M&E and knowledge management was designed to be entirely under the co-financing part of IFAD for SNRLP and not under GEF, as presented in this section. The plan is presented

here for the whole Programme since GEF is fully blended within SNRLP. Having two M&E systems would duplicate work and create issues during implementation. The SNRLP M&E officer and team will work closely with the GEF Project coordinator to report on GEF activities as presented in the proposal. Furthermore since GEF activities are fully blended in the Programme, the specific technical experts for supervisions, MTR and TE (i.e. on Climate Change and Environment) funded under IFAD co-financing will also report on the GEF.

Within the first three months of the Programme, the CPCU M&E, KM and Innovation Officer must develop the required specifications for a Management Information System (MIS), which will be instrumental in the data collection and analysis as well as in their reporting. The MIS must incorporate mobile and internet technologies which can make the data collection and the dissemination of results easy and readily accessible. The MIS must have sufficient tools (information dashboards, charting tools, and custom reports) for data review, analysis and dissemination. The CPCU Director will closely work with the M&E, KM and Innovation Officer to procure a consultant/firm to develop and implement the MIS.

The LDCF/GEF project coordinator will work closely on M&E with the Programme Senior M&E Expert, specifically on the SNRLAP activities and reporting to the LDCF/GEF and IFAD through the Project Implementation Reviews (PIRs) and the monthly and semi-annual progress reports. The budget of the M&E is essentially covered by the SNRLP through the funding of the Senior M&E Expert, the nine M&E, KM and Innovation Officers (under SNRLP component 3), sessions per State to constitute and capacitate multi-level task forces for following, evaluation and monitoring of the agreed upon issues during the forums and, finally, the training packages for locality, state, and federal government staff on M&E, KM, Legislations, etc. The table below presents the M&E plan with the type of M&E activities, the responsible parties, the time frame and the estimated costs supported by the Programme and the agency fees.

Table: Monitoring and Evaluation Plan

Type of M&E activity	Responsible parties	Time Frame	M&E Programme budget (USD) ? IFAD co-financing	GEF Agency fee
Project Start up Workshop	Under the guidance of the CPCU staff a special session on M&E system will be organised to brief participants about the Project Logical Framework, progress reporting and evaluation arrangements.	The workshop will be conducted at the onset of the Programme to present the steps for AWPB preparation as well as the M&E system.	37,100	Participation of Agency staff and consultants, review and oversight M&E Plan consultation and review

Preparation of Annual Work Programme and Budget (AWPB)	<p>The CPCU will, with the participation of representatives from all stakeholder groups, prepare the Overall Work Plan & Budget and the first Annual Work Plan & Budget (AWPB).</p> <p>Thereafter, the PMU will prepare each year a consolidated AWPB incorporating the State AWPBs generated by State Coordination Units and submit it in advance of the GoS annual budgeting process to ensure that sufficient counterpart funds are made available. The AWPB will be prepared, among others, on the basis of the activity in Subcomponent 2.1: ?Presentation of findings of reviews in multi-stakeholder platforms at Sector, State and Federal levels and make recommendations? for the amount of USD 140,000.</p>	Annually	0	Oversight, review, reporting through GEFSEC
Baseline and impact studies	<p>In close liaison with the SCUs M&E, KM and Innovation officers, the CPCU M&E, KM and Innovation Officer is responsible for developing the Terms of Reference for the conduct of the Baseline Studies. Then, bidding processes will be launched to select the subject (academic institution, external consultancy firm, etc) which will undertake the research.</p>	Baseline, Mid-term, Completion	15,900	Oversight, review, reporting through GEFSEC
Baseline mapping and assessment of environmental governance and Climate change in project areas	CPMU/CCU	Baseline	60,300	Oversight, review, reporting through GEFSEC

Develop KM Strategy and Communication Strategy	SCUs M&E, KM and Innovation officer. Reporting to Agency on project-specific results Support knowledge products/events	At Programme Start up During project implementation	5,300	Guide the approach Deliver knowledge products/ events
Refine and update the PIM	IFAD with CPCU, SPCU and Govt.	At Programme Start up	5,300	Oversight, review, reporting through GEFSEC
Annual Review and Planning Workshop	External auditors. Supporting documentations for the Statements of Expenditures must be maintained by the CPCU and made available for review by IFAD supervision missions upon request and to external auditors during their annual review of Programme accounts to enable issuing of an independent audit opinion.	Annually	40,000	Oversight, review, reporting through GEFSEC
Mid Term Review	External review led by IFAD with CPCU, SPCU and Govt. The CPCU Director is responsible for coordinating the activities of the MTR, including developing the schedule for field visits, meetings with stakeholders and meetings with the PMU Staff Members. Each SCU will be responsible for preparing progress reports on their respective areas and to make themselves available to the MTR Mission to ensure that MTR achieves its objectives. IFAD will provide technical experts to review GEF activities.	A Mid-Term Review (MTR) will be carried out three years after programme startup.	44,800	Oversight, review, reporting through GEFSEC
Project Completion Report Independent Terminal Evaluation (TE)	The programme completion review is a process undertaken by the Government of Sudan in close coordination with IFAD. IFAD will provide technical experts to review GEF activities. Lead the preparation of a completion report and assist the preparation of the TE Undertake terminal evaluation (independent consultants and their travel)	At the end of the implementation cycle in order to report on the results achieved through programme interventions.	6,500	Oversee preparation of Terminal Evaluation via the Agency's own IEO) and submit to GEF IEO and GEFSEC

Supervision by CPCU, SPCU, IFAD and Govt.	<p>Will be organized by IFAD's Country Director (CD) in coordination with the Government, the Lead Programme Ministry, the CPCU and the SPCU.</p> <p>Updates to the progress on Logframe Core Indicators will be provided during supervision missions and at any other time as requested by IFAD.</p> <p>Reporting to Agency on identified risks and impact, and management.</p> <p>IFAD will provide technical experts to review GEF activities.</p>	Supervision Missions will take place at least once per year.	80,100	IFAD's supervision costs are financed by the fee
Annual Audit	The National Audit Chamber (NAC) will conduct the annual audit.	<p>IFAD generally requires an annual audit of Programme financial statements.</p> <p>However, the frequency of the audit may be changed by IFAD as a function of the Programme's risk profile. In all instances, IFAD will confirm the frequency with which SNRLP's financial statements are to be audited. The audit reporting period may be amended for the first and/or final audits</p>	56,100	

Management Information System M&E of Core Indicators and project results framework	The CPCU Director will closely work with the Senior M&E Expert to procure a consultant/firm to develop and implement the MIS. Reporting to Agency on progress, provision of information for the MTR and TE updates	Within the first three months of the Programme, the CPCU Senior M&E Expert must develop the required specifications for a Management Information System (MIS), which will be instrumental in the data collection and analysis as well as in their reporting.	92,100	Oversight, review, reporting through GEFSEC
Monthly report	SPCUs will prepare monthly status reports with quantitative information on progress against the planned targets.	Monthly	0-	Oversight, review, reporting through GEFSEC
Semi-annual progress reports	The CPCU (M&E officer) will develop semi-annual Progress Reports based on the monthly reports received from the SPCUs and submit these reports to IFAD no later than forty-five (45) days after the end of the period. Semi-annual M&E reports will be updated prior to IFAD supervision missions.	Every 6 months	0-	Oversight, review, reporting through GEFSEC
Project Implementation Reviews (PIRs)	IFAD will prepare and submit an annual PIR to the GEF Secretariat. The GEF Project Coordinator will initiate preparation of the PIR.	Carried out annually	0	Review, finalization and reporting through GEFSEC
TOTAL			443,500	

10. Benefits

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

By improving climate resilience of the targeted communities and households, the LDCE is expected to generate and improve rural income from a range of on-farm and off-farm NR related enterprises. The

LDCF will empower local communities to promote good local practices and support farmers to build resilience against climate change. The main sources of quantified adaptation benefits are: (i) empowered local communities adopting good practices including climate smart agriculture; (ii) capacitated farmers with resilience against climate change and (iii) resilient incremental crop/tree production; and (iv) improved institutional framework for up scaling community based NRM in the programme area. Other benefits arising from the LDCF include the sustainable development of natural resources (rangeland and forests), gender equity and women involvement within the communities, greater community participation, better nutritional status and human health from the improved water management and increase milk production and animal weight from improved range management practice.

In total, 99,200 people will benefit directly from the LDCF. The LDCF will support community mobilization and Natural Resources Management (NRM) planning through the creation of 150 cluster/network with Natural Resources and Land-Use Management Plans (NRLMP) with Climate Change Adaptation mainstreamed. It will enable 72,000 persons (including pastoralists, agro-pastoralists, 50% women) to build resilience to Climate Change by improving their management of natural resources, giving ownership and reducing dispute over use of land and natural resources. Community mobilisation around land-use mapping, formalising access and user agreements, and joint rehabilitation and management of shared resources may reduce conflicts and increase benefits for all users comprising pastoralists, agro-pastoralists, smallholder crop farmers, women and youth.

The SNLRAP will also support cropland and climate adaptation in farming practices. 20,000 women and 7,200 vulnerable people will be supported to improve their livelihoods by sustainably managing NR and climate risks through training and construction of Jubrakas. As a result, a total of 2,850 ha area of land will be managed for climate resilience.

The expansion of existing early warning systems to SNRLP beneficiaries will improve the adaptation planning. It will strengthen the NR legal and policy framework at national and regional level. It is expected that at least 10 policies-relevant frameworks, decision supporting tools or knowledge products will be completed.

As a part of the exit strategy and to ensure sustainable adaptation benefits from the LDCF, the programme will support the community institutions to mobilise local (from programme activities) and external financial resources to continue the benefits to the communities even after the programme. The community institutions will be trained to mobilise resources through: i) self-generation of internal capital from the different types of livelihood enterprises; ii) generation of membership and user fees for use of common NRs by users; and iii) participation in the planning and allocation of government resources for the NR development activities the programme areas. Furthermore, the networks that will be created and the continuous exchanges (i.e. knowledge and goods) between the communities will make them more resilient to Climate Change on the long term.

In addition, the baseline SNLRP (IFAD co-financing) will have several socio-economic benefits as well as adaptation benefits: Around 84,000 HH (70%) will adopt environmentally sustainable and climate resilient technologies bringing 200,000 ha of land under climate resilience management. Felling of 40,000 trees will be prevented and USD 0.68 million will be saved by adoption of gas stoves by 10 000 HHs. Water availability to communities will be extended by 4 to 6 months per year during dry season through the construction/ rehabilitation and sustainable management of 242 hafirs, water points and other water harvesting structures, combined with rangeland management to avoid vegetation and land degradation around the water structures. Communities will earn USD 3.1 million net income from selling water in 6 years. At least 8,000 livestock heads will gain weight by access to 40 tons of fodder produced by 9,000 HH, construction of 300 fodder storages, 5 mobile animal health clinics and services from 450 trained community animal health workers. Project supported activities will produce net income of USD 71.1 million and increase the earnings of 84,000 HH (70%). At least 560 youth will find jobs as employees in new youth businesses. At least 10 public institutions at the federal, state and locality level will implement improved NRM related regulations and policies. At least 10 policies-relevant frameworks, decision

supporting tools or knowledge products will be completed and 500 government staff members will be trained on climate change (CC) adaptation and NR governance.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			

Measures to address identified risks and impacts

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

See Annex 2 - "Environmental and social management plan for SNRLP"

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex 2 REV- Environment and social management plan for SNRLP-18Apr21	CEO Endorsement ESS	
Annex 2 REV- Environmental and social management plan for SNRLP	CEO Endorsement ESS	

Title	Module	Submitted
Annex 2 - Environmental and social management plan for SNRLP	CEO Endorsement ESS	

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

See SNRLP logical framework presented in Annex 3 - SNRLP logframe. Furthermore see attached Excel file ?Tracking Tool Climate Change Adaptation Results Framework? for specific GEF results.

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).

Sustainable Natural Resource and Livelihood Adaptive Programme (SNRLAP) response sheet from the GEF.

PIF

Part I ? Project Information
Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

Secretariat Comment at PIF/Work Program Inclusion

The project is aligned with LDCF's CCA objective 1 of improving resilience of highly vulnerable people in conflict affected areas through access to new technologies and practices for climate change adaptation. The project will also contribute to objective CCA 2 regarding climate change mainstreaming with its focus on climate compatible natural resource management plans and livelihood investment plans. The ecosystems based approach followed in the MSP also aligns with broader integration approach of GEF 7 programmatic directions.

1. However, in the section 4 of part II, the MSP indicates alignment with CCA 3 which is more specific to NAP and UNFCCC related processes. This is also inconsistent with the Table A in part I. The agency is requested to review this.

2. The MSP indicates that the target region sees increasing conflicts on land use between farmers and pastoralists. Will the project address the conflicts issues directly under the program? If yes, please elaborate. The risk table mentions a conflict resolution mechanism. Will this factor in climate change aspects? The LDCF strategy has an entry point on climate risk and security to improve resilience of vulnerable people. The proposed MSP can potentially address this aspect of the programming directions too if focused well.

Agency Response

1. This has been revised in the PIF document section 4 ?Alignment with GEF focal area and/or Impact Program strategies?.

2. Included at the end of the section 3.1. ?The Sustainable Natural Resources and Livelihoods Programme (SNRLP)?.

Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

Secretariat Comment at PIF/Work Program Inclusion

The component 1 is clear and linked with the program objectives and indicators.

1. The focus of component 2 is on strengthening legal, policy and institutions for scaling up climate NRM. Within this it is not clear how strengthening early warning system fits. Possibly, it could be more relevant under output 1.2 as early warning could support implementation of climate smart agriculture and livelihood plans.

2. Both the components are classified as technical assistance. Under component 1, the MSP proposes to support access to finance to implement NRM and livelihood options. It is not clear if the investment needed for such implementation is already available or will the project explore opportunities for such finance. In the case of latter, how will the project address any uncertainties regarding the availability of the other fund.

3. This is important to elaborate as some of the key indicators such as 794000 ha of resilient land management and 84,000 beneficiaries will be dependent on this additional finance. Will the project itself invest any of the GEF resources directly in any NRM related activities?

4. The outputs propose a wide range of interventions from climate smart agriculture to IPM to biogas and solar irrigation and aquaculture. Will the project be able to support such a wide ranging intervention and are there finances available to support implementation of these interventions?

5. The output 1.1. and 1.2 have some overlaps. Output 1.1 mentions formulation of NRLMPs and also Livelihood Implementation plan. 1.2 also mention livelihood implementation plan formulation.

6. Under component 2, the focus is primarily on governance, policies and regulations. However, the activities under 2.1 is mainly on early warning systems. The output 2.1 title is not consistent with the detailed activities. Please review this. Also, please elaborate on how the project will support legal frameworks? Which laws or regulatory provisions will the project influence for enhanced resilience of vulnerable communities. Having a separate outcome on improved institutional capacity to assess climate risks through EWS may be more relevant.

The MSP may like to review the project components and its outputs, consolidate the interventions appropriately and make the project focus more clear.

Agency Response

1. Changes have been made in the PIF document, section 3.2 ?The added value of the LCDP? ?
?Output 2.1? to give a clearer link with strengthening legal and policy framework.

?The LCDP project will strengthen the existing Early Warning System (EWS) infrastructure in Sudan as a major element of disaster risk reduction. The aim of the activity is to directly support the participatory review of land and NR governance policies and frameworks by getting a clear picture of the vulnerability of the different pastoralist and other agricultural zones, as a tool for negotiation and sustainable solutions. The component will establish an institutional structure for a comprehensive multisector and multilevel consultation and discussion process. The LCDP activity, in order to support this process, will gather essential data and will document them to serve as knowledge base for the formulation of focused strategies and revision of policies and regulations.?

2. The co-financing SNRLP, for which funding has already been approved by the IFAD Board of September 2019, will ensure partnership with Microfinance Institutions: SNRLP will select partnering financial institutions (PFI) that are ready to provide access to credit to beneficiaries to help them meet the beneficiary contribution needed to access seed capital financing. SNRLP will offer seed capital support for start-up NR based MEs in collaboration with PFIs. The share of the PFIs will be very limited at the beginning and increase gradually to support the growth and scaling up of the MEs. Building on experiences and partnerships achieved in other IFAD supported projects, SNRLP will select partnering financial institutions (PFI) and facilitate beneficiaries' linkages to them so they can eventually meet their beneficiary contribution through access to credit. The SNRLP will provide training and capacity building support to the PFIs as well as support to develop their infrastructure and reduce the cost of delivery in the programme villages.

3. Yes, the GEF resources will mainstream resilience to climate change in 150 Natural resource and land-use management plans (NRLMPs), will ensure the establishment of 27,200 Jubraka and will cover the expansion of existing early warning systems to SNRLP beneficiaries. As stated above, IFAD's own funding for the SNRLP has already been approved by the IFAD Board.

4. Yes, the activities under the different ranging intervention have been budgeted in the COSTAB of the SNRLP (e.g. Small start-up input packages for PFS livelihood activities, Private sector support to gas stoves, post-harvest support for crop transformation and storage, environmental conservation, etc.).

5. Yes, the titles of the outputs are quite similar but Output 1.1 covers the support to the development of the plans by the integration of the CC (aspect plan) and Output 1.2 is the implementation of those plans and the technical assistance.

6. Detailed activities reviewed in the PIF in ?Output 2.1 - Added value of the LCDF?

Co-financing

3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?

Secretariat Comment at PIF/Work Program Inclusion

\$63 million grant co-finance from IFAD is proposed. This is aligned with co-financing policy and guidelines. More details of this co-finance will be useful.

Agency Response

See more details of the IFAD co-financing in PIF 3.1. ?The Sustainable Natural Resources and Livelihoods Programme (SNRLP)?

GEF Resource Availability

4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

The STAR allocation?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

The focal area allocation?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

The LDCF under the principle of equitable access

Secretariat Comment at PIF/Work Program Inclusion

Yes. The resources are in line with the LDCF allocation to Sudan.

Agency Response

The SCCF (Adaptation or Technology Transfer)?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

Focal area set-aside?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

Impact Program Incentive?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

Secretariat Comment at PIF/Work Program Inclusion

Yes.

Agency Response

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

Secretariat Comment at PIF/Work Program Inclusion

The agency is requested to attach the LDCF-SCCF results framework and fill out the core indicators. To avoid double counting, please remove the indicator targets (3,4,11) on the portal. These indicators are for GEF Trust fund projects only.

Agency Response

Done

Project/Program taxonomy

7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?

Secretariat Comment at PIF/Work Program Inclusion

Yes

Agency Response

Part II ? Project Justification

1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?

Secretariat Comment at PIF/Work Program Inclusion

The climate vulnerability of the target region is very well described using scientific evidence. The barriers are also elaborated well.

Agency Response

2. Is the baseline scenario or any associated baseline projects appropriately described?

Secretariat Comment at PIF/Work Program Inclusion

The baseline projects are described in details and their links with the proposed project is also clearly explained.

Agency Response

3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

Secretariat Comment at PIF/Work Program Inclusion

The components are elaborated well. However, please refer to comments in previous section regarding alignment of activities within each components. Especially under component 2, the activities under 2.1 are more related to early warning system and related support which are not linked directly with strengthening legal and policy framework.

The two components are understood as- a) support to community groups in integrated NRM and livelihood planning factoring in climate risks and b) strengthening institutional capacity to better assess climate risks through EWS and strengthened GIS.

How the project will strengthen legal and policy aspects related to NRM planning and climate resilience is not clear?

Agency Response

Changes have been made in the PIF document, section 3.2 ?The added value of the LCDP? ? ?Output 2.1? to give a clearer link with strengthening legal and policy framework.

?The LCDP project will strengthen the existing Early Warning System (EWS) infrastructure in Sudan as a major element of disaster risk reduction. The aim of the activity is to directly support the participatory review of land and NR governance policies and frameworks by getting a clear picture of the vulnerability of the different pastoralist and other agricultural zones, as a tool for negotiation and

sustainable solutions. The component will establish an institutional structure for a comprehensive multisector and multilevel consultation and discussion process. The LDCF activity, in order to support this process, will gather essential data and will document them to serve as knowledge base for the formulation of focused strategies and revision of policies and regulations.?

4. Is the project/program aligned with focal area and/or Impact Program strategies?

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

Secretariat Comment at PIF/Work Program Inclusion

Yes. the additional cost reasoning is described well. The paragraph on LDCF value add explained under baseline could be actually inserted under this section.

Agency Response

The following paragraph (at the end of section 2. baseline) was edited and is recalled in introduction to section 3.2 added value of LDCF.

The BAU scenario leaves significant adaptation gaps unaddressed. The danger is to reach contradictory results due to fragmented approaches. Because of the different sectoral and thematic approaches taken by the projects, climate change adaptation is not being addressed in a holistic and integrated way as a general constraint affecting all the regions. There is thus clearly a need of a more integrated approach. The proposed alternative will be supported by the LDCF and the Sustainable Natural Resources and Livelihoods Adaptation Programme (SNRLAP) that will provide IFAD co-financing.

6. Are the project?/s/program?s indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?

Secretariat Comment at PIF/Work Program Inclusion

1. Please use the LDCF-SCCF results framework to report on indicators and targets. The format was shared by the GEF Secretariat. For LDCF project, please do not fill the core indicators in the portal as these are for GEF trust Fund projects only.

2. In terms of target contributions, the results are quite high for the MSP. While we acknowledge that the proposed project will blend with the existing co-finance, the Secretariat would prefer indicators and targets specific to LDCF financing only.

Agency Response

1. Noted.
2. Done.

7. Is there potential for innovation, sustainability and scaling up in this project?

Secretariat Comment at PIF/Work Program Inclusion

The innovation aspect of the project is well explained. Integrated approach, working through village networks and innovative technologies for alternate livelihoods are clear innovation aspects of the project.

The agency is requested to elaborate a bit more on the project sustainability and scaling up potential.

Agency Response

Paragraphs added in the PIF in the section ?Innovation, sustainability and potential for scaling up?

Project/Program Map and Coordinates

Is there a preliminary geo-reference to the project?s/program?s intended location?

Secretariat Comment at PIF/Work Program Inclusion

The map is not visible in the portal. The agency is requested to upload again.

Agency Response

Stakeholders

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?

Secretariat Comment at PIF/Work Program Inclusion

The MSP has listed relevant stakeholders which will be engaged in the project going forward.

The MSP needs to include information related to consultation that took place during project identification phase.

Agency Response

Added in the document in the section 7) 2. ?Stakeholders?.

Gender Equality and Women?s Empowerment

Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?

Secretariat Comment at PIF/Work Program Inclusion

The gender context is elaborated well.

Agency Response

Private Sector Engagement

Is the case made for private sector engagement consistent with the proposed approach?

Secretariat Comment at PIF/Work Program Inclusion

Yes. The opportunities to engage with the private sector is described well.

Agency Response

Risks

Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?

Secretariat Comment at PIF/Work Program Inclusion

Risks are captured well. The agency is requested to elaborate on the conflict resolution mechanism to address conflict related risks and also describe how it will be integrated with the proposed NR and Livelihood planning processes.

Agency Response

Please see the last part of the Section 3.1 "The Sustainable Natural Resources and Livelihoods Programme (SNRLP)".

Coordination

Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?

Secretariat Comment at PIF/Work Program Inclusion

The institutional arrangement is elaborated for the entire SNRLP project. It would be good to explain how LDCF related activities will be coordinated.

Agency Response

Paragraph added in the PIF in the section "Coordination".

Consistency with National Priorities

Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?

Secretariat Comment at PIF/Work Program Inclusion

Yes. The project's alignment with the national policies and priorities is quite strong.

Agency Response

Knowledge Management

Is the proposed ?knowledge management (KM) approach? in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project?s/program?s overall impact and sustainability?

Secretariat Comment at PIF/Work Program Inclusion

Yes. The project's objectives related to knowledge management is described well. However, it doesn't mention how the knowledge management activities will be carried out under the project. The agency, therefore, is requested to elaborate on the "how" part of the knowledge management approach.

Agency Response

The section 8 ?Knowledge Management? has been revised accordingly.

Part III ? Country Endorsements

Has the project/program been endorsed by the country?s GEF Operational Focal Point and has the name and position been checked against the GEF data base?

Secretariat Comment at PIF/Work Program Inclusion

The endorsement letter is attached and signed by the current OFP.

Agency Response

Termsheet, reflow table and agency capacity in NGI Projects

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

Secretariat Comment at PIF/Work Program Inclusion

NA

Agency Response

**GEFSEC DECISION
RECOMMENDATION**

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

Secretariat Comment at PIF/Work Program Inclusion

Not at this stage. The agency is requested to address the comments and re-submit the MSP.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion

Review Dates

Agency Response

First Review

Additional Review (as necessary)

Additional Review (as necessary)

Additional Review (as necessary)

Additional Review (as necessary)

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

There is no PPG request.

ANNEX D: Project Map(s) and Coordinates

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

Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.
 Final status of the Abyei area is not yet determined.
 Map compiled by IFAD | 31-05-2019

ANNEX E: Project Budget Table

Please attach a project budget table.

SNRLAP LDCF Project's Budget

SNRLAP LDCF Project's Budget (USD '000) *																						
Expenditure Category	Detailed Description	IFAD				Unit cost (USD '000)	GEF												Component 1			
		IFAD Grant	IFAD Loan	M&E	Unit		2021	2022	2023	2024	2025	2026	Total	GEF co-financing (%)	Total GEF cost (USD '000)	Component 1		Component 2		PMC	Total GEF	Total financing
Civil Works	Total GEF and Co-financing	8 250	2 050													1.1	1.2	2.1	2.2			
Consultancies	Total GEF and Co-financing	5 095	1 261	444												350		311			661	
	National consultants to develop NRLMPs with communities and registration /authorization of community forests; hema; community range enclosures.	-	-		plan registration	12.09	30	45	60	15			150	15	272							
	Consultancies for setting up the Early Warning System	-	-		man-month	1.04	80	70					150	50	78	350					350	
	Project Start up Workshop			37		1.56	5	46	58	68	23		200	100	311			311			311	
	Baseline study			16																		
	Develop KM Strategy and Communication Strategy			5																		
	Refine and update the PIM			5																		
	Annual Review and Planning Workshop			40																		
	Mid Term Review			45																		
	Project Completion Report			7																		
	Supervision by CPCU, SPCU, IFAD and Govt.			80																		
	Annual Audit			56																		
	Baseline mapping and assessment of environmental governance and Climate change in project areas			60																		
	Management Information System M&E of Core Indicators and project results framework			92																		
Training & Workshops	Total GEF and Co-financing	9 210	2 300														56				56	1
	TA&T of farmers groups in climate adaptation in farming practices and TA&T of young community extension/PM agents in crop farming.	-	-		training session	2.26	5	7	5				17	16	6							
						1.50	30	40	50	30			150	22	50		56				56	

* Shaded cells provide details of expenditures under each expenditure category for the GEF/LDCF Grant. IFAD co-financing is not detailed, with the exception of M&E.

KM Sheet

		IFAD funding for Knowledge Management (including M&E)														
		Quantities							Unit Cost (USD '000)	Total Cost (USD '000)						
Knowledge Management	Unit	2021	2022	2023	2024	2025	2026	Total		2021	2022	2023	2024	2025	2026	Total
Manual for NRM	Manual		2					2	31.45		62.9				62.9	
Study on Pastoralist	Study	3						3	15.40	46.2					46.2	
Media public awareness activities on NRM targeting communities, legislators, and authorities at local, state and federal levels	Campaign	1	1	1	1	1	1	6	1.50	1.50	1.50	1.50	1.50	1.50	9.00	
Policy briefs/notes and knowledge products on NRM at various levels	unit		4	6	8	10		28	4.70		18.80	28.20	37.60	47.00	131.60	
Network local Exchange Visits and Learning Routes	unit		20	30	30	20		100	2.28		45.60	68.40	68.40	45.60	228.00	
International Exchange Visits and Learning Routes	unit		1	1	1	1	1	5	126.60		126.60	126.60	126.60	126.60	633.00	
Training package for locality, state, and federal government staff on M&E, KM, Legislations, etc.	Training	50	50	50	50			200	2.10	105.00	105.00	105.00	105.00		420.00	
Total															1 530.00	

M&E Sheet

Type of M&E activity	Responsible parties	Time Frame	M&E Programme budget (USD '000) – IFAD co-financing	GEF Agency fee
Project Start up Workshop	Under the guidance of the CPCU staff a special session on M&E system will be organised to brief participants about the Project Logical Framework, progress reporting and evaluation arrangements.	The workshop will be conducted at the onset of the Programme to present the steps for AWPB preparation as well as the M&E system.	37.10	Participation of Agency staff and consultants, review and oversight M&E Plan consultation and review
Preparation of Annual Work Programme and Budget (AWPB)	The CPCU will, with the participation of representatives from all stakeholder groups, prepare the Overall Work Plan & Budget and the first Annual Work Plan & Budget (AWPB). Thereafter, the PMU will prepare each year a consolidated AWPB incorporating the State AWPBs generated by State Coordination Units and submit it in advance of the GoS annual budgeting process to ensure that sufficient counterpart funds are made available. The AWPB will be prepared, among others, on the basis of the activity in Subcomponent 2.1: "Presentation of findings of reviews in multi-stakeholder platforms at Sector, State and Federal levels and make recommendations" for the amount of USD 140,000.	Annually	0.00	Oversight, review, reporting through GEFSEC
Baseline and impact studies	In close liaison with the SCUs M&E, KM and Innovation officers, the CPCU M&E, KM and Innovation Officer is responsible for developing the Terms of Reference for the conduct of the Baseline Studies. Then, bidding processes will be launched to select the subject (academic institution, external consultancy firm, etc) which will undertake the research.	Baseline, Mid-term, Completion	15.90	Oversight, review, reporting through GEFSEC
Baseline mapping and assessment of environmental governance and Climate change in project areas	CPMU/CCU	Baseline	60.30	Oversight, review, reporting through GEFSEC
Develop KM Strategy and Communication Strategy	SCUs M&E, KM and Innovation officer.	At Programme Start up	5.30	Guide the approach
		During project implementation		Deliver knowledge products/ events
	Reporting to Agency on project-specific results Support knowledge products/events			

Refine and update the PIM	IFAD with CPCU, SPCU and Govt.	At Programme Start up	5.30	Oversight, review, reporting through GEFSEC
Annual Review and Planning Workshop	External auditors. Supporting documentations for the Statements of Expenditures must be maintained by the CPCU and made available for review by IFAD supervision missions upon request and to external auditors during their annual review of Programme accounts to enable issuing of an independent audit opinion.	Annually	40.00	Oversight, review, reporting through GEFSEC
Mid Term Review	External review led by IFAD with CPCU, SPCU and Govt. The CPCU Director is responsible for coordinating the activities of the MTR, including developing the schedule for field visits, meetings with stakeholders and meetings with the PMU Staff Members. Each SCU will be responsible for preparing progress reports on their respective areas and to make themselves available to the MTR Mission to ensure that MTR achieves its objectives. IFAD will provide technical experts to review GEF activities.	A Mid-Term Review (MTR) will be carried out three years after programme startup.	44.80	Oversight, review, reporting through GEFSEC
Project Completion Report	The programme completion review is a process undertaken by the Government of Sudan in close coordination with IFAD.	At the end of the implementation cycle in order to report on the results achieved through programme interventions.	6.50	Oversee preparation of Terminal Evaluation via the Agency's own IEO) and submit to GEF IEO and GEFSEC
Independent Terminal Evaluation (TE)	IFAD will provide technical experts to review GEF activities.			
	Lead the preparation of a completion report and assist the preparation of the TE			
	Undertake terminal evaluation (independent consultants and their travel)			
Supervision by CPCU, SPCU, IFAD and Govt.	Will be organized by IFAD's Country Director (CD) in coordination with the Government, the Lead Programme Ministry, the CPCU and the SPCU. Updates to the progress on Logframe Core Indicators will be provided during supervision missions and at any other time as requested by IFAD. Reporting to Agency on identified risks and impact, and management. IFAD will provide technical experts to review GEF activities.	Supervision Missions will take place at least once per year.	80.10	IFAD's supervision costs are financed by the fee

Annual Audit	The National Audit Chamber (NAC) will conduct the annual audit.	IFAD generally requires an annual audit of Programme financial statements. However, the frequency of the audit may be changed by IFAD as a function of the Programme's risk profile. In all instances, IFAD will confirm the frequency with which SNRLP's financial statements are to be audited. The audit reporting period may be amended for the first and/or final audits	56.10	
Management Information System	The CPCU Director will closely work with the Senior M&E Expert to procure a consultant/firm to develop and implement the MIS.	Within the first three months of the Programme, the CPCU Senior M&E Expert must develop the required specifications for a Management Information System (MIS), which will be	92.10	Oversight, review, reporting through GEFSEC
M&E of Core Indicators and project results framework	Reporting to Agency on progress, provision of information for the MTR and TE updates	instrumental in the data collection and analysis as well as in their reporting.		
Monthly report	SPCUs will prepare monthly status reports with quantitative information on progress against the planned targets.	Monthly	0.00	Oversight, review, reporting through GEFSEC
Semi-annual progress reports	The CPCU (M&E officer) will develop semi-annual Progress Reports based on the monthly reports received from the SPCUs and submit these reports to IFAD no later than forty-five (45) days after the end of the period. Semi-annual M&E reports will be updated prior to IFAD supervision missions.	Every 6 months	0.00	Oversight, review, reporting through GEFSEC
Project Implementation Reviews (PIRs)	IFAD will prepare and submit an annual PIR to the GEF Secretariat. The GEF Project Coordinator will initiate preparation of the PIR.	Carried out annually	0.00	Review, finalization and reporting through GEFSEC
TOTAL			443.50	

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).