AFB/PPRC.22-23/15
11 June 2018

Adaptation Fund Board
Project and Programme Review Committee
Twenty-First Meeting
Bonn, Germany, 11 June 2018

Agenda Item x x)

PROPOSAL FOR DJIBOUTI, KENYA, SUDAN, UGANDA

Background

1. The strategic priorities, policies and guidelines of the Adaptation Fund (the Fund), as well as its operational policies and guidelines include provisions for funding projects and programmes at the regional, i.e. transnational level. However, the Fund has thus far not funded such projects and programmes.

2. The Adaptation Fund Board (the Board), as well as its Project and Programme Review Committee (PPRC) and Ethics and Finance Committee (EFC) considered issues related to regional projects and programmes on a number of occasions between the Board's fourteenth and twenty-first meetings but the Board did not make decisions for the purpose of inviting proposals for such projects. Indeed, in its fourteenth meeting, the Board decided to:

> *(c) Request the secretariat to send a letter to any accredited regional implementing entities informing them that they could present a country project/programme but not a regional project/programme until a decision had been taken by the Board, and that they would be provided with further information pursuant to that decision*
>
> *(Decision B.14/25 (c))*

3. In its eighth meeting in March 2012, the PPRC came up with recommendations on certain definitions related to regional projects and programmes. However, as the subsequent seventeenth Board meeting took a different strategic approach to the overall question of regional projects and programmes, these PPRC recommendations were not included in a Board decision.

4. In its twenty-fourth meeting, the Board heard a presentation from the coordinator of the working group set up by decision B.17/20 and tasked with following up on the issue of regional projects and programmes. She circulated a recommendation prepared by the working group, for the consideration by the Board, and the Board decided:

> *a. To initiate steps to launch a pilot programme on regional projects and programmes, not to exceed US$ 30 million;*
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> *b. That the pilot programme on regional projects and programmes will be outside of the consideration of the 50 per cent cap on multilateral implementing entities (MIEs) and the country cap;*
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> *c. That regional implementing entities (RIEs) and MIEs that partner with national implementing entities (NIEs) or other national institutions would be eligible for this pilot programme, and*
>
> *d. To request the secretariat to prepare for the consideration of the Board, before the twenty-fifth meeting of the Board or intersessionally, under the guidance of the*

working group set up under decision B.17/20, a proposal for such a pilot programme based on consultations with contributors, MIEs, RIEs, the Adaptation Committee, the Climate Technology Centre and Network (CTCN), the Least Developed Countries Expert Group (LEG), and other relevant bodies, as appropriate, and in that proposal make a recommendation on possible options on approaches, procedures and priority areas for the implementation of the pilot programme.

(Decision B.24/30)

5. The proposal requested under (d) of the decision above was prepared by the secretariat and submitted to the Board in its twenty-fifth meeting, and the Board decided to:

a. *Approve the pilot programme on regional projects and programmes, as contained in document AFB/B.25/6/Rev.2;*

b. *Set a cap of US$ 30 million for the programme;*

c. *Request the secretariat to issue a call for regional project and programme proposals for consideration by the Board in its twenty-sixth meeting; and*

d. *Request the secretariat to continue discussions with the Climate Technology Center and Network (CTCN) towards operationalizing, during the implementation of the pilot programme on regional projects and programmes, the Synergy Option 2 on knowledge management proposed by CTCN and included in Annex III of the document AFB/B.25/6/Rev.2.*

(Decision B.25/28)

6. Based on the Board Decision B.25/28, the first call for regional project and programme proposals was issued and an invitation letter to eligible Parties to submit project and programme proposals to the Fund was sent out on 5 May 2015.

7. In its twenty-sixth meeting the Board decided *to request the secretariat to inform the Multilateral Implementing Entities and Regional Implementing Entities that the call for proposals under the Pilot Programme for Regional Projects and Programmes is still open and to encourage them to submit proposals to the Board at its 27th meeting, bearing in mind the cap established by Decision B.25/26.*

(Decision B.26/3)

8. In its twenty-seventh meeting the Board decided to:

a. *Continue consideration of regional project and programme proposals under the pilot programme, while reminding the implementing entities that the amount set aside for the pilot programme is US$ 30 million;*

b. *Request the secretariat to prepare for consideration by the Project and Programme Review Committee at its nineteenth meeting, a proposal for prioritization among regional project/programme proposals, including for awarding project formulation grants, and for establishment of a pipeline; and*

c. *Consider the matter of the pilot programme for regional projects and programmes at its twenty-eighth meeting.*

(Decision B.27/5)

9. The proposal requested in (b) above was presented to the nineteenth meeting of the PPRC as document AFB/PPRC.19/5. The Board subsequently decided:

a) With regard to the pilot programme approved by decision B.25/28:

(i) To prioritize the four projects and 10 project formulation grants as follows:

1. If the proposals recommended to be funded in a given meeting of the PPRC do not exceed the available slots under the pilot programme, all those proposals would be submitted to the Board for funding;

2. If the proposals recommended to be funded in a given meeting of the PPRC do exceed the available slots under the pilot programme, the proposals to be funded under the pilot programme would be prioritized so that the total number of projects and project formulation grants (PFGs) under the programme maximizes the total diversity of projects/PFGs. This would be done using a three-tier prioritization system: so that the proposals in relatively less funded sectors would be prioritized as the first level of prioritization. If there are more than one proposal in the same sector: the proposals in relatively less funded regions are prioritized as the second level of prioritization. If there are more than one proposal in the same region, the proposals submitted by relatively less represented implementing entity would be prioritized as the third level of prioritization;

(ii) To request the secretariat to report on the progress and experiences of the pilot programme to the PPRC at its twenty-third meeting; and

b) With regard to financing regional proposals beyond the pilot programme referred to above:

(i) To continue considering regional proposals for funding, within the two categories originally described in document AFB/B.25/6/Rev.2: ones requesting up to US$ 14 million, and others requesting up to US$ 5 million, subject to review of the regional programme;

(ii) To establish two pipelines for technically cleared regional proposals: one for proposals up to US$ 14 million and the other for proposals up to US$ 5 million, and place any technically cleared regional proposals, in those pipelines, in the order described in decision B.17/19 (their date of recommendation by the PPRC, their submission date, their lower "net" cost); and

(iii) To fund projects from the two pipelines, using funds available for the respective types of implementing entities, so that the maximum number of or maximum total funding for projects and project formulation grants to be approved each fiscal year will be outlined at the time of approving the annual work plan of the Board.

(Decision B.28/1)

10. According to the Board Decision B.12/10, a project or programme proposal needs to be received by the secretariat no less than nine weeks before a Board meeting, in order to be considered by the Board in that meeting.

11. This is the second submission of the project document using the three-step submission process. It was first submitted as a project pre-concept for consideration by the Board at its thirtieth meeting and the Board decided to:

(a) To endorse the project pre-concept, as supplemented by the clarification responses provided by the Sahara and Sahel Observatory (OSS) to the request made by the technical review;

(b) To request the secretariat to transmit to OSS the observations in the review sheet annexed to the notification of the Board's decision, as well as the following recommendations for the project concept stage:

(i) The project concept should specify the sub-regions that are most drought-prone and on which the project will therefore concentrate;

(ii) The project concept should provide additional details on, for example, the aspects of the projects and resources devoted to addressing the pastoralists versus farmers;

(iii) The concept should demonstrate how local institutions and extension agents will be targeted and included in implementation;

(iv) The concept should provide consideration of how availability of water resources and especially water points for livestock, which are mainly groundwater based, will be addressed in the project;

(v) The concept should address how agreements on stock routes can be modified or made more flexible in case of drought and provision be made to prevent pastoralists from getting into conflicts with sedentary farmers or encroaching on protected areas;

(vi) The concept should provide further details on the gender dimension and the differentiated rights of sedentary versus pastoralist groups;

(vii) The proponent should more clearly outline how it will engage, involve and benefit women and other marginalized groups;

(viii) The concept should provide more detailed evidence of the sustainability of the project outcomes;

(c) To approve the project formulation grant of US$ 20,000

(d) To rrequest OSS to transmit the observations under subparagraph (b) above to the Governments of Djibouti, Kenya, Sudan and Uganda; and

(e) To encourage the Governments of Djibouti, Kenya, Sudan and Uganda to submit, through OSS, a project concept that addresses the observations under subparagraph (b) above.

(Decision B.30/29)

12. The present project-concept along with a project formulation grant (PFG) was received by the secretariat in time to be considered at its thirty-first – thirty-second intersessional meeting.

13. The present submission was received by the secretariat in time to be considered in the thirtieth Board meeting. The secretariat carried out a technical review of the project proposal, assigned it the diary number AFR/RIE/DRR/2017/1, and completed a review sheet.

14. The secretariat is submitting to the PPRC the summary the final technical review of the pre-concept for a regional project, both prepared by the secretariat, along with the final submission of the proposal in the following section. The proposal is also submitted with changes between the initial submission and the revised version highlighted.

Project Summary

Djibouti, Kenya, Sudan, Uganda:	Strengthening drought resilience of small holder farmers and pastoralists in the IGAD region
Implementing Entity:	Sahara and Sahel Observatory (OSS)
Project/Programme Execution Cost:	USD 1,045,860
Total Project/Programme Cost	USD 11,009,020
Project Management Fee	USD 1,024,660
Financing Requested	USD 13,079,540

Project Background and Context:
The four countries in the IGAD region which are a part of this proposal are highly impacted by droughts across the countries or part of the countries, resulting in severe impacts to communities and the environment in the countries. The project aims to increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through establishment of appropriate early warning systems and implementation of drought adaptation actions in the four targeted countries IGAD region.

Component 1: Development and enhancement of a regional Drought Early Warning System (USD 1,500,000).

This Component will focus on upgrading, as well as reinforcing, the climate change early warning process since smallholder farmers and pastoralists are facing challenges of accessing timely and accurate climate information for planning and responding to drought risks. As current EWS are inadequate and unsustainable causing crop failures, pasture losses, the death of livestock, soil degradation, conflicts, migration, and food insecurity, this component intends to conduct baseline studies and assessments as a first step to understand the current status of the existing EWS for different types of hazards in the four selected countries. By understanding the challenges associated with the existing EWS, the project will consequently undertake interventions aimed at promoting adaptation actions to address drought risks and improving the situation for the benefit of smallholder farmers and pastoralists, including women.

Component 2: Strengthening the capacity of stakeholders to manage drought risks due to Climate Change effects (USD 1,750,000)

This component aims at strengthening and improving the adaptive capacity of various stakeholders including women and youth that are affected and will contribute to drought adaptation and resilience in various ways. Stakeholders would include extension agents, artisans, local government or sub-national and national as well as regional leaders including technical and non-technical plus the smallholder farmers and pastoralists in the four selected countries/areas. The proposed project will first of all, seek to understand the stakeholders' needs in drought adaptation if their resilience is to be enhanced. Based on such needs, capacity building plans including the appropriate tools and materials will be developed.

Component 3: Drought and climate change adaptation actions (USD 6,297,920).

This component, aims at increasing resilience of smallholder farmers and pastoralists by

supporting them to undertake concrete innovative and appropriate sustainable land, water, crops and livestock management measures or technologies. The proposed project seeks to understand the status of water security by focusing on surface and groundwater, soil and water conservation, crop and livestock production and sources of incomes. Some of the specific climate change and drought adaptation interventions include: developing soil and water conservation, water harvesting and storage structures e.g. simplified water jars, rock water harvesting, construction of sunken sand dams and water ponds.

Under this component, the project aims to establish an innovative competitive grant scheme targeting household value in addition to food crops and livestock products. The competitive small grants scheme will focus on encouraging and rewarding the efforts of the most vulnerable among smallholder farmers and pastoralists such as the women, youth and elderly. Such efforts sought for evaluation will be on drought adaptation actions or income generation activities (IGAs).

Component 4: Knowledge management and information sharing (USD 1,479,100).

This component aims to support knowledge generation, packaging, and dissemination between and across stakeholders in various institutions. The activities facilitate institutions to generate knowledge on drought risk management, undertaking study tours and exchange visits, documenting lessons learned or best practices, facilitating knowledge exchange. The information, lessons learned, best practices and innovative technologies will be documented and shared for the use by various stakeholders.

ADAPTATION FUND BOARD SECRETARIAT TECHNICAL REVIEW OF PROJECT/PROGRAMME PROPOSAL

PROJECT/PROGRAMME CATEGORY: REGIONAL PROJECT

Countries/Region: **Djibouti, Kenya, Sudan, Uganda /Africa**
Project Tittle: **Strengthening Drought Resilience for Small Holder Farmers and Pastoralists in the IGAD Region**
Countries: **Djibouti, Kenya, Sudan, and Uganda**
Thematic Focal Area: **Disaster Risk Reduction and Early Warning Systems**
Implementing Entity: **Sahara and Sahel Observatory (OSS)**
Executing Entities**:** **Regional level**: Global Water Partnership Eastern Africa (GWPEA) hosted by the Nile Basin Initiative (NBI) secretariat
National level: National Project Management Units NPMUs):
Djibouti: Ministry of Agriculture Water Fisheries and Livestock**,**
Kenya: Ministry of Environment and Natural Resources,
Sudan: Ministry of Water Resources and Electricity Ministry of Water and Environment.
AF Project ID: **AFR/RIE/DRR/2017/1**
IE Project ID: Requested Financing from Adaptation Fund (US Dollars): **USD 13,079,540**
Reviewer and contact person: **Alyssa Maria Gomes** Co-reviewer(s): **Dirk Lamberts**
IE Contact Person:

Review Criteria	Questions	Comments on 4 May 2018	Comments on 21 May 2018
Country Eligibility	1. Are all of the participating countries party to the Kyoto Protocol?	Yes. Djibouti, Kenya Uganda and Sudan are parties to the Kyoto protocol	-
	2. Are all of the participating countries developing countries particularly vulnerable to the adverse effects of climate change?	Yes. The IGAD member states face severe water constraints and prolonged droughts. Moreover, the region faces uncontrolled activities such as deforestation and poor agricultural practices that lead to reduced water retention capacities, surface runoffs and soil cover losses, not only impacting negatively on water resources, environment and other ecosystems that serve as community livelihood sources but also increasing their vulnerability to droughts. Significantly reduced precipitation levels are leading to many challenges such as pollution, food insecurity, civil strife over water, food and pastures, drying-up of rivers, streams and aquifers and loss	-

		of plant available water in the soils, negatively impacting the livelihoods of smallholder farmers and pastoralists. The proposed DRESS-EA project will further strengthen linkages between the existing drought strategies at both regional and country levels and the drought declaration – Windhoek declaration) that was adopted at the Africa Drought Conference (ADC) in August 2016 in Windhoek, Namibia.	
Project Eligibility	1. Has the designated government authority for the Adaptation Fund endorsed the project/programme?	Yes. The designated authorities (DAs) for Djibouti (15th Feb 2018), Kenya (5th April 2018), Sudan (2nd Feb 2018) and Uganda (18th April 2018) have issued endorsed letters.	-
	2. Does the regional project / programme support concrete adaptation actions to assist the participating countries in addressing the adverse	Yes. Climate change has aggravated the impacts of droughts in Djibouti, Kenya, Sudan and Uganda within the IGAD region in the Horn of Africa (HOA). A regional	-

	effects of climate change and build in climate resilience, and do so providing added value through the regional approach, compared to implementing similar activities in each country individually?	approach to tackling the drought problem not only provides a trans boundary innovative way for drought management since its occurrence is not limited to Boarders, but also contribute to the achievement of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI). The predominant livelihood system, especially in the ASALs of the HOA, is pastoral and agro-pastoral production. Climate extremities are forcing pastoralists to be constantly on the move for fresh water and pastures, within and outside their national boundaries, often resulting into conflicts, frequently necessitating regional intervention to resolve or prevent conflict. In addition to the regional justification for the above mentioned challenge, the proposed project will build on the	

		existing initiatives of the Global Water Partnership East Africa (GWPEA) is collaborating with IGAD and governments of Djibouti, Kenya, Sudan and Uganda through the Integrated Drought Management Programme (IDMP) and the Water, Climate and Development Programme (WACDEP) to enhance drought resilience in the region. It also aims establish new mechanisms to address drought related challenges in the region through facilitating investments in early warning systems, building the capacity of targeted stakeholders, supporting innovative adaptation actions and enhancing knowledge management and skills.	
	3. Does the project / programme provide economic, social and environmental benefits, particularly to vulnerable communities, including	Economic and Social benefits- The project provides economic benefits with activities focusing on improving and diversifying livelihoods in the four selected countries in the IGAD region.	-

	gender considerations, while avoiding or mitigating negative impacts, in compliance with the Environmental and Social Policy of the Fund?	Developments and improvements in EWS infrastructure are expected to enhance the livelihoods of vulnerable groups, women and children. Activities are also specifically targeted at women, women headed households such as competitive small grants programme, improved cook/energy saving stoves. It is acknowledged that the competitive small grants programme will be provided to highly innovative groups of women, youth and other marginalized group. The social benefits of planned activities to vulnerable groups, women, youth and children are well noted (p.30). **CR1:** Please provide additional details of innovative activities (IGAs, drought adaptation actions?) envisaged under the competitive small grants	**CR1: Addressed.** Additional information on innovative activities for IGAs and drought adaptation actions under the Competitive Small Grants scheme have been provided such as training, skills development and value addition to the various drought resistant

		program and the criteria for selection. Environmental benefits - To reduce pressure on the ecosystem and preserve biodiversity the planned concrete intervention include the implementation of drought adaptation approaches, measures and actions; innovative water and soil conservation structures; silvopastoral dryland agroforestry and rangeland management (p.31). **CR 2:** The concrete benefits of the planned interventions on the ecosystem is acknowledged, however please clarify the impact of planned interventions particularly on vulnerable communities, including gender	food crops and food crop products; drought tolerant livestock products. Additionally, the selection criteria for accessing small grants have been suggested. The specific IGAs and adaptation actions for which the activities are indicated are gender responsive and home based with a particular focus on women, youth and the elderly. (Part II; p.30-31). **CR 2: Addressed.** Concrete socio-economic and environmental benefits of planned interventions to ecosystems and populations especially the vulnerable groups including women and youth among smallholder farmers and pastoralists in the region have been presented. These include reducing pressure on the ecosystems so that they can provide the

		considerations and steps to avoid / mitigate negative impacts in compliance with AF ESP.	goods and services to vulnerable populations upon which they derive their livelihoods. Also, food, crop products, livestock products, income/money from sale of such products and clean and safe water. Developed water points support women and children in reducing the distance travelled to collect water. The energy saving cooking stoves will also have the positive impact of reducing women's and children's burden of collecting fuel wood. (Part II section C; p. 32 – 33)
	4. Is the project / programme cost-effective and does the regional approach support cost-effectiveness?	Yes. The project aims to enable the deployment of a regional action plan where the joint capacities and measures of intervention will be more efficient and more cost-effective. It also plans to contribute to improving the conditions and infrastructures of the beneficiary countries in	-

		the most vulnerable sites, permitting an effective response to drought and greater resilience to climatic variations. The regional approach supports cost-effectiveness by - Cooperation/coordination to build cohesion and provide platforms at regional level - Facilitating exchange and experiential learning - Enabling coordinated planning and implementation of interventions thereby minimizing duplication of efforts - Contributing to the achievement of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) (p.33).	
	5. Is the project / programme consistent with national or sub-national sustainable development strategies, national or sub-national development plans,	Yes. Regional - Conflict Early Warning and Response Mechanism (CEWARN), IGAD Drought Disaster Resilience	-

	poverty reduction strategies, national communications and adaptation programs of action and other relevant instruments? If applicable, it is also possible to refer to regional plans and strategies where they exist.	and Sustainability Initiative (IDDRSI)(p.33-34). National - the project is in alignment with national or sub-national sustainable development strategies, development plans, poverty reduction strategies, national communications and national adaptation programs of action. (p.34-39)	
	6. Does the project / programme meet the relevant national technical standards, where applicable, in compliance with the Environmental and Social Policy of the Fund?	The requirements are properly listed, and when followed should produce outputs adequate for the full proposal. The project contains a significant number of unidentified sub-projects (USPs) for which environmental and social policy compliance will need to be done during implementation. The related process should also include arrangements for identifying	**CR3: Addressed.** An Environmental and social management framework will be developed at full proposal development stage. Also, at full proposal development and implementation levels/stages all relevant laws, regulations and existing technical standards including water resources management, water infrastructure development, agriculture development and other

		and meeting relevant national technical standards. (p. 39-40) **CR 3:** Please provide further information on the arrangements for identifying and meeting relevant national technical standards for USPs.	project related activities will be reviewed and relevant aspects observed including labour, and public procurement procedures for project investments. The project will be implemented using the existing structures and the respective Ministries will be expected to spearhead and ensure that all relevant laws and regulations applicable to each Country are observed. (Part II, section F; p. 39-42)
	7. Is there duplication of project / programme with other funding sources?	Sufficient information at concept has been provided on how the project will to avoid any potential duplication of efforts, resources or geographical coverage, and ensure synergy between ongoing initiatives and the proposed DRESS-EA project. (p.40-44).	-
	8. Does the project / programme have a learning and knowledge	Yes. Component 4 has activities specifically dedicated to knowledge management	-

	management component to capture and feedback lessons?	(KM), learning and sharing. The component seeks to support knowledge generation, packaging and dissemination between and across stakeholders in various institutions. (p.28-29, p.42).	
	9. Has a consultative process taken place, and has it involved all key stakeholders, and vulnerable groups, including gender considerations?	It is mentioned that comprehensive community level consultations will be undertaken in the focal countries and target areas, including with vulnerable groups such as female-headed households and key informants including elders and opinion leaders during the full proposal development stage. **CR 4:** Please clarify how the consultations will include gender considerations to ensure gender responsiveness of planned interventions. Please demonstrate how planned consultations will	**CR4: Addressed.** At full proposal stage, the project consultation process will be inclusive and will appropriately consider gender as key issue towards planned interventions. To ensure effective implementation of the project components, detailed information will be deliberately collected from population/ community categories including men and women and ensuring representation of the elderly, disabled, children, youth and socio-economically disadvantaged groups. The project aims to ensure 50% of the

		ensure concrete ways that women can be effectively integrated into decision-making structures.	beneficiaries/participants are women. Specific gender responsive consultations on IGAs will be deliberately emphasized for women. Keeping in mind that women manage homes daily with numerous domestic chores, innovative IGAs that specifically target stay home women and mothers in will be a vital innovative gender responsive consideration in the proposed project. (Part II, section I; p.48 – 50)
	10. Is the requested financing justified on the basis of full cost of adaptation reasoning?	Yes. Details are provided on p.46-48.	-
	11. Is the project / program aligned with AF's results framework?	**CR 5:** Please demonstrate alignment of project components and outcomes with at least one of the Adaptation Fund Strategic Outcomes. Please refer to the AF Results and Baseline Guidance document (p.5-6): https://www.adaptation-	**CR5: Addressed.** Project outcomes align with the following Fund level outcomes: Outcome 1: Reduced exposure at the national level to climate related hazards and threats.

		fund.org/wp-content/uploads/2015/01/Results%20Framework%20and%20Baseline%20Guidance%20final%20compressed.pdf	Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level Outcome 4: Increased adaptive capacity within the relevant development and natural resource sectors Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas Outcome 7: Improved policies and regulations that promote and enforce resilience measures (PART III. Section F pages 87 – 88)
	12. Has the sustainability of the project/programme outcomes been taken into account when designing the project?	The design of the project has considered sustainability of all project interventions - environmental, economic, technical, social and institutional sustainability.	**CR6: Addressed.** To ensure that the infrastructure constructed by the project are economically/financially sustained and maintained, the project will support existing

		CR 6: Please demonstrate considerations for financial sustainability whereby there is a financial support system for small-scale maintenance of the infrastructure after project closure.	interventions including small-scale infrastructure such as weather stations, ground and surface water sources, watering points and community learning centers. Water users will be encouraged to form user associations (WUAs) with executive committees that will be charged with taking care of the constructed water sources. Alternatively, farmer and pastoralist group/cooperative members could be required to pay a small and affordable fee for maintenance of their water sources and other infrastructure. At full proposal development stage, a proposed idea of developing modalities and supporting the communities to establish a **community infrastructure maintenance**

			fund will be considered. (Part II, section K; p.53)
	13. Does the project / programme provide an overview of environmental and social impacts / risks identified?	A preliminary assessment is reported to have been carried out, and a detailed environmental and social impact assessment is announced for full proposal preparation. A few issues that need to be addressed during preparation of the full proposal: 1. Currently, section II.L does not include substantiation of the risks findings. In the full proposal, please ensure that risks have been identified in line with the ESP, meaning that the risks identification needs to be comprehensive (covering all project activities), risk findings need to be justified and substantiated, and the risks should be identified and	-

		presented according to the 15 principles of the ESP. The AF guidance document on ESP compliance provides related suggestions https://www.adaptation-fund.org/document/guidance-document-implementing-entities-compliance-adaptation-fund-environmental-social-policy/ 2. Positive environmental and social outcomes, as well as mitigation or management measures, should not be taken into account in the risk identification. 3. Environmental and social risk identification requires that both the inherent risks of an activity are known as well as the specific environmental and social setting in which the activity will take	

		place. The project includes a large number of activities that have not yet been identified to the stage where effective ESP risks identification is possible (so-called unidentified sub-projects, USPs), particularly under component 3. When a project contains such USPs, it must include an Environmental and Social Management Plan (ESMP) that specifies how, at what stage and by whom during project implementation for each USP risks of negative environmental and social impacts will be identified according to the 15 principles of the ESP. The ESMP will further include provisions for the	

		identification of subsequent safeguard measures, their implementation, and monitoring and reporting. The risk findings presented in Table 8, p. 62 are premature. The ESP applies to all project activities, including those of component 1 that may carry ESP risks (e.g. construction and renovation of buildings).	
	14. Does the project promote new and innovative solutions to climate change adaptation, such as new approaches, technologies and mechanisms?	Yes. The project will promote new and innovative solutions by employing a regional Participatory Learning and Action approach where new and already existing innovative solutions to communicate, manage and adapt to climate change and drought impacts will be identified through participatory processes involving gatherings at national, sub-national and regional levels.	-

		Furthermore, small competitive grants will be provided for innovative climate change adaptation and drought management ideas or mini-projects to the most vulnerable yet organized farmers' groups (including women and youth) with innovative ideas.	
Resource Availability	1. Is the requested project / programme funding within the funding windows of the pilot programme for regional projects/programmes?	Yes. USD 13,079,540 is well within the 14 million cap. There is a request for PFG to the amount of USD 80,000 to support full proposal development.	-
	2. Are the administrative costs (Implementing Entity Management Fee and Project/ Programme Execution Costs) at or below 20 per cent of the total project/programme budget?	Yes, at 17.18% the administrative costs (Implementing Entity Management Fee and Project/Programme Execution Costs) are below 20 percent of the total project/programme budget.	-

Eligibility of IE	3. Is the project/programme submitted through an eligible Multilateral or Regional Implementing Entity that has been accredited by the Board?	Yes. OSS is a regional implementing entity of the fund	-
Implementation Arrangements	1. Is there adequate arrangement for project / programme management at the regional and national level, including coordination arrangements within countries and among them? Has the potential to partner with national institutions, and when possible, national implementing entities (NIEs), been considered, and included in the management arrangements?	N/a (Not applicable at the concept stage).	-
	2. Are there measures for financial and project/programme risk management?	N/a (Not applicable at the concept stage).	-

	3. Are there measures in place for the management of for environmental and social risks, in line with the Environmental and Social Policy of the Fund? Proponents are encouraged to refer to the Guidance document for Implementing Entities on compliance with the Adaptation Fund Environmental and Social Policy, for details.	Please refer to point 13 above regarding the development of an ESMP during full proposal stage.	-
	4. Is a budget on the Implementing Entity Management Fee use included?	N/a (Not applicable at the concept stage).	-
	5. Is an explanation and a breakdown of the execution costs included?	N/a (Not applicable at the concept stage).	-
	6. Is a detailed budget including budget notes included?	N/a (Not applicable at the concept stage).	-

	7. Are arrangements for monitoring and evaluation clearly defined, including budgeted M&E plans and sex-disaggregated data, targets and indicators?	N/a (Not applicable at the concept stage).	-
	8. Does the M&E Framework include a breakdown of how implementing entity IE fees will be utilized in the supervision of the M&E function?	N/a (Not applicable at the concept stage).	-
	9. Does the project/programme's results framework align with the AF's results framework? Does it include at least one core outcome indicator from the Fund's results framework?	N/a (Not applicable at the concept stage).	-
	10. Is a disbursement schedule with time-bound milestones included?	N/a (Not applicable at the concept stage).	-

Technical Summary	The project titled, “Strengthening Drought Resilience for Small Holder Farmers and Pastoralists in the IGAD Region” aims to increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through establishment of appropriate early warning systems and implementation of drought adaptation actions in the four targeted countries IGAD region. The project intends to strengthen the drought resilience of smallholder farmers and pastoralists by the following components: i. Developing and promoting regional investments in drought early warning systems (EWS) and improving the existing ones ii. Strengthening and improving the capacity of key stakeholders in drought risk management at regional, national and local levels iii. Facilitating smallholder farmers and pastoralists inputs to undertake innovative adaptation actions that reinforce their resilience to drought iv. Enhancing knowledge management and information sharing on drought resilience at the considered levels The initial technical review found that project concept is well articulated, identifies the critical needs of the targeted countries and proposes innovative solutions to help the target beneficiaries and ecosystems in the participating countries to adapt to climate extremities. The proposed activities align well with subnational and national priorities and are relevant to the regional context. However, a few clarification requests (CRs) were requested: **CR1:** Please provide additional details of innovative activities (IGAs, drought adaptation actions?) envisaged under the competitive small grants program and the criteria for selection. **CR 2:** The concrete benefits of the planned interventions on the ecosystem is acknowledged, however please clarify the impact of planned interventions particularly on vulnerable communities, including gender considerations and steps to avoid / mitigate negative impacts in compliance with AF ESP. **CR 3:** Please provide further information on the arrangements for identifying and meeting relevant national technical standards for USPs.

	CR 4: Please clarify how the consultations will include gender considerations to ensure gender responsiveness of planned interventions. Please demonstrate how planned consultations will ensure concrete ways that women can be effectively integrated into decision-making structures. **CR 5:** Please demonstrate alignment of project components and outcomes with at least one of the Adaptation Fund Strategic Outcomes. Please refer to the AF Results and Baseline Guidance document (p.5-6) **CR 6:** Please demonstrate considerations for financial sustainability whereby there is a financial support system for small-scale maintenance of the infrastructure after project closure. The final technical review finds that all clarification requests were sufficiently addressed at the project concept stage. The following recommends are suggested for the full proposal development stage: - Please clearly demonstrate in the project document, how consultations were gender inclusive as well as include efforts to ensure gender issues are well incorporated during the design of proposed interventions. - At full proposal development and implementation levels/stages, please ensure that all relevant laws, regulations and existing technical standards are reviewed and relevant aspects follow the Environmental and Social Policy of the Fund. - Ensure that all tangible interventions are presented with the level of detail on location and environmental and social setting. - In the full proposal, please ensure that risks have been identified in line with the ESP, such that the risks identification is comprehensive (covering all project activities). Furthermore, risk findings need to be justified and substantiated, and the risks should be identified and presented according to the 15 principles of the ESP. - The project contains a considerable number of unidentified sub-projects (USPs) for which environmental and social policy compliance will need to be done during implementation. The related process should also include arrangements for identifying and meeting relevant national technical standards.

	- Include an Environmental and Social Management Plan (ESMP) that specifies for each USP, *how*, *at what stage* and *by whom* during project implementation, risks of negative environmental and social impacts will be identified according to the 15 principles of the ESP. - The ESMP should include provisions for the identification of subsequent safeguard measures, their implementation, and monitoring and reporting. The risk findings presented in Table 8, p. 62 are premature. - Demonstrate how environmental and social safeguard measures will be integrated in the implementation arrangements of the project.
Date:	21 May 2018

REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN P4-400
Washington, D.C., 20433
U.S.A
Fax: +1 (202) 522-3240/5
Email: afbsec@adaptation-fund.org

ADAPTATION FUND

REGIONAL PROJECT/PROGRAMME PROPOSAL

PART I: PROJECT/PROGRAMME INFORMATION

Title of Project/Programme:	STRENGTHENING DROUGHT RESILIENCE FOR SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION
Countries:	DJIBOUTI, KENYA, SUDAN AND UGANDA
Thematic Focal Area[1]:	DISASTER RISK REDUCTION AND EARLY WARNING SYSTEMS
Type of Implementing Entity:	REGIONAL IMPLEMENTING ENTITY
Implementing Entity:	SAHARA AND SAHEL OBSERVATORY (OSS)
Executing Entities:	**Regional level**: Global Water Partnership Eastern Africa (GWPEA) hosted by the Nile Basin Initiative (NBI) secretariat **National level:** National Project Management Units NPMUs): □ **Djibouti:** Ministry of Agriculture Water Fisheries and Livestock**,** □ **Kenya:** Ministry of Environment and Natural Resources, □ **Sudan:** Ministry of Water Resources and Electricity □ **Uganda:** Ministry of Water and Environment.
Amount of Financing Requested:	13,079,540 US DOLLARS

[1] Thematic areas are: Food security; Disaster risk reduction and early warning systems; Transboundary water management; Innovation in adaptation finance.

CONTENTS

ACRONYMS

ADC	Africa Drought Conference
ASALs	Arid and Semi- arid lands
CC	Climate Change
DMPs	Drought Management Plans
DRESS-EA	Strengthening Drought Resilience of Smallholder farmers and Pastoralists in the IGAD Region
EIAs	Environmental Impact Assessments
ESIAs	Environmental and Social Impact Assessments
ESMF	Environmental and Social Management Framework
GWPEA	Global Water Partnership East Africa
HOA	Horn of Africa
IDMP HOA	Integrated Drought Management Program in the Horn of Africa
IGAs	Income Generating Activities
IGAD	Inter-Governmental Authority on Development
IDDRSI	IGAD Drought Disaster Resilience and Sustainability Initiative
MOU	Memorandum of Understanding
MWE	Ministry of Water and Environment, Uganda
NAPs	National Adaptation Plans
NDCs	Nationally Determined Contributions
SDGs	Sustainable Development Goals
SNAPA	Sudan National Adaptation Programme of Action
UNCCP	Uganda National Climate Change Policy
USPs	Unidentified sub-projects
WACDEP	Water, Climate and Development Programme
WMP	Water Management Plan

1 Project / Programme Background and Context:

1.1 Project area context

The IGAD member states face severe water constraints and prolonged droughts. Between 60- 70 percent of the land area in the IGAD region consists of Arid and Semi-Arid Lands (ASALs) that receive less than 600 mm (Figure1) of rainfall annually (IGAD 2013)[2]. It is predicted that the frequency and intensity of droughts would increase as a result of climate change, especially in semi-arid areas[3]. In fact, climate change has exacerbated drought occurrences due to high anomalies in precipitation. From 2015 to-date, high rainfall anomalies have been recorded (Figure 2). Moreover, the region faces uncontrolled activities such as deforestation and poor agricultural practices that lead to reduced water retention capacities, surface runoffs, and soil cover losses. Such activities not only impact negatively on water resources, environment and other ecosystems that serve as community livelihood sources but also increase their vulnerability to droughts. Significantly reduced precipitation levels lead to pollution, food insecurity, civil strife over water, food and pastures, the drying-up of rivers, streams and aquifers as well as loss of plant available water in the soils on which smallholder farmers and pastoralists derive their livelihoods.

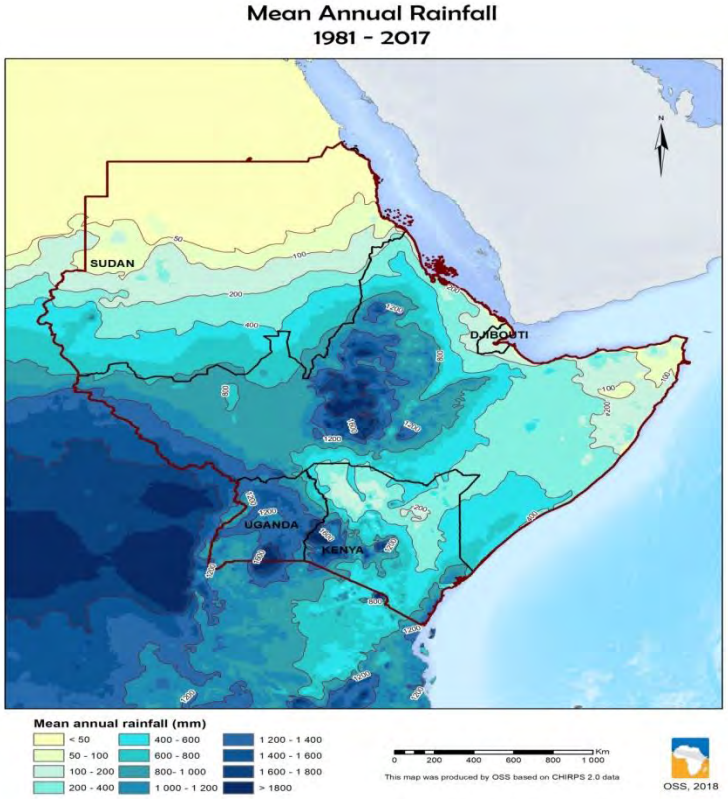


Figure 1: Average annual rainfall (mm) in the Arid and Semi-arid Lands (ASALs) of the Horn of Africa

[2] IGAD, 2013. IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) Strategy.
[3] T. Zhao et al. (2015) 'The Magnitude and Causes of Global Drought Changes in the Twenty-First Century under a Low–Moderate Emissions Scenario'. *Journal of Climate*, 28.

The dominant livelihoods in the region are agriculture, mainly dominated by smallholder farmers and pastoralists or semi pastoralist production systems. Among smallholder farmers and pastoralists within the IGAD region, are women, children, youth and elderly that are most vulnerable groups. The causes for vulnerability to droughts due to climate change that has led to significantly reduced precipitation in the region include low adaptive capacity by communities especially the smallholder farmers and pastoralists. It also integrates inadequate innovative adaptation actions to droughts, poor early warning systems and insufficient knowledge and skills in drought management. Climate change contributes to higher temperatures in the region thereby aggravating the impacts of drought. Higher temperatures result in greater evaporation, reduction in soil moisture, leading to drier conditions and failed rains. Crops and pastures suffer due to less water with eminent failed harvests and reduction of feed for livestock.

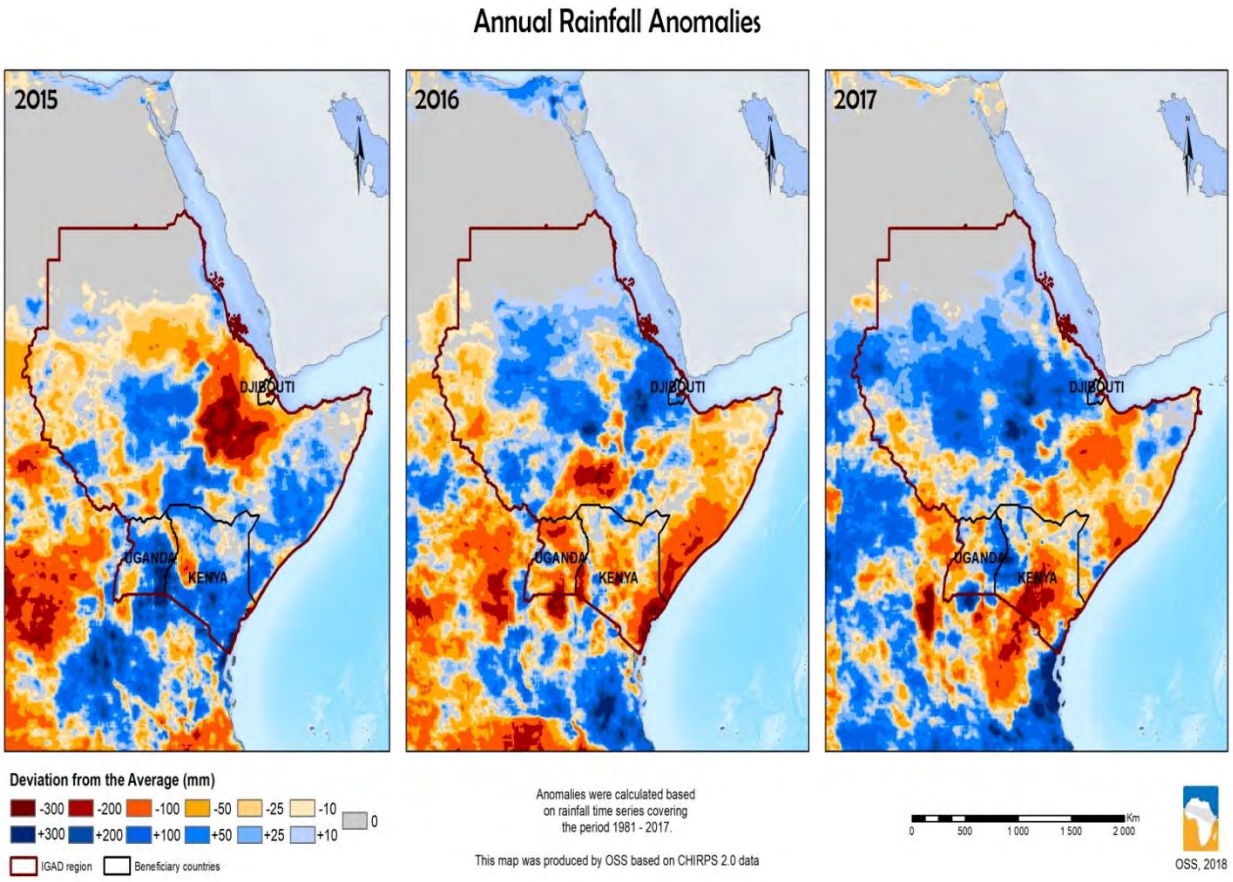


Figure 2: Rainfall deviations in the IGAD region between 2015 and 2017

Drought and its consequences namely, degradation of environmental and natural resources, continues unabated largely due to climate changes, increased human population, inadequate institutional capacities, civil strife and high poverty levels in the region (IFRC,2011). Water pollution, food insecurity, civil conflict over water, food, and pastures, drying up of rivers, streams and aquifers and the general land degradation (vegetation and soil degradation) are major impacts of droughts resulting from climate change. Due to the significant destructive climate

change led effects of droughts on the region's economy, ecosystems and community livelihoods, smallholder farmers and pastoralists in Djibouti, Kenya, Sudan and Uganda have been the most affected due to their limited coping mechanisms coupled with limited knowledge, skills and early warning information as well as the associated facilities to enable them adapt to droughts.

Djibouti is vulnerable to extreme events such as droughts[4]. Almost three-quarters of the total land area in the country is arid, yet nearly all the land is under pasture land and agricultural use[5]. However, increasing desertification remains a significant challenge where 227,463 people are threatened with food insecurity in the hardest-hit areas of Ali Sabieh, Obock and Dikhil[6]. Djibouti imports nearly all of the cereals consumed in the country, and food aid represents almost 10% of total imports. The Djibouti National Adaptation Programmes of Action (DNAPA, 2006)[7] however, recognizes agro-pastoral and pastoral communities as the most vulnerable to climate change and drought with high crop and animal losses due to drought reported. According to the DNAPA (2006) women are more vulnerable to water scarcity since they travel longer distances to fetch fresh potable water. Rangelands and grasslands equally face increasing degradation due to overgrazing. Droughts, floods, sea level rise, and epidemics, whose frequency, occurrence, and impacts have increased in recent years, already pose a significant risk to the country's vulnerable population. However, the vast majority of Djibouti's rural population remains highly susceptible to climatic uncertainty because they live in deserts or marginal and infertile areas, often with highly erodible soils, poor ground cover, and limited water supplies where food security is a serious concern. The country is home to a large pastoralist population, living on poor quality pasture lands, and the impact of climate-related changes on livestock production could be significant[8]. Therefore, droughts pose a severe challenge to the already limited water stocks, frequently necessitating emergency food and water assistance. Drought conditions have previously affected nearly 28,650 people in the northwest pastoral, southeast border, and central lowlands, especially near Obock (The World Bank Group 2011). The DNAPA is an opportunity as it prioritizes drought adaptations where drought risk management is a key area that requires urgent adaptation interventions to secure water resources and conserve soil related ecosystems on which local communities depend.

Kenya faces risks of climate variability and change with droughts reported to be recurrent (Kenya National Adaptation Plan (KNAP, 2016). Kenya has, generally, scarce and unevenly distributed fresh water resources with major rivers showing severely reduced volumes during droughts, and

[4] The World Bank Group, 2011. Vulnerability, risk reduction, and adaptation to climate change. Climate risk and adaptation country profile. Djibouti.

[5] Anonymous, 2017. https://www.un.int/djibouti/djibouti/country-facts. Country Facts. 26.03.2018

[6] Anyadike, O. 2017. Drought in Africa 2017. Farmers, traders and consumers across East and Southern Africa are feeling the impact of consecutive seasons of drought that have scorched harvests and ruined livelihoods. https://www.irinnews.org/feature/2017/03/17/drought-africa-2017.

[7] Djibouti National Adaptation Programme if Action, 2006. Ministry of Habitats, Urban areas and Environment. Republic of Djibouti.

[8] Anonymous, 2017b. http://sdwebx.worldbank.org/climateportalb/doc/GFDRRCountryProfiles/wb_gfdrr_climate_change_country_profile_for_DJI.pdf Vulnerability, Risk Reduction, and Adaptation to Climate Change. Climate Risk and Adaptation Country Profile. 30.03.2018

many seasonal ones completely drying up[9]. The most drought vulnerable areas in Kenya are found in the Northwestern where transboundary transhumance of the Karamajong and Turkana across the Uganda and Kenya borders is pronounced. These areas are characterized with widespread crop failures and falling terms of trade for pastoralists that have affected both farming and agro-pastoral communities in the northwest, northeastern and coastal strip of Kenya (Onyandike, 2017). Actually, the agricultural sector is well considered as a very climate sensitive sector that is negatively affected by current climate variabilities such as droughts resulting in reduced productivity and insecure livelihoods. Such eminent impacts of droughts including reduced production of not only staple food crops such as maize but also other major crops such as tea, sugarcane and wheat have eventually lead to increased imports especially of (maize, wheat and sugar) and reduced exports (tea), thereby weakening the country's balance of payments (Ministry of Environment and Natural Resources, 2010). Conflicts resulting from the displacement of communities by transhumance seeking water and pastures are also a common phenomenon. Fortunately, the proposed project presents an opportunity to complement the KNAP (2016) that aims to strengthen the adaptive capacity of vulnerable groups such as women, orphans and vulnerable children, the elderly, and persons with disability to manage drought risks through technological support, awareness raising, up-scaling, financing specific drought adaptation actions.

In Sudan, Communities and ecosystems are vulnerable to climate-related impacts that are associated with climate variability and climate change. Currently, the major climate hazards consist of droughts and extreme flooding events as well as other climate-related phenomena such as dust storms, thunderstorms, and heat waves whose occurrences, though less frequent, still pose serious threat to local livelihoods. Generally, about seven major drought events characterized with major rainfall variability[10] are reported to have occurred in Sudan. Average annual rainfall has reportedly declined from about 425 mm/year to about 360 mm/year leading to intense rainfall variability and frequent drought occurrences. The hardest hit areas are in the western and northern parts of Sudan within the semiarid portions of the Nile including North & Western Sudan (North Kordofan and Darfur), Kassala State and some parts of the rain-fed areas in central Sudan basin. Over 80% of the population lives in rural areas and depends on agriculture and livestock production. Agriculture is among the sectors that most vulnerable to droughts and climate change in addition to Agriculture, livestock, water resources and health (Sudan National Adaptation Programme of Action (SNAPA, 2006)[11]. The productivity of natural pastures has tremendously reduced in the last thirty years due to recurring droughts. The deterioration of pastures is not only limited to grasses but also decreasing the production of trees that negatively impact on soil, biodiversity, forests and food security. Consequently, the most severe effects of these changes have been felt by the most vulnerable groups of communities including the very poor people, women, and children. These groups have been reported to be significantly affected

[9] Ministry of Environment and Natural Resources, 2010. National Climate Change response strategy. Executive brief. Kenya.

[10] Ahmed Eltohami, A. B. E. 2016. Anthropogenic and Climatic factors: as causes of drought disaster in Sudan. World Irrigation. Forum (WIF2), 6-8 November, Chiang Mai, Thailand.
http://www.droughtmanagement.info/literature/UNWDPC_NDMP_Country_Report_Sudan_2014.pdf.

[11] Sudan National Adaptation Programme of Action (NAPA), 2007. Ministry of Environment and Physical Development, Higher Council for Environment and Natural Resources, Sudan.

because they mostly depend on natural resources (Ahmed Eltohami, 2016). However, their options to adapt to drought and climate change are still impeded by limited capacity. Fortunately, the SNAPA prioritizes project interventions that focus on enhancing resilience to rainfall variability, reducing vulnerability to droughts by communities and ecosystems through improved crop, water resources, and biodiversity and environment management.

In Uganda, areas that are highly vulnerable to severe droughts are located within a region commonly referred to as the "cattle corridor" an area stretching from Karamoja region in the northeast, through central to the southwest of the country. These areas are mainly rangelands and cover approximately 84,000 km^2 (about 40 percent) of the total land area of Uganda. In these areas, semi-arid and dry sub-humid conditions prevail characterized by low, unreliable and variable rainfall (450–800mm)[12]. Therefore, this is a semi-arid area characterized by, high rainfall variability and drought occurrence. Pastoralism and crop production are the main economic activities from which most vulnerable local communities derive their livelihoods. Agriculture is recognized by the Uganda National Climate Change Policy (UNCCP, 2015)[13] as the most vulnerable and severely affected sector. Indeed, two consecutive seasons of rain shortage have hit production across much of the country causing an increase of the staple food prices (UNCCP, 2015). Pastoralists frequently acknowledge evidence of climate change. Dry periods have become longer, drought periods are occurring more frequently and rainfall has been less regular. Many of the perennial rivers have turned into seasonal rivers[14] (Stark, 2011). In addition, overgrazing is rampant in the area due to: (i) disruption of traditional transhumance corridors resulting in limitation to cattle movement (in many cases as a consequence of change in land tenure policies from communal property to individual titling)[15].

Such vulnerability not only negatively impacts on peoples' livelihoods but also the country's economy. Communities in cattle corridor have long been well known for heavy reliance on mobile pastoralism as an important strategy to cope with resource variability. However, the abilities of these communities to cope have greatly weakened due to the aggravated impacts of frequent and severe droughts. The ability of local community populations and ecosystems in the area to recover from the shocks is so limited that they inevitably resort to overexploitation of natural resources using unsustainable methods. Food stocks are critically low in northeastern Karamoja. The UNCCP proposes the implementation of adaptation strategies for reducing climate change effects on agriculture to build climate resilient farming communities in the affected parts including drought-prone areas of Uganda.

[12] Ericksen, P., de Leeuw, J., Thornton, P., Said, M., Herrero, M. And Notenbaert., A. 2013. Climate change in Sub-Saharan Africa: What consequences for pastoralism? In Catley, A., Lind, J. and Scoones I. (Eds.), *Pastoralism and development in Africa: Dynamic change at the margins* (pp 71 – 81). Routledge.

[13] Ministry of Water and Environment (MWE), 2015. Uganda National Climate Change Policy. Transformation through Climate Change Mitigation and Adaptation. Kampala, Uganda.

[14] Stark, Jeffrey. 2011. *Climate Change and Conflict in Uganda: The Cattle Corridor and Karamoja.* Foundation for Environmental Security and Sustainability.

[15] Fitzgibbon, C. and Crosskey, A. 2013. *Disaster risk reduction management in the drylands in the Horn of Africa.* Brief prepared by a Technical Consortium hosted by CGIAR in partnership with the FAO Investment Centre. Technical Consortium Brief 4. Nairobi: International Livestock Research Institute.

Overall, prolonged and widespread drought is a recurrent feature that is exacerbated by climate change phenomena, advancing desertification and ecological degradation[16]. In the proposed project focal countries of Djibouti, Kenya, Sudan, and Uganda within the IGAD region in the Horn of Africa (HOA), climate change has aggravated the impacts of droughts in the region manifested in the form of acute water constraints resulting from high rainfall variability and increasing temperatures. Future climate change projections between 2030 and 2080 paint a gloomy picture characterized by high rainfall variability and increased temperatures in the region (Figures 3a and 3b).

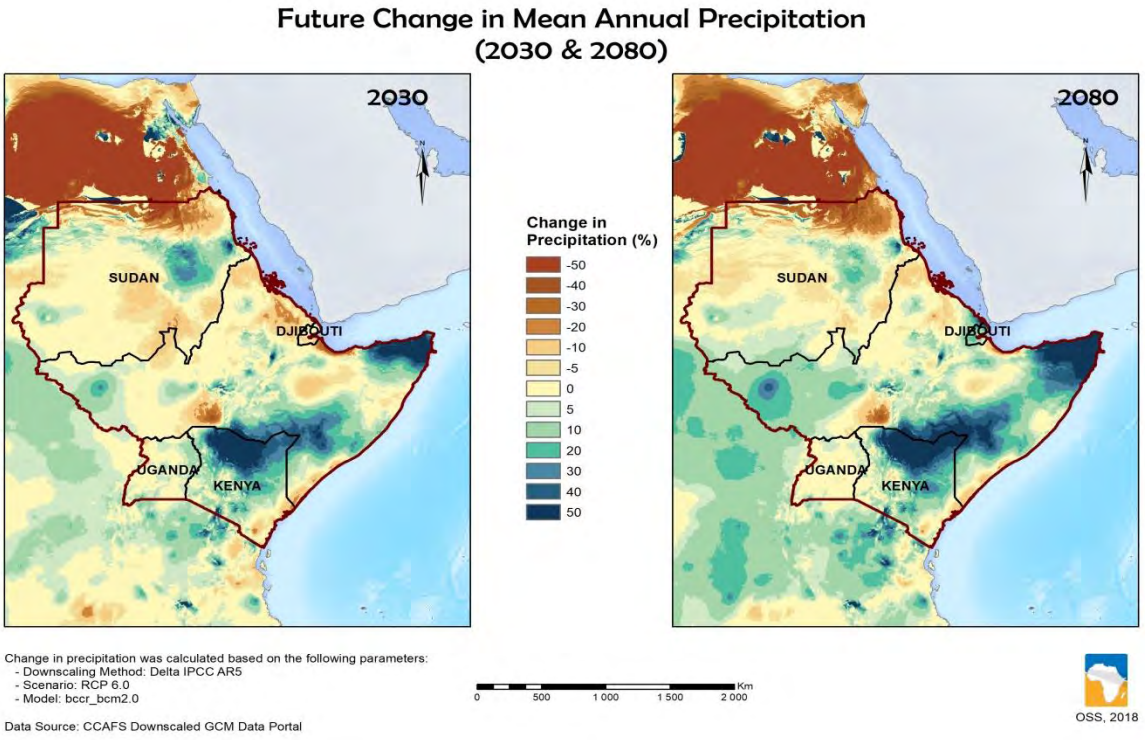


Figure 3a: Projected mean annual precipitation between 2030 and 2080 in the proposed project areas

The predominant livelihood system, especially in the ASALs of the HOA, is pastoral and agro-pastoral production. The pastoralists are constantly on the move, within and outside their national boundaries, in search of pasture and freshwater resources, often resulting into conflicts, which frequently necessitate regional intervention to resolve or prevent. Some other factors that worsen the vulnerability to drought risk include a high dependency on climate-sensitive livelihoods, fragile and rapidly degrading physical environment, inadequate extension services and high incidences of conflicts that are rampant in the region (Global Water Partnership East Africa, 2015).

[16] Global Water Partnership Eastern Africa (GWPEA) (2015). *Assessment of Drought Resilience Frameworks in the Horn of Africa*. Integrated Drought Management Program in the Horn of Africa (IDMP HOA), Entebbe, Uganda.

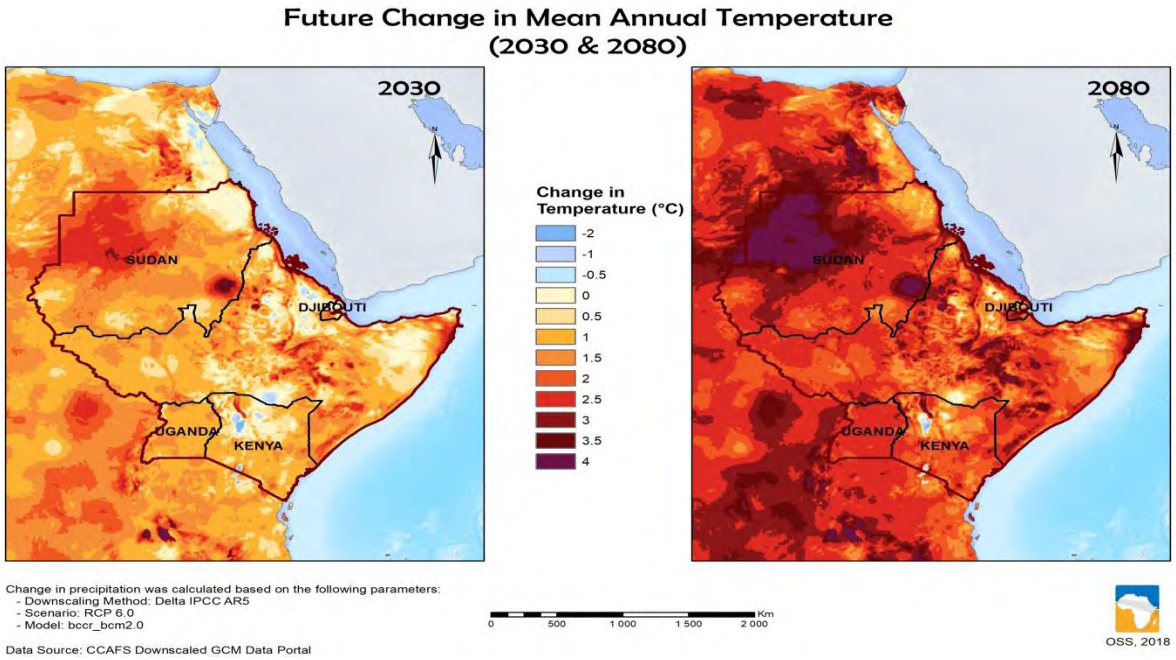


Figure 3b: Projected mean annual precipitation between 2030 and 2080 in the proposed project areas.

Global Water Partnership East Africa (GWPEA) is collaborating with IGAD and governments of Djibouti, Kenya, Sudan and Uganda through the Integrated Drought Management Programme (IDMP) and the Water, Climate and Development Programme (WACDEP) to enhance drought resilience in the region. The proposed project will build on the existing initiatives and establish new mechanisms to address drought-related challenges in the region through facilitating investments in early warning systems, building the capacity of targeted stakeholders, supporting innovative adaptation actions and enhancing knowledge management and skills.

The proposed DRESS-EA project will further strengthen linkages between the existing drought strategies at both regional and country levels and the drought declaration (for example the Windhoek declaration) that was adopted at the Africa Drought Conference (ADC) in August 2016 in Windhoek, Namibia. Furthermore, the project will support countries in the implementation of the Paris Agreement commitments on Nationally Determined Contributions (NDCs). Countries in the IGAD region including Djibouti, Kenya, Sudan and Uganda have put in place the NDC as part of their national development processes and have either identified NDC priorities (e.g. Kenya and Uganda) or are in process of identifying their country priorities (Djibouti and Sudan). In addition, the countries have developed National Adaptation Plans (NAPs) and /or National Adaptation Frameworks. The project will engage the responsible entities in the countries to identify priorities and synergies in the NDCs and NAPs for support during project implementation.

The DRESS-EA project will also contribute to the attainment of Sustainable Development Goals (SDGs) targets of the countries. This will be possible through the wide partnerships (at regional scale) that the project has proposed to put in place. Many of the targets of SDGs are closely linked to water resources management as water remains a key resource in several sectors of the economies of the focal countries. A prolonged absence of water (rainfall) often results in a

drought, therefore, the need to target water resource management. The DRESS-EA project will strengthen national, regional and inter-regional alliances not only to realize SDG 6 but for many other development goals targets such as SDG 13[17]. These two goals align quite well with the DRESS-EA project interventions. Also, the proposed DRESS-EA capacity development approach reflects the essence of SDG 17 i.e. use of national, regional and global partnerships for developing a knowledge base, and effective capacity development. The DRESS-EA project results framework is fully aligned with the means of implementation of the global development agenda, SDG 17, target 17.9[18] and SDG 6a[19] and 6b[20]. The DRESS-EA project will further contribute to SDG1[21], 2[22] and 5[23]

Employing such a regional approach to tackling the drought problem not only provides a transboundary innovative way for drought management since its occurrence is not limited to borders. Coordinated and cooperative arrangements across the countries including capturing data and sharing the resulting information, building capacity for drought management interventions, will build cohesion and provide platforms at the regional level. The diversity of ideas generated will be harnessed and both indigenous and modern knowledge, technologies and expertise will be equally shared. The DRESS-EA project will also contribute to the achievement of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI). Overall, regionally led implementation is less expensive and faster. It helps build a pool of regional and national experts. The innovations generated are adopted more easily by the member countries and moreover, it promotes sustainability. It provides platform and means for the countries to share experiences, practices, lessons, knowledge, and resources.

1.2 Description of the Project sites

The project will be implemented in different sites within each of four selected countries of the IGAD region. Basically, these are areas that are considered to be most vulnerable and prone to drought based on the following criteria:

- In terms of the environmental conditions, the sites experience high rainfall variability with increasing frequency and intensity of drought occurrences and high environmental degradation (focusing on vegetation and soil degradation as well as degradation and deterioration of water resources such as streams and rivers).
- Communities inhabiting such sites are also food insecure characterized by recurrent famine and a shortage of food. There is high dependence on the rain-fed agriculture especially high dependence of farmers and pastoralists on crop and livestock farming.

[17] Take urgent action to combat climate change and its impacts. This is taken in combination with target 1.5 of goal 1 (to build the resilience of the poor and those who are in vulnerable situations and reduce their vulnerability to climate related extreme events and other economic social and environmental disasters

[18] Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation"

[19] "By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies".

[20] "Support and strengthen the participation of local communities in improving water and sanitation management"

[21] End poverty in all its forms everywhere

[22] End hunger, achieve food security and improved nutrition and promote sustainable agriculture

[23] Achieve gender equality and empower all women and girls

- Socially, there are many vulnerable members among the smallholder farmers and pastoralists especially women, children, youth, disabled and elderly by gender. Low-income levels of the population/high poverty levels in such sites therein are known and reported.
- Economically, smallholder farmers and pastoralists have limited options in terms of the potential alternative sources of livelihoods and /or income.

These criteria allowed the selection of the project sites which are the most vulnerable to drought and Climate Change Impacts.

1.2.1 Geographical location and area

In Djibouti, the project will be implemented in three sites that are considered most vulnerable to droughts. The sites include Oued Ambouli, Wadi Gobaad, and the Hanle sector. These sites are located at latitudes 0°5‟ and 2°13‟ and longitudes 43°58‟ and 33°8‟ east respectively (Figures 4). The Oued Ambouli drains a watershed of about 600 km^2 and flows into the Indian Ocean near the Gulf of Tadjourah. The Wadi Gobaad is 120 km long and drains south of the Gobaad depression to the southwest of the Republic of Djibouti. It is the confluence of many superficial flows of the Adigala region in Ethiopia that crosses from south to north into Djibouti territory via Abbot Lake As Eyla. The Hanle sector is found 150-200m above sea level.

In Kenya, project will be implemented in Kitui and Samburu counties (Figure 5) that lie between latitudes 0°10‟ and 3°0‟ south and longitudes 37°50‟ and 39°0‟ East and latitudes 0°30’and 2° 45’ north of the equator between longitudes 36°15’ and 38° 10’east of the Prime Meridian respectively. Kitui covers an area of 30,496.4 km^2 including 6,369 km^2 occupied by Tsavo East National park. Samburu covers an area of 21,022.27 km^2. Samburu is bordered by Turkana to the Northwest, Baringo to the Southwest, Marsabit to the Northeast, Isiolo to the East and Laikipia to the South.

In Sudan, the project will be implemented in El Salam in the White Nile state. This site is located west of the White Nile River bordered by South Sudan to the south, South Kordofan state to the west and Kosti town mid-way to the north and North El Zelate town of South Sudan to the north (Figures 6a and 6b).

In Uganda, the project will be implemented in Rupa Sub County in Lokere Catchment. The catchment is located in the districts of Kaabong (5.4%), Moroto (32.0%), Kotido (3.8%), Napak (32.9%) and Nakapiripirit (2.2%) in the Karamoja Region and; Amuria (11.0%), Katakwi (9.5%) and Soroti (3.3%) in Teso Region (Figure 7). Lokere Catchment covers a total area of 8,156 km^2. Rupa Sub County in Moroto district borders Kotido District to the North, Katikekile Sub County to the South East, Moroto Municipality to the south and Turkana County of the Republic of Kenya. This calls for transboundary approaches and interventions in tackling the drought problem across neighboring areas in Uganda and Kenya.

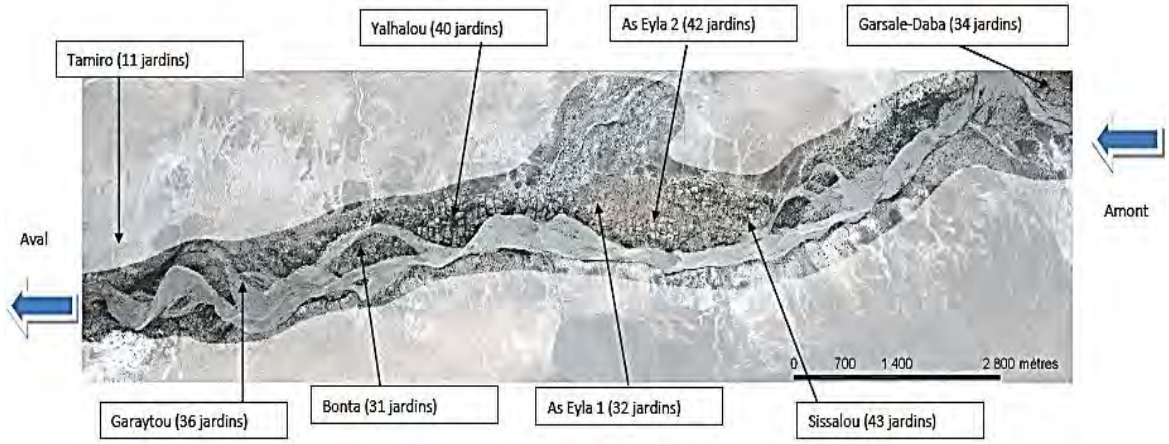


Figure 4a: Gobaad region, agricultural sectors of Gobaad cooperative (satellite image)

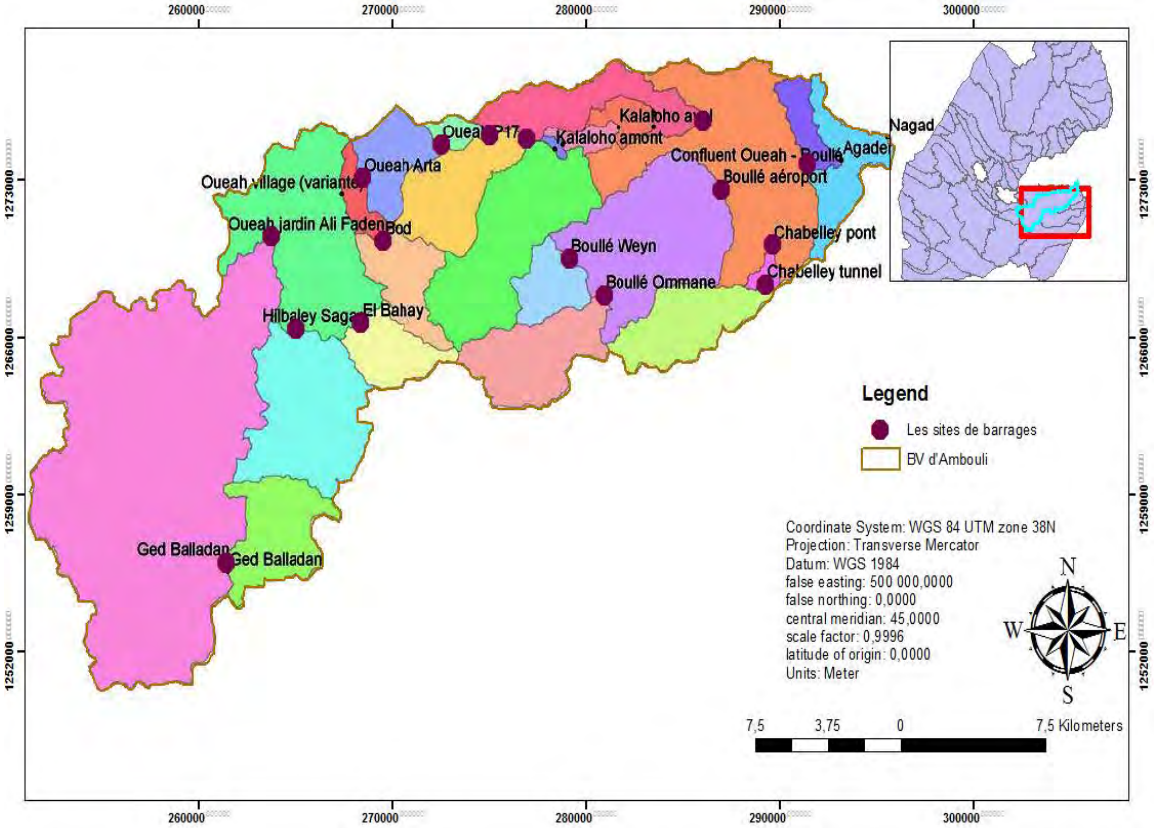


Figure 4b: Location of project sites (Oued Ambouli, Wadi Gobaad and the Hanle sector) in Djibouti

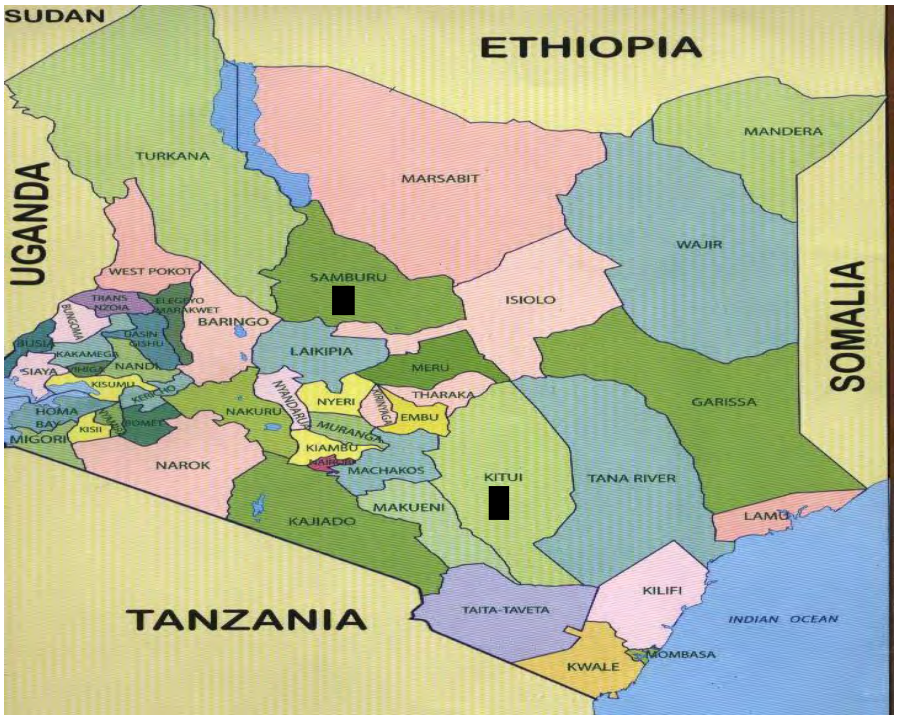
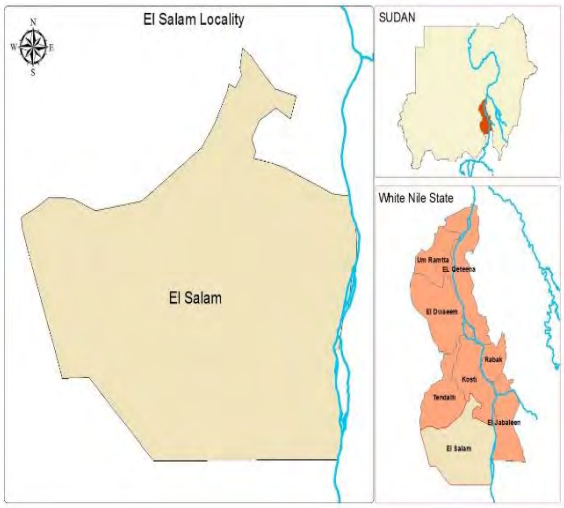


Figure 5: Location of project sites (Kitui and Samburu counties) in Kenya



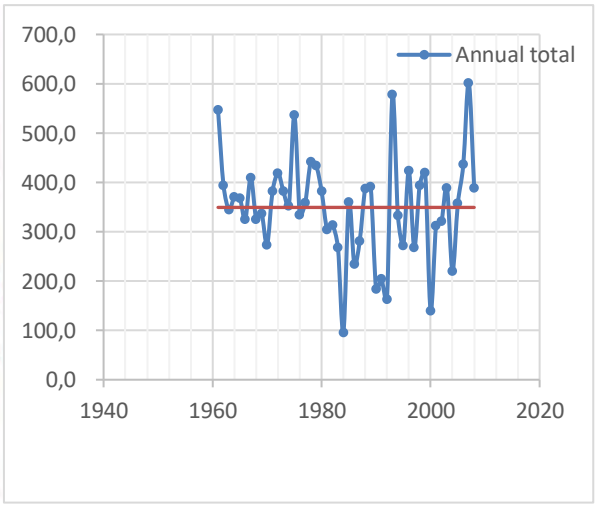


Figure 6(a): The location of El Salam in Sudan *Figure 6(b): Total Annual Rainfall (mm).*

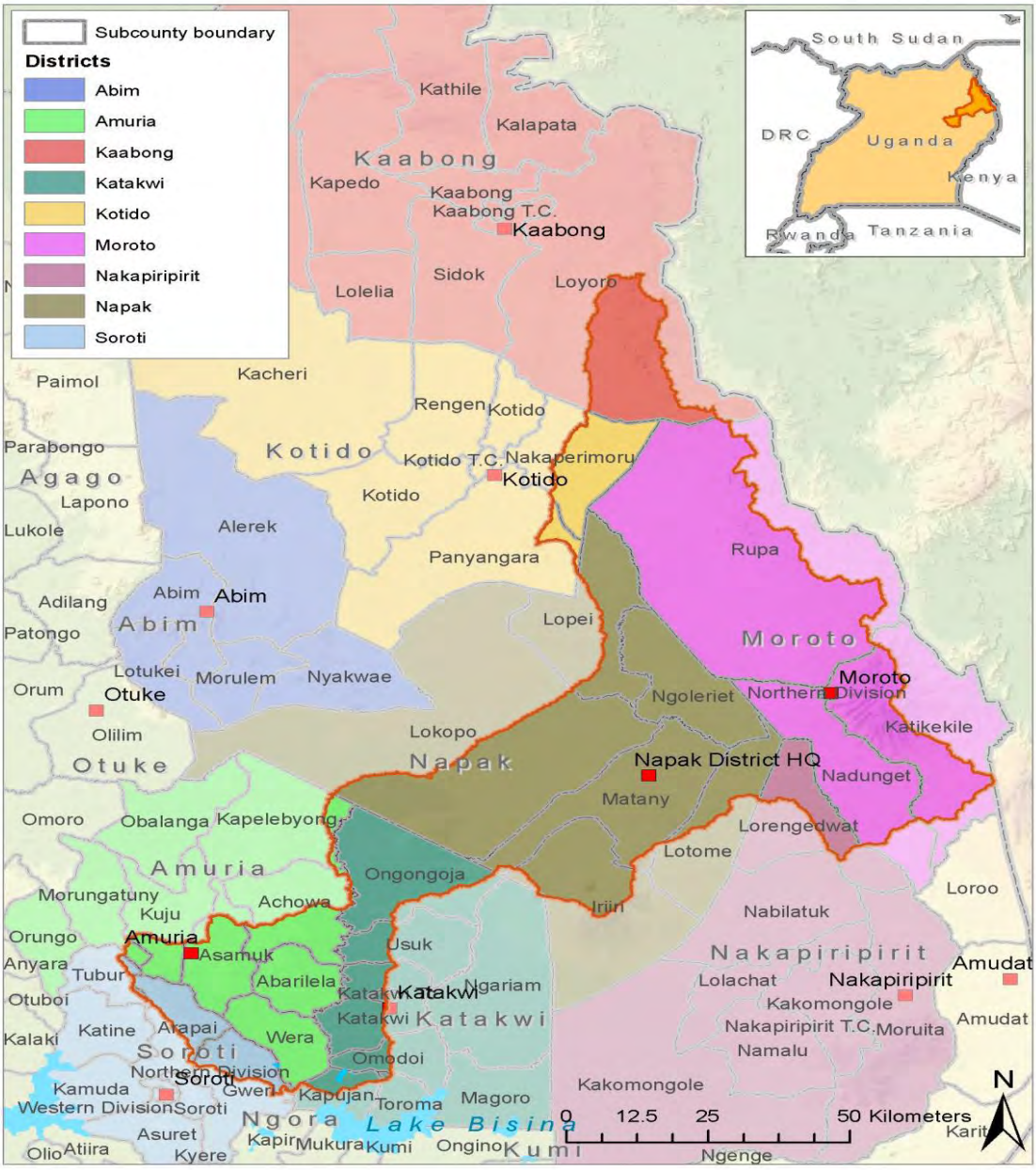


Figure 7: Districts and Sub-Counties in Lokere Catchment (Source: Lokere catchment Management Plan)

1.2.2 Agriculture

The agricultural lands are widely distributed on the terraces of the large basins of Wadi Gobaad and Hanley Wadi with a cultivated area of 0.5 to 1 ha per farm. Irrigation water is obtained from the wells dug in the terraces. According to the Government of Djibouti, only 10,000 hectares (24,700 acres) of arable land exist in the country. Majority of the agriculture is irrigated and domestic food production satisfies only 20% of the grain needs and 10% of the fruit and vegetable requirements of the population. Palm oil, refined sugar, and rice accounted for a combined 25.9%

of total imports in 2007. Due to the limited number of either permanent or intermittent water sources, rainfall is a key determinant of food security in the country.

In Kitui County agriculture is the backbone of the economy. In the highlands of Kitui, farmers are involved in subsistence agriculture - mainly growing cotton, tobacco, sisal, mangoes, maize, beans, cassava, sorghum, millet and pigeon peas. These crops are well adapted to the climatic conditions of Kitui. Crops produced are consumed locally with the surplus being sold to traders from Nairobi and neighboring towns. In the lowlands, farmers keep livestock - mainly cattle, sheep, goats, and chicken - as a means to supplement crop farming as their source of income. Tourism is a low-key economic activity in this area. Majority of the farming schemes in Sudan are traditional farming schemes (10 – 30 feddans) although there are also some mechanized rainfed schemes (500 – 1000 feddans).

1.2.3 Pastoralism

Approximately 130,000-170,000 pastoralists and/or nomads in Djibouti live in the rural parts of the country. These nomads live very traditional lives, sheltering themselves in portable huts made of branches and woven mats and living through the herding of sheep, goats, and cattle. However, due to the consistent presence of drought, pastoralists have lost 70-80% of their livestock from a lack of food and water. In Kenya, the majority of people in Kitui are nomadic pastoralists who mainly keep cattle, camels, sheep, and goats. These animals are mainly sold to the Kenya Meat Commission as well as traders from Nairobi and other neighboring towns, especially during droughts. The livestock population in Sudan is estimated to be 6,000,000 (cattle), 8,000,000 (sheep) on which communities depend for food and income. The Samburu people are nomadic pastoralists related to the Maasai that mainly occupy the county. The Samburus rely on sheep, goats, cattle, and camels as their source of livelihood. Livestock rearing is the backbone of Samburu County's economy. Their main food consists of maize, milk and blood, and meat on special occasions such as during circumcision ceremonies, marriage and birth of a child. Other ethnic groups living in Samburu County include Rendille, Turkana, and Borana. These are nomadic pastoralists who rear cattle, donkeys, camels, and goats. Cattle are an essential feature of the Samburu culture, especially because milk is an important part of the Samburu diet-a mixture of blood and milk. Traditionally, men are supposed to protect their villages and the livestock, whereas the women are tasked with looking after children and performing domestic duties such as cooking, fetching water and gathering firewood. Approximately 80% of the pastoralists move from the El Salam to South Sudan in search for pastures and water where they stay from September to June every year. In Uganda, the pastoral livelihood zone runs along the extreme eastern border with Turkana-Kenya, which comprises mostly of eastern Kaabong and Nakapiripirit, a huge proportion of Kotido, and Moroto as well as parts of Napak. In this area, transhumance is practices by Karamajong and Turkana across the Uganda and Kenya border in search for water and pastures. At the on-set of the rains, these communities return to their homes in the respective countries.

1.2.4 Water resources

Djibouti is generally poorly endowed with natural resources. It has inadequate arable land, insufficient rainfall, and underground water resources. There are a number of water pump schemes in Sudan scattered along the river Nile. However, most of them have not been

operational since 1995. No groundwater sources have been recorded in the El Salaam. Rainwater harvesting facilities mainly haffirs (artificial bonds) therein enable farmers and pastoralists to harvest and store water during dry spells. The White Nile River is the major source of water in the El Salaam. Lokere Catchment is well drained with a dense network of meandering seasonal rivers and streams. The only permanent streams run in the Mount Moroto Ranges (IIRR 2015), all other rivers and streams are seasonal. They originate in the mountainous areas along the border with Kenya, of which the rivers Nangoloapolon, Apule, Matheniko, and Omanimani are the most noticeable. With more frequent and severe droughts, such water resources in Uganda will likely experience negative impacts on water supply, biodiversity, and hydropower generation. A shift in rainfall patterns decreases the recharge of rainwater into the soil, which has far-reaching negative impacts on groundwater resources and water tables in wells.

1.2.5 Population

Overall, there is a high human population that is vulnerable to climate change and droughts in the project sites. Djibouti has a population of 818,159 people, of which 58.1% live in the capital city, Djibouti-Ville. The hinterland, an extension of the deserts of Ethiopia and Somalia, is sparsely occupied by a poor pastoral and largely nomadic population. Djibouti's population is young, with about 40 percent under age 15 and only 15 percent over 40 years of age 18. In Kenya, within the arid and semi-arid climatic conditions, Samburu has a population of about 224,000 people and 1.147 million[24]people in Kitui. According to the 2009 Population and Housing Census, the population growth rate of Samburu County is 4.45 percent per annum, higher than the national growth rate of 3 percent. Samburu shares its borders with four other counties; Marsabit to the north and northeast, Isiolo to the east, Turkana to the west and northwest, and Laikipia and Baringo to the southwest. In Sudan, the human population constitutes about 136,000 people (permanent), 120,000 (refugees in camps), 68,000 people (coming from South Sudan. The human population in Lokere catchment comprises mainly the rural poor estimated at 420,000 people. Such population constraints or is in dire need of the scarce water resources during drought.

1.2.6 Livelihoods

Livestock pastures constitute the country's major industries with the fishing sector employing only about 1,000 people in Djibouti. In Kenya, Bee-keeping is a major economic activity, especially in Kitui. Despite the harsh climatic conditions, some Samburu residents have recently started growing crops in an effort to fight starvation. Drought-resistant crops such as millet, sorghum and certain species of maize are grown in areas such as Lpartuk, Poros, and Malaso for food as well as income. Tourism is also a major source of revenue to the Samburu people, with some of the residents being employed in the county's safari lodges and others working as tourist guides. The county's main attraction sites offer a thriving market for Samburu artifacts such as beads, necklaces, and bracelets. The main livelihood of the Karamojong and Iteso in Lokere Catchment revolves around a mixed agro-pastoral economy. An increasing number of people rely on agro-pastoral livelihoods, which combine livestock rearing with crop production.

[24] http://www.kitui.go.ke/

1.2.7 Climate Change, droughts, vulnerability and threats

Djibouti is characterized by a very arid and semi-desert type of climate, which makes it extremely sensitive to climate change-induced drought and water scarcity risks. It experiences fluctuating, low and abrupt precipitation regime with annual mean rainfall of 150 mm, mean temperatures between 17°C and 42°C and extremely high rate of evapotranspiration amounting to 2000 mm per year. The vast majority of Djibouti's rural population is highly susceptible to climatic uncertainty – they live in deserts or marginal and infertile areas, often with highly erodible soils, poor ground cover and limited water supplies, where food security is a serious concern. Djibouti imports nearly all of the cereals consumed in the country, and food aid represents almost 10% of total imports. The country is poor in natural resources and arable land are limited (only 0.1% by area), as well as rainfall and groundwater reserves. According to the UN assessment of 2005, the population of Djibouti was 800,000 inhabitants, of which two-thirds live in the capital. The poor pastoral and nomadic people in Djibouti are highly vulnerable to prolonged droughts. The last major drought claimed nearly 4 percent of gross domestic product (GDP) annually between 2008 and 2011 and impacted more than half of its 860,000 residents. Djibouti is at particular risk for water shortages and severe flooding, both of which profoundly impact its growing but fragile economic sector.

In Kenya, rainfall distribution is erratic and unreliable due to drought. Kitui County is mostly dry and hot with temperatures ranging between 14°C during the coldest months (July-August) and 34°C during the hottest months (January-March). The county receives between 500mm and 1050mm of rainfall annually, with an average rainfall of 900mm a year. It has two rainy seasons; May-June (long rains) and September-October (short rains). Samburu is one of the driest counties in Kenya with temperatures ranging between 25°C during the coldest months (June and July) and 35°C during the hottest months (January to March). The county receives between 200mm and 250mm of rainfall annually. The rainfall pattern is unpredictable and at times the county receives no rain in a whole year.

Although **Sudan** is generally vulnerable to climate change especially to the high rainfall variability and related recurrent droughts, the human and livestock populations as well as the ecosystems in El Salam are highly vulnerable to the effects of drought. Insufficient and highly variable annual precipitation define the climate of most of Sudan with El Salam recording average minimum temperature (1963 – 2004) of 15.7ºC in (Jan.) and 25.3ºC (May); average maximum temperature (1964 – 2004) of 32.5ºC (Jan.) and 41.5ºC (April/May). The average annual rainfall (1961 – 2008) of 350mm.

In **Uganda**, the climate is not only a driving force but also a key determinant of the status of natural resources, such as water resources, forest, agriculture, ecotourism, and wildlife. Uganda has diverse and rich biodiversity, which has provided both food and medicine. The first rainy season ranges from March to June, while the second one ranges from August to November. The rainfall level ranges from 400 to 2200 mm per year. The precipitation pattern in Lokereis classified as bimodal, but is highly variable in space and time, with high peak events and long dry periods. Variance in annual rainfall is highest in the middle parts of the catchment. It is characterized by prolonged dry spells and erratic rainfall.

These prolonged dry spells result in: total crop failure with far-reaching impacts on food security, leaving communities vulnerable to starvation; reduced water and pasture for livestock; disease outbreaks; loss of biodiversity and increased resource use conflicts.

Overall the targeted countries have experienced drought pressure for quite a long time. The table below illustrates the drought years with widespread impact.

Table 1: Drought events in the four selected countries in the IGAD region.

Djibouti	Kenya	Sudan	Uganda
1980	1960-1961	1967-1973	1973
1984	1974-1976	1980-1984	1979
1988	1979	1987	1981
1996	1981	1989	1984
1999	1983	1990	1985
2000	1984	1991	1986
2005	1991/92	1993	1987
2007	1995/96	2011	1992
2008	1999-2000		1993
2010/11	2004		1999
	2011		

Source: ICPAC[25], Nairobi

2 Project / Programme Objectives:

The overall objective of the project is to increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through the establishment of appropriate early warning systems and implementation of drought adaptation actions in the IGAD region.

The project targets to consolidate synergies and adopt innovative and resilient drought management actions from selected IGAD region countries including Djibouti, Kenya, Sudan and Uganda. More specifically, this project is intended to strengthen the drought resilience of smallholder farmers and pastoralists by:

- Developing and promoting regional investments in drought early warning systems (EWS) and improving the existing ones
- Strengthening and improving the capacity of key stakeholders in drought risk management at regional, national and local levels
- Facilitating smallholder farmers and pastoralists inputs to undertake innovative adaptation actions that reinforce their resilience to drought
- Enhancing knowledge management and information sharing on drought resilience at the considered levels

[25] IGAD Prediction and Application Centre

3 Project / Programme Components and Financing:

Table 2: Budget summary

Project/ Programme Components	Expected Outcomes	Expected Outputs	Countries	Amount (US$)
1. Development and enhancement of a regional Drought Early Warning System	1.1: Increased use of effective Early Warning Systems by stakeholders	1.1.1: Efficient and effective EWS in place/developed	Djibouti, Kenya, Sudan &Uganda	688,000
		1.1.2: Institutional linkages for EW information established	Djibouti, Kenya, Sudan &Uganda	496,000
		1.1.3: Feedback mechanism for EW information developed	Djibouti, Kenya, Sudan &Uganda	316,000
2. Strengthening the capacity of stakeholders to manage drought risks due to Climate Change effects	2.1: Drought resilience of key stakeholders at regional, national and local levels strengthened	2.1.1: Drought management plans (DMPs) integrating CC aspects and adaptation actions are developed	Djibouti, Kenya, Sudan &Uganda	360,000
		2.1.2: Adaptive capacity of institutions, farmers, and pastoralists in drought management is improved	Djibouti, Kenya, Sudan &Uganda	950,000
	2.2: Partnerships for drought management at regional, national and local levels strengthened	2.2.1: New/existing regional and National arrangements /networks for drought management supported	Djibouti, Kenya, Sudan &Uganda	440,000
3. Supporting innovative drought and Climate change adaptation actions	3.1: Increased uptake and usage of concrete and innovative drought adaptation actions	3.1.1: Innovative water and soil conservation structures constructed	Djibouti, Kenya, Sudan &Uganda	1,550,000
		3.1.2: Groundwater sources established/ improved	Djibouti, Kenya, Sudan &Uganda	460,000
		3.1.3: Adaptive agricultural practices for improving crop production promoted	Djibouti, Kenya, Sudan &Uganda	1,140,000
		3.1.4 Adaptive livestock and rangeland practices enhanced	Djibouti, Kenya, Sudan &Uganda	1,044,040
		3.1.5: Enabling environment for smallholder farmers' and pastoralists' adaptive activities created	Djibouti, Kenya, Sudan &Uganda	625,600
		3.1.6: Environmental friendly IGAs ([e.g., Pottery, Beekeeping, Energy saving stoves, Briquettes making, and interlocking bricks) promoted	Djibouti, Kenya, Sudan &Uganda	1,460,280
4. Enhancing knowledge Management, awareness creation and information	4.1: Knowledge and awareness on drought risks management is increased	4.1.1 Good practices and lessons on drought management documented and disseminated	Djibouti, Kenya, Sudan &Uganda	904,000

sharing		4.1.2 Drought information management strengthened	Djibouti, Kenya, Sudan &Uganda	288,**000**
	M&E		Djibouti, Kenya, Sudan &Uganda and Uganda	287,100
6. Project/Programme Execution cost				1,045,860
7. Total Project/Programme Cost				11,009,020
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)				1,024,660
Amount of Financing Requested				**13,079,540**

4 Projected Calendar:

Milestones	Expected Dates
Start of Project/Programme Implementation	June 2019
Mid-term Review (if planned)	June 2021
Project/Programme Closing	June 2023
Terminal Evaluation	September 2023

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Project / programme components

COMPONENT 1: Development and enhancement of a regional Drought Early Warning System

Component one will focus on upgrading, as well as reinforcing, the climate change early warning process since smallholder farmers and pastoralists are facing challenges of accessing timely and accurate climate information for planning and responding to drought risks. Current EWS are inadequate and unsustainable causing crop failures, pasture losses, the death of livestock, soil degradation, conflicts, migration, and food insecurity. The purpose of this component is to conduct baseline studies and assessments as a first step to understand the current status of the existing EWS for different types of hazards in the four selected countries. By understanding the challenges associated with the existing EWS, the project will consequently undertake interventions aimed at promoting adaptation actions to address drought risks and improving the situation for the benefit of smallholder farmers and pastoralists, including women. In achieving these goals, the project proposes to improve and develop effective and efficient innovative EWS by equipping and upgrading weather stations including observation and monitoring infrastructure to ably collect weather related information that could aid smallholders, farmers, and pastoralists to plan appropriate drought adaptation measures. It is also understood that good risk management decisions rely on accurate information, which, in turn, requires reliable and timely data which is by far the most useful assets farmers and pastoralists can access to help them adopt drought resilient actions. In fact, farmers and pastoralists are constrained in accessing EW information, for this, the project proposes to construct and/or renovate EW information centers where all the necessary data for drought adaptation planning could be availed to the farmers and pastoralists.

Institutional linkages for sharing early warning information will also be supported and the targeted beneficiaries capacities reinforced to access EW information for instance through, developing social media tools and other response and feedback mechanisms for EWS. These specific aspects will be achieved through outcome 1.1, outputs 1.1.1, 1.1.2 and 1.1.3 presented below. The proposed activities in relation to the corresponding outcomes and outputs are also presented.

Outcome 1.1: Increased use of effective Early Warning Systems by stakeholders

Output 1.1.1: Efficient and effective DEWS in place/developed
Activities

- Activity 1.1.1.1 Assess the status of EWS in the target countries and the update options of traditional EWS with modern EW technologies
- Activity 1.1.1.2 Develop an EWS prototype to be used at the regional and national levels
- Activity 1.1.1.3 Equip/upgrade selected weather stations and Remote sensing derived products, time series of bioclimatic variables, etc.
- Activity 1.1.1.4 Construct/renovate and equip EW information centers including database
- Activity 1.1.1.5 Support/Equip project beneficiaries (pastoralist, farmers, and extension agents) to access EW information (e.g. devices including, brochure, SMS, Radio etc.)

Output 1.1.2: Institutional linkages for EW information established
Activities

- Activity 1.1.2.1 Develop/Review EW information sharing frameworks at regional. National and sub-national levels
- Activity 1.1.2.2 Develop an implementation action plan to operationalize the frameworks
- Activity 1.1.2.3 Hold inter-ministerial and sectoral meetings for data sharing
- Activity 1.1.2.4 Support national, regional and local EW information sharing Forums (including farmers and pastoralist associations)
- Activity 1.1.2.5 Support Incorporation of EW information into planning and budgeting processes of targeted countries

Output 1.1.3: Feedback mechanism for EW information developed.
Activities

- Activity 1.1.3.1 Support regular stakeholder EW information feedback platforms for farmers and pastoralists
- Activity 1.1.3.2 Hold quarterly stakeholder meetings on EW information utilization for national and sub-national stakeholders
- Activity 1.1.3.3 Conduct KAP surveys on EW information
- Activity 1.1.3.4 Develop periodic feedback user-friendly tools on accessing, utilizing and reporting EW information to mandated institutions

COMPONENT 2: Strengthening the capacity of stakeholders to manage drought risks due to Climate Change effects

Current capacity to integrate drought risk management interventions into development plans is insufficient; implement drought adaptation actions and responses at the community level and with a limited budget allocation for drought risk management at the national level.

Communities' drought coping mechanism is weak. Component two aims at strengthening and improving the adaptive capacity of various stakeholders including women and youth that are affected and contribute to drought adaptation and resilience in various ways. Such stakeholders include extension agents, artisans, local government or sub-national and national as well as regional leaders including technical and non-technical plus the smallholder farmers and pastoralists in the four selected countries/areas. The proposed project seeks to, first of all, understand the stakeholders' needs in drought adaptation if their resilience is to be enhanced. Based on such needs, capacity building plans including developing the appropriate tools and materials. The proposed activities are indicated under outcome 2.1 and 2.2 in outputs 2.1.1, 2.1.2 and 2.2.1.

Outcome 2.1: Drought resilience of key stakeholders at regional, national and local levels strengthened

Output 2.1.1: Drought management plans (DMPs) integrating CC aspects and adaptation actions developed

Activities

- Activity 2.1.1.1 Develop/update existing DMPs at national and sub-national levels integrating CC aspects and adaptation actions
- Activity 2.1.1.2 Popularization and Dissemination of the reviewed DMPs for use by the farmers and pastoralists
- Activity 2.1.1.3 Support integration of DMPs into the national and sub-national development plans. This activity involves organizing workshops for stakeholders to meet, share documents and integrate the drought management plans into national and sub-national level development plans.
- Activity 2.1.1.4 Support formulation of bye-laws and ordinances at sub-national and lower political units. The support required is facilitating the organization of a workshop for formulating as well as deliberating on the specific bye-laws.

Output 2.1.2: Adaptive capacity of institutions, farmers, and pastoralists in drought management improved

Activities

- Activity 2.1.2.1 Undertake a capacity needs assessment to identify gaps and hindrances to effective drought management
- Activity 2.1.2.2 Develop capacity building plans for regional, national and sub-national levels
- Activity 2.1.2.3 Develop capacity building materials
- Activity 2.1.2.4 Undertake exchange visits and learning tours for cross-learning in areas with successful drought management innovations including groundwater management initiatives
- Activity 2.1.2.5 Train staff managing EW information centers
- Activity 2.1.2.6 Train extension staff and artisans in drought adaptation interventions
- Activity 2.1.2.7 Facilitate community training workshops for farmers and pastoralists in drought risk management and adaptation measures utilizing the farmer field school approach

- Activity 2.1.2.8 Support farmers and pastoral groups to establish learning centers for innovative Climate Smart agricultural extension services. In this activity farmers and pastoralists will be provided with inputs

Outcome 2.2: Partnerships for drought management at regional, national and local levels strengthened
Output 2.2.1: New/existing regional and National arrangements /networks for drought management supported
Activities

- Activity 2.2.1.1 Support review/development of MoUs, protocols and stock route agreements for Drought Management and reducing conflict between farmers and pastoralists
- Activity 2.2.1.2 Facilitate the establishment of regional and national drought management multi-sectoral/stakeholder platforms to coordinate partner efforts
- Activity 2.2.1.3 Support regional and national partners to jointly mobilize resources for Drought Management in a changing climate context

COMPONENT 3: Drought and Climate Change adaptation actions

Component three aims at increasing resilience of smallholder farmers and pastoralists by supporting them to undertake concrete innovative and appropriate sustainable land, water, crops and livestock management measures or technologies. It is understood that currently, smallholder farmers and pastoralists have limited drought adaptation technologies that have consequently caused the extremely low productivity characterized by low crop and livestock food production levels, food insecurity and low incomes. The proposed project seeks to understand the current status of water security by focusing on surface and groundwater, soil and water conservation, crop and livestock production and sources of incomes. Some of the specific climate change and drought adaptation interventions include: developing soil and water conservation, water harvesting and storage structures e.g. simplified water jars, rock water harvesting, construction of sunken sand dams and water ponds. Mini-irrigation systems to support crops during water stress will be constructed. Underground water sources e.g. construction of boreholes and water wells will be constructed. Drought resistant pastures and crops will be promoted to enhance the resilience of pastoralists and farmers. The project aims to establish an innovative competitive grant scheme targeting household value in addition to food crops and food crop and livestock products. The competitive small grants scheme will focus on encouraging and rewarding the efforts of the most vulnerable among smallholder farmers and pastoralists such as the women, youth and elderly. Such efforts sought for evaluation will be on drought adaptation actions or IGAs. For instance, the innovativeness of the competitive grant scheme will include interventions on alternatives energy sources (solar, improved energy stoves, etc.), energy saving innovations, interlocking blocks and charcoal briquettes manufactured from household waste such as briquettes from crop residues will be promoted. Pasture management techniques- including growing fast-growing pasture varieties and storage as silage or hay for longer term use by domestic animals, improved livestock breeds of animals (cattle and goats), drought-resistant crops will be tackled. These aspects are covered under outcome 3.1 and outputs 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5 and 3.1.6.

Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions
Output 3.1.1: Innovative water and soil conservation structures constructed
Activities

- Activity 3.1.1.1 Undertake assessment on surface water utilization/potential/availability and develop water Management Plans in project sites
- Activity 3.1.1.2 Construct appropriate, innovative water harvesting and storage infrastructure (e.g. simplified water tanks, water jars, sunken dams, micro-dams, sand dams, water pans, valley dams, rock water harvesting, roadside water harvesting facilities, water ponds, and locally dug underground tanks, deep and shallow wells. Furthermore, Contour Stone Bunds and Stone Lines for water and soils conservation will be established.
- Activity 3.1.1.3 Construct mini-irrigation and water delivery systems (e.g. gravity flow scheme, micro-irrigation systems, check dams, drip irrigation borehole irrigation, and solar powered irrigation systems)
- Activity 3.1.1.4 Support protection of water wells and springs to ensure quality, quantity and efficient water use by providing inputs, for instance, live markers around the wells. Train the established water management committees to protect water wells and springs to ensure quality, quantity and efficient water use
- Activity 3.1.1.5 Promote appropriate soil and water conservation measures (e.g. terraces, contours, conservation/minimum tillage, pit gardening, Zai pits and home gardening). other soil and water conservation measures (e.g. Integrated soil fertility management, terraces, contours, conservation/minimum tillage, pit gardening, Zai pits and home gardening)

Output 3.1.2: Groundwater sources established/ improved
Activities

- Activity 3.1.2.1 Undertake assessment on groundwater utilization/potential/availability and develop groundwater Management Plans in project sites
- Activity 3.1.2.2 Review/develop regulatory framework and guidelines on groundwater sources
- Activity 3.1.2.3 Restore degraded water catchments to improve recharge rates of groundwater

Output 3.1.3: Adaptive agricultural practices for improving crop and livestock production promoted
Activities

- Activity 3.1.3.1 Promote fast growing and drought resistant crop varieties (e.g. Promote agro-silvopastoral systems (dryland agroforestry) (e.g. fast growing multi-purpose tree species such as *Acacia mearnsii*,)
- Activity 3.1.3.2 Promote agrosilvopastoral systems (dryland agroforestry) (e.g. fast growing multi-purpose tree species such as *Acacia mearnsii*, integrated with crops and livestock rearing)
- Activity 3.1.3.3 Provide inputs for irrigated agriculture technologies (Drip irrigation, small irrigation etc.)
- Activity 3.1.3.4 Promote climate-smart agricultural practices

Output 3.1.4: *Adaptive livestock and rangeland practices enhanced*

Activities

- Activity 3.1.4.1 Promote improved rangeland management practices (e.g. developing of rangeland management plans, reduction livestock stocking, integrated pest and disease management)
- Activity 3.1.4.2: Support introduction of drought-tolerant livestock breeds. The project will collaborate with animal research/breeding centers in the targeted countries to identify livestock breeds that are able to feed on poor quality forages (a characteristic of drylands) and crop residues. Often these are the breeds that have low feed requirements and yet produce better quality livestock products in the drylands.
- Activity 3.1.4.3: Promote hydroponic systems for growing nutritious fast growing cereals for livestock (animal feeds). Hydroponics agricultural systems have the advantage of growing crops with less water and moreover recyclable. The other merits of the system are that it requires a small area of operation, plants grow quicker, production is throughout the year and there is quality control of the plants being raised. The project will train potential farmers/pastoralists to adopt the system and will select women and youth groups to demonstrate the technology for future scale up/replication
- Activity 3.1.4.4 Support farmers and pastoralists to prepare high-value silage and hay for livestock during dry spells. The targeted communities will be trained in this aspect to increase on the production of livestock products. Preparation of nutritious silage and hay is a function of its exposure to appropriate weather condition, methods of collection of materials from the field, using optimum temperatures for curing. Other ways to increase the quality of hay and silage are the size of particles used in its processing and fiber ratios. High-value silage and hay will be made through the use of proper harvesting techniques of the materials and good management.
- Activity 3.1.4.5: Support formation and/or facilitate existing livestock associations/groups/cooperatives at the community level.

Output 3.1.5: Enabling environment for smallholder farmers and pastoralists' adaptive activities created

Activities

- Activity 3.1.5.1 Introduce and promote Index-based weather insurance in partnership with insurance companies. The targeted communities face the challenge of addressing residual losses and damages due to climate change risks. The focal countries require being supported to improve contingency measures and risk mitigation strategies. The DRESS-EA project will mobilize partners to support target countries to enhance knowledge and capacity on innovative risk insurance. Further, the project will collaborate with relevant partners and existing initiatives in the insurance sector to improve understanding of the risk profiles of the targeted countries. This information will be useful to connect the potential beneficiaries to providers of the risk insurance solutions. The project will also support countries to explore climate risk-pooling insurance solutions and other insurance products to address residual losses to climate risks.
- Activity 3.1.5.2 Conduct drought risk assessments on the agriculture value chain
- Activity 3.1.5.3 Facilitate farmer and pastoralists associations/cooperatives to generate analyze and share market information.

- Activity 3.1.5.4 Create linkages between farmer and pastoralists associations/cooperatives at regional, national and sub-national levels to enable sharing of market information

Output 3.1.6: Environmental friendly IGAs ([e.g., Pottery, Beekeeping, Energy saving stoves, Briquettes making, and interlocking bricks) promoted
Activities

- Activity 3.1.6.1 Support women and youth groups with inputs for IGAs including (e.g. growing of sisal and *Aloe vera* to support rope production and art crafts; beekeeping; briquette making; keeping of local poultry (e.g. Kroilers) and community tourismFarmer groups will be trained in modern techniques of sisal and Aloe growing. Also, the project will assist farmers to acquire high-value planting materials. Aloes *spp* that grow in dryland and produce quick returns through the sale of the aloe gel will be targeted. For example, *Aloe ferox* grows quite well in drylands and produces bitter extract and leaf powder for use as a constipation remedy as well as supporting immune function. This product is highly marketable and required by pharmaceutical companies. Linkage of collaboration between producers (farmer associations) and a prospective buyer will be made.
- Activity 3.1.6.2 Provide competitive small grants targeting smallholder farmers and pastoralist associations to undertake innovative IGAs or drought adaptation actions.
  Activity 3.1.6.3 Provide inputs for value addition crop and livestock products

COMPONENT 4: Knowledge management and awareness creation

There is a limited awareness on drought risks and adaptation actions amongst stakeholders leading to poor planning and responses to drought risks and disasters with low crop and livestock yields hence food insecurity and low incomes. This component seeks to support knowledge generation, packaging, and dissemination between and across stakeholders in various institutions. The activities facilitate institutions to generate knowledge on drought risk management, undertaking study tours and exchange visits, documenting lessons learned or best practices, facilitating knowledge exchange. The information, lessons learned, best practices and innovative technologies will be documented and shared for the use by various stakeholders.

The specific activities of this component are highlighted under outcomes 4.1 and 4.2 and outputs 4.1.1 and 4.2.1.

Outcome 4.1: Knowledge and awareness on drought risk management increased
Output 4.1.1: Good practices and lessons on drought management, EWS, and Climate Change impacts documented and disseminated
Activities

- Activity 4.1.1.1 Document lessons and best practices from project interventions. From the onset of project implementation, lessons and best practices that can be replicated will be documented. This will also promote sustainability as it will promote continuity of the good practices identified even beyond the project implementation period.
- Activity 4.1.1.2 Generate and package information dissemination materials on EW, CC and drought adaptation actions in forms for easy uptake (e.g. policy briefs, brochures) adapted to the various stakeholders. Generate and package information dissemination materials on EW and drought adaptation actions in forms for easy uptake (e.g. policy

briefs, brochures). The package information will be done commensurate with the various levels i.e. at Policy (national and sub-national levels), technocrats, and community levels.

- Activity 4.1.1.3 Disseminate/share knowledge and information through the use of existing and popular platforms e.g. electronic and print media, telecom that is easily accessible to the stakeholders.

Output 4.1.2 Drought information management strengthened

Activities

- Activity 4.1.2.1 Support existing channels/networks for information generation and dissemination at the regional level (e.g. GHACOF for EW and IDDRISI for drought management platform and national platforms)
- Activity 4.1.2.2 Engage policymakers in the dissemination of drought management information and best practices
- Activity 4.1.2.3 Support drought management working groups to share and disseminate the information. This involves organizing workshops and meetings for vulnerable groups of women and youth to share and disseminate information on drought management.
- Activity 4.1.2.4 Develop gender responsive and scale-up strategies for drought, CC and early warning technologies among women, and other vulnerable groups

The proposed project targets smallholder farmers and pastoralists that are threatened by the changing climate risks from recurrent and prolonged droughts that negatively impact on their sources of livelihood in the IGAD region. The project basically intends to increase the resilience of such populations to the impacts of recurrent and prolonged droughts. In fact, recurrent and prolonged drought not only limit agricultural production but also lead to chronic scarcity of water, food, and pastures for human and animal/livestock populations of communities especially in arid and semi-arid areas in drylands within the IGAD region.

B. Promotion of new and innovative solutions to climate change adaptation

First of all, pastoral and agro-pastoral communities in the four targeted countries have experienced drought pressure for quite a long time. Their survival is essentially dependent on climate-sensitive livelihoods that are derived from fragile and degraded natural resources amidst weak and inadequate extension services for improved natural resources management. The abilities of these communities to cope with climate-related events such as droughts have greatly remained weak. The ability of local community populations and ecosystems in the proposed project areas to recover from the shocks is largely limited. Therefore, this project will promote new and innovative solutions by employing a Regional Participatory Learning and Action Approach. In this approach, new and already existing innovative solutions to communicate, manage and adapt to climate change and drought impacts will be identified through participatory processes involving gatherings at national, sub-national and regional levels. Considering the project design, it essentially seeks to develop and maintain a strong linkage between the stakeholders at the regional level and others including smallholder farmers and pastoralists at the sub-national levels. Such linkage has been and continues to be a major hindrance to the resilience of communities to climate change impacts and drought. Smallholder farmers and pastoralists rarely access early warning information on droughts. If they did, still they rarely use it to plan the various adaptation activities. This project innovatively harnesses, develops and enhances the communication channels and linkages, develops new and upgrades existing tools and technologies for various stakeholders including smallholder farmers and pastoralists in the focal countries. The proposed project also seeks to provide fora and platforms where stakeholders can easily share information, and other opportunities for managing climate change impacts and drought risks. The project further innovatively plans to train extension staff such that they could easily support knowledge and capacity building among smallholder farmers, pastoralists and other stakeholders.

Another new and innovative solution to climate change adaptation is the inclusion of small competitive grants to stimulate and reward hard work. Small competitive grants will be provided to the most vulnerable yet organized farmers' groups including women and youth with innovative ideas. Women and youth groups will be provided an opportunity to present and showcase their innovative climate change adaptation and drought management ideas or mini-projects. Some of the innovative IGAs activities and drought adaptation actions envisaged under the competitive small grants program include: *Training, skills building* and *engaging* in gender responsive and home-based income generating activities such IGAs include pottery, production of energy saving stoves and briquettes making for vulnerable members of the community (e.g. women, youth and the elderly). Smallholder farmers and pastoralists interested in pursuing specific IGAs will be supported with training sessions and facilitators or experts to be knowledgeable, skilled and perfect these activities and develop innovative ideas. It is well known that among smallholder farmers and pastoralist communities in the four selected focal countries in the IGAD region, women are essentially responsible for home keeping where they manage homes daily with numerous domestic chores. The men may not allow them to travel far or be away from home for relatively longer times unless they are attending regular women group meetings for household development. Therefore promoting IGAs that respond to such society social set up for stay home women and mothers as well as the elderly is a major innovation that enhances sustainability under the proposed project. In this case, such vulnerable members of the community stay home and focus on making such products as pottery, weaving sisal and other crafts, producing briquettes and energy-saving stoves which they later sell for income. Women and the elderly can ably engage in such home-based productivity by accessing the funds under the competitive small

grants scheme which they invest to ably produce more for higher incomes. One other area of innovation could be *adding value* to some of the products of pottery, energy saving stoves, and briquettes through better and fancy designs that do not compromise the overall purpose of the product. They could also innovate by customizing the products to various stakeholder needs and ably earn more money from them.

In terms of innovative drought adaptation measures under the competitive small grants program, notable activities include *training* and *skills developing* and *value addition* to the various drought-resistant food crops and food crop products; drought tolerant livestock products. Similarly, Smallholder farmers and pastoralists interested in pursuing such IGAs will be supported with training sessions and facilitators or experts to be knowledgeable, skilled and perfect these activities and develop innovative ideas. For instance, among smallholder farmers' crops such as tubers and cereals could be ground using local materials and stored for longer periods. This way a farmer can rest assured of higher incomes for a relatively longer time. Also, pastoralist women and girls are known and credited for adding value to milk products, for instance, they skillfully process milk to ghee and store such a high-value product longer. The proposed project will also support these vulnerable members of the community to innovate more using the competitive small grants scheme. The ideas or mini-projects will be evaluated competitively under a specific call for innovative ideas where the best are evaluated following specified criteria will be awarded the small grant for implementation. The following criteria will be used to select the beneficiaries for the competitive small grants scheme. They should (i) be women, youth or men that are already actively participating in the DRESS-EA project activities, special focus will be on vulnerable and marginalized groups; (ii) the rationale should be for IGA, (iii) be knowledgeable and skilled in the IGAs and drought adaptation measures they intend to innovate in, (iv) write, cost and present their ideas, (v) the innovation plans should be feasible with net profit, (vi) have the capacity to scale up the innovation at the end of the project, (vii) activity that contributes to resilience to climate variability and change. One other innovative aspect of the proposed project is the introduction and promotion of Index-based weather insurance in partnership with insurance companies. In this activity, appropriate insurance products that could help smallholder farmers and pastoralist reduce and offset climate change-related losses from crop and livestock and other livelihood sources will be promoted in partnership with insurance companies. The targeted communities face the challenge of addressing residual losses and damages due to climate change risks. The focal countries require being supported to improve contingency measures and risk mitigation strategies.

C. Economic, social and environmental benefits

The DRESS-EA project's design promotes activities that are compliant and compatible with the ecological and social context of smallholder farming and pastoralist in the IGAD region as well as the Environmental and Social Policy of the Adaptation Fund.

At the socio-economic level

The project will directly contribute to improving the populations' livelihoods, across the four selected countries in the IGAD region, through innovative approaches and measures and income-generating activities. The development of new EWS infrastructures and the improvement of existing ones at regional and national levels and the organization of smallholder, pastoralists and vulnerable groups of women and youth will serve to enhance their livelihoods.

In fact, activities such as promoting the growth of drought-resistant crops and drought tolerant breeds of livestock, soil and water conservation measures and climate-smart agriculture are expected to increase incomes. The livelihoods improvement will also be based on the

development and promotion of IGAs (ecotourism, beekeeping, sisal, and crafts production, energy saving stoves, briquettes and promotion of interlocking bricks for construction).

Furthermore, these actions would also socially enhance and ensure food and water security for the drought-affected populations in the four countries by limiting the drought-related risks on agriculture and pasture and health (water-related diseases). Indeed, the project plans to improve water resources quality and quantities, to prevent communities from natural disasters and avoid epidemics.

Another benefit from such measures would be reduced social unrest, conflicts and, migration of community members seeking water and pastures and other sources of livelihoods. Therefore, in posterity, these measures would socially reduce people's instability and migration across the countries as well as across the regions within the countries.

Some activities of the project are specifically targeting women, women-headed households, and vulnerable groups by involving them in the consultative processes. In addition, to reduce their vulnerability to drought, for instance, the competitive small grants programme, improved cook /energy saving stoves and briquettes stoves will be introduced and promoted for both income generation and improving resilience to climate change. The stoves will also have the positive impact of reducing women's and children's burden of collecting fuelwood. Women could then spend more time on productive activities. The youth will also be engaged in activities such as pottery and ecotourism.

Overall, the planned interventions of the proposed project provide concrete socio-economic and environmental benefits to ecosystems and populations especially the vulnerable groups including women and youth among smallholder farmers and pastoralists in the region. The interventions essentially reduce pressure on the ecosystems so that they can provide the goods and services to vulnerable populations upon which they derive their livelihoods. It is evident that with such planned interventions in early warning systems, (capacity building efforts, soil and water management, surface and groundwater improvement, climate-smart agriculture, range and livestock management and the proposed IGAs) not only make the vulnerable women, youth, children and elderly resilient against drought and climate change variability but also provide them with concrete benefits in terms of food, crop products, livestock products, income/money from sale of such products and clean and safe water. Developed water points support women and children in reducing the distance traveled to collect water. The stoves will also have the positive impact of reducing women's and children's burden of collecting fuelwood. Women could then spend more time on productive activities.

At the environmental level

The project will have very high impacts on the natural ecosystems restoration and management. The implementation of the proposed drought EWS will allow the reduction of the impacts related to climate changes disasters especially droughts. The information that the drought EWS will generate at the appropriate time will help the community leaders, the natural resources managers and the individual smallholder farmers and pastoralists to develop contingency plans/emergency plans and eventually reduce the damages and losses associated with climate change and droughts. The project will develop specific contingency plans based on the analysis of the vulnerabilities of ecosystems and populations.

The development of drought management plans or reviewing the existing ones will greatly contribute to drought management at various levels. In addition, the implementation of concrete

drought adaptation actions will also have concrete benefits on the ecosystems through the implementation of adapted approaches, measures and actions.

Moreover, during the project implementation period, the activities to be undertaken will have direct environmental benefits. For instance, the silvopastoral dryland agroforestry and the rangeland management practices will help reduce the pressure on the ecosystems and preserve biodiversity.

Activities will also focus on surface and groundwater resources by drawing up their current status and by undertaking activities for better mobilization and use efficiency. This will be achieved through the implementation of innovative water and soil conservation structures, the establishment, and enhancement of groundwater sources and the promotion of adaptive agricultural practices. The concrete impact of the project on developing surface and groundwater resources is the availability of clean water resources for human and livestock populations among smallholder farmers and pastoralist communities in the IGAD region.

The lessons learned and the good practices to be adopted will be extended to sites in the four participating countries and other countries and sites in the IGAD region. This will be achieved through the involvement of the populations and actors at local and central level. The planned sensitization and communication activities will ensure the mobilization of decision makers and local population and their engagement for a sustainable management of the ecosystems in the focal countries. The results of dissemination and scaling up in addition to the awareness-raising actions will be the basis for sustaining the project's achievements and their ownership by the population. Capacity building of the smallholder farmers, pastoralists, and other involved stakeholders will focus on the approaches and adapted techniques of managing drought-prone areas in other regions/areas.

All these are anticipated benefits of the project interventions. However, to mitigate negative impacts of the interventions in compliance with AF ESP, Environmental and Social Impact Assessments, Gender analysis supported by a complete gender action plan as well as a grievance redress mechanism will be undertaken during the development of a full proposal document. Beyond the lifespan of the project as a way to further ensure sustainable benefits to vulnerable groups, it is proposed that a study will be undertaken to develop gender responsive and scale-up strategies for drought, CC and early warning technologies among women, and other vulnerable groups (Activity 4.1.2.4).

D. Cost-effectiveness

The proposed project focuses on using the regional approach towards improving drought resilience of smallholder farmers and pastoralists through enhancing and developing an EWS. The project has a twofold objective, it aims at the one hand to sharing an updated and relevant information to announce the drought on a regional scale, which will enable the deployment of a regional action plan where the joint capacities and measures of intervention will be more efficient and more cost-effective. On the other hand, it plans to contribute to improving the conditions and infrastructures of the beneficiary countries in the most vulnerable sites they selected, thus permitting an effective response to drought and greater resilience to climatic variations and changes, which intensified this situation over last decades.

Drought phenomenon is a transboundary issue faced by the four target countries, so the DRESS-EA project has similar challenges to be addressed allowing capacity building and support processes streamline, thus creating an economy of scale in implementation. It encompasses an important capacity-building component of the various stakeholders, policy makers, managers, technicians, local government representatives, local community representatives and people. It further proposes to support the vulnerable members such as women, children, youth and elderly in undertaking the innovative IGAs. Undertaking these interventions in four selected countries of the IGAD region is not only catalytic but also pioneers innovativeness in addressing climate change and drought that transcend the political boundaries. Comparing taking no action and actually undertaking the proposed project interventions basically leads to positive cost-benefit ratios, probably with varying magnitudes. It is worth noting that climate change and drought cannot be coordinated only at the respective national levels because these aspects are transboundary in nature. Therefore, regional coordination has comparative advantages that are cost-effective with positive cost-benefit ratios considering scenarios of implementing the interventions or not.

Advantages of the regional approach

Implementing this project using the regional approach provides the following advantages. First of all, drought is a transboundary challenge that affects many countries including the four selected countries of the IGAD region. These transboundary challenges require using transboundary innovative solutions, hence the proposed regional approach to address the drought problem in the IGAD. In addition, the regional approach to tackling the drought challenge presents the advantages below.

(i) Cooperation/coordination: Drought is regional phenomena and as such, the data and information generated by each country will feed into the regional EWS and make it more efficient. In addition, the project will strengthen the regional capacity; build cohesion and provide platforms at the regional level.

(ii) Knowledge, technology, and expertise: A wider platform at the regional level to harness diversity of ideas, indigenous and modern knowledge, technologies and expertise in drought risk management will be established. This will facilitate exchange and experiential learning;

(iii) Duplication: The regional design will enable coordinated planning and implementation of interventions thereby minimizing duplication of efforts*;*

(iv) Contribution to regional frameworks: The project will contribute to the achievement of the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI). Overall, regionally led implementation is less expensive and faster. It helps build a pool of regional and national experts. The innovations generated are adopted more easily by the member countries and moreover, it promotes sustainability. It provides platform and means for the countries to share experiences, practices, lessons, knowledge, and resources.

E. Consistency with development strategies

The proposed project will contribute to achieving the respective national adaptation priorities. For all the four selected focal countries water and agriculture are priority sectors for adaptation to drought, in a Climate change context. Consequently, the project is in alignment with national or

sub-national sustainable development strategies, development plans, poverty reduction strategies, national communications and national adaptation programs of action. It is also consistent with national socio-economic priorities, national climate change priorities and national disaster risk management priorities.

Regional level:

Protocol on the Establishment of a Conflict Early Warning and Response Mechanism (CEWARN) for the IGAD Member States, 2003	The CEWARN mandate is "to receive and share information concerning potentially violent conflicts as well as their outbreak and escalation in the IGAD region, undertake an analysis of the information and develop case scenarios and formulate options for response."
IDDRISI strategy, 2013	This is an initiative developed for driving a regional agenda to develop and harmonize policies, strategies, and systems throughout the IGAD region. It enhances cooperation and integration among the member countries and causes the execution of national and regional projects in a coordinated framework of implementation, aimed at ending drought emergencies.

National level:

1- Djibouti

Intended Nationally Determined Contribution	Djibouti's mitigation contribution is to abate its greenhouse gas emissions by 40 percent by 2030 relative to the business as usual scenario. http://www4.unfccc.int/ndcregistry/PublishedDocuments/Djibouti%20First/CPDN%20Djibouti_9%20-%20CPDN%20-%20Format%20pour%20soumission%20CCNUCC.pdf
Primary Sector Development Master Plan 2009-2018	This is a reference framework for the planning and development of natural resources in the primary sector. The Ministry of Agriculture of Livestock, and the Sea, in charge of hydraulic resources, have prepared it. This plan aims at improving the contribution of the primary sector to the socio-economic development of the country by a better valorization of the resources of this sector.
Accelerated Growth Strategy for the Promotion of Employment 2015-2019	This is the first instrument for the operationalization of the Vision Djibouti 2035. It is built around four strategic axes: (i) economic growth, competitiveness and role private sector engine, (ii) human capital development, (iii) public governance and institutional capacity building, and (iv) regional development poles and sustainable development. It aims to achieve, for the 2015-2019 period, an average real GDP growth rate of 8%.
Vision Djibouti 2035	Achievement of the goals of the 2035 Djibouti vision will be achieved through the strategies that underpin each of the identified pillars and cross-cutting themes (Gender, Youth, and Environment).To address food and nutrition insecurity and combat food shortage, the 2035 Djibouti vision aims to promote a food and nutritional security strategy. In the context of more productive and sustainable agriculture, forestry and fisheries, Vision Djibouti 2035 provide for the promotion and development of agriculture, fishing, and breeding.

Second national communication, 2013	The development of this document demonstrates to the international community the vulnerability of the Republic of Djibouti to the impacts of climate change and its financing and capacity-building needs in the areas of both mitigation and adaptation.
National adaptation programme of action - NAPA (2006)	National adaptation programmes of action (NAPAs) provide a process for Least Developed Countries (LDCs) to identify priority activities that respond to their urgent and immediate needs to adapt to climate change – those for which further delay would increase vulnerability and/or costs at a later stage.
Strategy and Action Plan for the implementation of the Great Green Wall, 2011	The overall objective of the Strategy and Action Plan for the implementation of the Great Green Wall is to create sustainable socio-economic and environmental development conditions for the populations concerned by the GGW.

2- Kenya

Constitution of Kenya (2010)	Kenya's Constitution provides the basis for action on climate change by guaranteeing citizens a clean and healthy environment, which is a fundamental right under the Bill of Rights
Intended Nationally Determined Contribution	Kenya's mitigation contribution is to abate its greenhouse gas emissions by 30 percent by 2030 relative to the business as usual scenario. Kenya also commits to mainstream adaptation into Medium-Term Plans and to implement actions. Achievement of these contributions will require financial, technology and capacity building support (MENRRDA). http://www4.unfccc.int/ndcregistry/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf
Second Medium-Term Plan of Vision 2030	Mainstreaming of climate change in national planning, by identifying actions to address climate change, many of them recommended in the NCCAP (MODP)
County Integrated Development Plans	Many county governments are addressing climate change in their policy and planning documents, including the CIDPs that outline development priorities (County Governments).
National Climate Change Framework Policy	Adopts a climate change mainstreaming approach that includes integration of climate change considerations into development planning, budgeting and implementation in all sectors and at all levels of government (MENRRDA).
Climate change legislation	A Climate Change Bill is expected to be enacted into law. This legislation includes the establishment of a National Climate Change Council that has responsibility for coordination of climate change actions, including mainstreaming climate change in national and county budgets, plans and programs (MENRRDA)
Draft National Policy on Climate Finance	aims to further Kenya's national development goals through enhanced mobilization of climate finance (National Treasury and MENRRDA)
National Climate	The first national policy document on climate change has improved understanding of the issue and has guided policy decisions (MENRRDA).

Change Response Strategy, 2010	
National Climate Change Action Plan 2013-2017	Sets out priority adaptation and mitigation actions that will help Kenya move toward a low carbon climate resilient development pathway. Effective implementation will be supported through the establishment of an enabling governance structure including a climate change policy and law, a funding mechanism and investment framework, a capacity development and management framework, and a national performance and benefit measurement system (MENRRDA).
National Adaptation Plan	Consolidates the country's vision on adaptation supported by macro-level adaptation actions that relate with the economic sectors and county level vulnerabilities in order to enhance long-term resilience and adaptive capacity (MENRRDA). http://www4.unfccc.int/nap/Documents%20NAP/Kenya_NAP_Final.pdf The NAP recognizes the governance and institutional arrangements for implementation of adaptation actions as stipulated in the NCCAP and Climate Change Act, 2016. With drought being the main hazard, the NAP recognizes that the National Drought Management Authority (NDMA) is a key institution in enhancing adaptive capacity. Established in 2011, NDMA is mandated to establish mechanisms to ensure that drought does not become famine and that impacts of climate change are addressed.
Green Economy Strategy and Implementation Plan	Sets out a framework to encourage a shift towards a development path that promotes resource efficiency and sustainable management of natural resources, social inclusion, resilience and sustainable infrastructure development (MENRRDA).
Agricultural Sector Development Strategy	The Agriculture (farm forestry) Rules require the establishment and maintenance of farm forestry on at least 10 percent of every agricultural land holding (MALF)
Draft Kenya Climate Smart Agriculture Framework Programme 2015-2030	Promotes climate resilient and low carbon growth sustainable agriculture that ensures food security and contributes to national development goals in line with Kenya Vision 2030 (MALF and MENRRDA).
REDD+ Readiness	The proposal outlines a strategy for developing REDD+ in Kenya (REDD+ Coordination Office, KFS).
Renewable energy policy tools	0% import duties and Value-added tax exemption on renewable energy materials, equipment and accessories; feed-in tariffs at a price level that attracts and stimulates new investment in the renewable energy sector (ERC).
Energy regulations	On solar water heating, energy management and solar photovoltaic systems were passed in 2012. The regulations require that: buildings using more than 100 liters per day shall use solar water heating systems; designated energy consuming facilities shall carry out energy audits and implement audit recommendations; and design, manufacture and sale of solar PV be licensed by the ERC. Draft regulations developed to set minimum energy performance standards for selected electrical appliances and improved biomass cookstoves (etc)

3- Sudan

Intended Nationally Determined Contribution	Sudan intends to pursue implementing low carbon development interventions in three sectors of energy, forestry, and waste in line with Sudan's national development priorities, objectives and circumstances.

	http://www4.unfccc.int/ndcregistry/PublishedDocuments/Sudan%20First/28Oct15-Sudan%20INDC.pdf
Agriculture and Articulate a Future Vision and Action Plan for Agricultural Revival	In continuation of the strategy to support agriculture manifested in the declaration of the green mobilization and the preparation of the five-year strategic plan, the government has formulated the present status of agriculture and articulated a future vision and action plan for Agricultural in 2008. The overall mission of the agricultural development strategy is to transform agriculture from a sector dominated by subsistence production to a modern sector responsive to market signals and with substantial contributions to poverty reduction, growth, foreign exchange earnings and sustainable management of natural resources.
Interim Poverty Reduction Strategy Paper.	Interim Poverty Reduction Strategy Paper is a national multi-sectoral strategy paper of Sudan. Its main objective is the reduction of poverty in Sudan and providing the roadmap for the elaboration and implementation of the full Poverty Reduction Strategy Paper. The Paper covers the area of environmental protection, agriculture, and livestock.
National Action Plan for the implementation of the Great Green Wall for the Sahel and Sahara Initiative (GGWSSI) 2015	The National Action Plan for the implementation of the Great Green Wall for the Sahel and Sahara Initiative (GGWSSI) is a national action plan with a cross-sectoral approach. The timeframe of this Action Plan is 5 years between 2015 and 2020. The main objectives of the Action Plan are the restoration of degraded lands; forest and rangeland sustainable management; support to livelihoods and resilience of local communities.
National Adaptation Plan 2016	The Plan provides information on actions to reduce climate change vulnerability regarding water resources, agriculture and food security, public health, coastal zones, and rural communities in all the 18 states of Sudan. http://www4.unfccc.int/nap/Documents%20NAP/National%20Reports/Sudan%20NAP.pdf
National Adaptation Programme of Action 2007	In order to offer an effective basis for urgent and immediate action to reduce the mounting risks of climate change on the nation's most vulnerable communities, the government of Sudan has adopted the national adaptation programme of action (NAPA) in 2007. The overall goal of the NAPA process in Sudan has been to identify urgent and immediate activities to address climate variability and climate change within the context of the country's economic development priorities. http://extwprlegs1.fao.org/docs/pdf/sud148489.pdf
Second national communication, 2013	This document identifies specific adaptation measures to build future resilience against looming impacts.
Combat Desertification Law of 2009.	This Law consisting of 25 articles divided in V Sections aims at: establishing the competent authorities, at national and local level, to achieve: elimination or mitigation of desertification; achieving development of material and human capabilities; creating a successful environment to achieve the intended goals; and coordinating between them through a mechanism of supervision and follow-up.

4- Uganda

Intended Nationally Determined Contribution	The livelihood of the people of Uganda is highly dependent on the exploitation of her natural resources, including climate. In submitting this INDC, Uganda's priority is the adaptation. The country will continue to work on reducing vulnerability and addressing adaptation in agriculture and livestock, forestry, infrastructure (with an emphasis on human settlements, social infrastructure, and transport), water, energy, health and

	disaster risk management. Sustainable Land Management (SLM) and Climate Smart Agriculture (CSA) will be scaled up to increase resilience at the grassroots level.
National Climate Change Policy	The National Climate Change Policy is a national sectoral policy of Uganda. Its main objective is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures while promoting sustainable development and a green economy.
National Agriculture Policy, 2013.	This National Agriculture Policy (NAP) shall be guided by six principles derived from the country's lessons learned in implementing the PEAP, the PMA, and decentralized governance through the Local Government Act of 1997. The overall objective of the agriculture policy is to achieve food and nutrition security and improve household incomes through coordinated interventions that focus on enhancing sustainable agricultural productivity and value addition; providing employment opportunities, and promoting domestic and international trade.
Second National Development Plan (NDPII) 2015/16-2019/20.	This Plan is designed to propel Uganda towards middle-income status by 2020, in line with the aspiration of Uganda's Vision 2040. This Plan aims at strengthening Uganda's competitiveness for sustainable wealth creation, employment, and inclusive growth. This Plan prioritizes investment in five areas with the greatest multiplier effect on the economy, which are: (i) agriculture, (ii) tourism, (iii) minerals, oil, and gas, (iv) infrastructure development, (v) human capital development.
Uganda Vision 2040.	The present Uganda Vision 2040 lays out the general development objectives for Uganda over a 30-year period. Its goal is to transform Uganda from a predominantly peasant and low-income country to a competitive upper middle-income status country. Together with the National Development Plan, Uganda Vision 2040 provides the overall leadership and policy direction for job creation and priority setting. It prioritizes agricultural development as well as tapping into the youth demographic dividend. Agricultural production in Uganda is mainly dominated by smallholder farmers engaged in food and industrial crops, forestry, horticulture, fishing and livestock farming.
Uganda National Land Policy.	The Uganda National Land Policy is a national policy of the Republic of Uganda whose main goal is to ensure an efficient, equitable and optimal utilization and management of Uganda's land resources for poverty reduction, wealth creation, and overall socio-economic development. To this end, the document provides for a set of goals, including in the area of the environment.
Second national communication, 2014	This document summarizes up to date information as well as general and specific data on climate change in Uganda, the national greenhouse gas inventory, interventions made and/or proposed in adapting to and mitigating climate change. https://unfccc.int/resource/docs/natc/uganc2.pdf
National Adaptation Programme of Action (NAPA) 2007	Undertook the first preliminary assessment of the country's vulnerability to climate change, and identified its adaptation priority projects. The proposed project is anchored firmly in the priorities identified in the NAPA. The project will contribute towards implementing NAPA Priority projects in Uganda such as Community Tree Growing, Land Degradation Management, and Water for Production and Development Planning

F. Alignment with national technical standards

The national technical standards include Environmental Impact Assessments (EIAs), building codes, water quality regulations, and sector-specific regulations. Regarding EIAs, depending on the sector and the size of the project, the category of impact assessment or management strategy that the project is expected to trigger will have to be outlined. At full proposal development, compliance with relevant technical standards will be explained in detail, including addressing environmental assessments, building codes, and land use or tenure regulations, as required by national legislation. If one specific activity of the project/programme requires compliance with technical standards, the legal source of the requirement, the steps are taken to comply with it and

the nature of the authorization/clearance granted for the project to be implemented will be explained.

Project activities will be screened, their impacts assessed and depending on the magnitude of the impacts, they will undergo an Environmental Impact Assessment (EIA) or Review in accordance with EIA procedures and guidelines of the respective countries as well as the Adaptation Fund. Mitigation measures will then be proposed.

Each executing country has developed their own environmental standards and regulations and potential projects are required to comply with these standards in accordance with the laws of that country.

Some of the national laws, codes, and standards applicable to the theme of this project are.

Djibouti

- Gender Policy 2011-2021.
- Decree No. 2013-110 / PR / DFAIT establishing the National Early Warning and Reaction Mechanism for Pastoral and Urban Conflicts
- Law No. 93 / AN / 95 / 3e L Bearing Code of Water
- Law No. 51 / AN / 09 / 6th L on the Environment Code

Kenya

- Arid and Semi-Arid Land (ASAL) Policy
- National Water Policy 2012 and Water Act 2002
- Agricultural Sector Development Strategy 2010-2020
- Land Control (Amendment) Regulations, 2008
- Gender Policy, 2007

Sudan

- Water policy, 2007
- Comprehensive National Strategy 2002-2027
- Natural Resources Strategy (2003-2027)

Uganda

- National Land Use Policy, 2011
- The Uganda Climate Change Policy, 2015
- The National Land Policy, 2013
- Rangelands management policy in Uganda, 2001

The key Environmental standards and regulations of the countries are presented in Table 3:

Table 3: Environmental Standards and guidelines in executing countries

NO	COUNTRY	ENVIRONMENTAL STANDARDS	RESPONSIBLE INSTITUTION
1	Djibouti	The project will comply with the environmental standards in Djibouti i.e. National Environmental Impact Assessment Procedures and Guidelines. The Ministry of Habitat, Urbanism, Land Planning and Environment of Djibouti is responsible for approving and evaluating the EIAs.	The Ministry of Habitat, Urbanism, Land Planning and Environment
2	Kenya	The National Environmental Management Authority of Kenya is responsible to coordinate and supervise Environment related activities in Kenya. Identified activities in the project will be categorized according to the Environment Impact Assessment Regulations of Kenya. For example, the small projects are subjected to the Environment Social Monitoring Plan (ESMP)	National Environmental Management Authority of Kenya
3	Sudan	The government of Sudan adopted a National Strategy for Development. The strategy enabled the establishment of the	Higher Council for Environment and Natural Resources

		Higher Council for Environment and Natural Resources (HCENR) to oversee, coordinate and liaise on issues pertaining to and linked with, the environment. Sudan has a comprehensive environmental legislation, Environmental Protection Policy Act. This is clear on developmental projects, of which construction that might negatively impact the quality of the environment should undergo an Environment Feasibility Study (EFS)	
4	Uganda	National Environmental Impact Assessment Procedures and Guidelines.	National Environmental Management Authority of Uganda. This is the Agency responsible for coordination, supervision, and compliance with environmental standards in the country.

In order to ensure that all Unidentified sub-projects (USPs) are compliant with the environmental and social policy requirements and/or standards of the respective countries, all sub-projects will be detailed per country at the full proposal level or during project implementation. The USPs will be subjected to initial screening and categorized based on individual country requirements and specifications as stipulated in their Environmental laws and regulations. For Projects whose impacts can easily be mitigated, appropriate mitigation measures will be proposed and recommended for implementation by the project stakeholders. For those with more complex impacts that may need deeper studies, full environmental impact assessment will be recommended and undertaken before the actual activity implementation takes place. An Environmental and Social Management Framework will be developed at full proposal development stage. This will guide all Environmental and social aspects of the entire projects and sub-projects as identified in the full proposal and during project implementation. Deliberate efforts will be undertaken during the development of Environmental and Social Management Frameworks (ESMF) to ensure that it takes into account the laws and regulations governing Environment and social issues (Table 3) in the target countries and well as the Environment and social policy of the adaptation fund. At full proposal development and implementation levels/stages, all relevant laws, regulations and existing technical standards including water resources management, water infrastructure development, agriculture development, and other project related activities will be reviewed and relevant aspects observed including labor and public procurement procedures for project investments. The proposed project will be aligned to the respect all current regulations relating to water, biodiversity and soil protection, and work for a better management of natural resources. The project will be implemented using the existing structures (Ministries). The respective Ministries are expected to spearhead and ensure that all relevant laws and regulations applicable to each Country are observed.

In addition, compliance certificates will be provided by the incumbent national authorities and will be annexed to the ESIA study.

G. Project duplication

During the design process, all stakeholders, including other projects entities were consulted in order to avoid any potential duplication of efforts, resources or geographical coverage, and to ensure synergy between ongoing initiatives and the proposed DRESS-EA project.

The project will complement and create synergies with existing similar initiatives including projects and programmes. At the regional level the ongoing projects and programmes include:

The *Integrated Drought Management Programme (IDMP) in the Horn of Africa* promotes drought resilience of countries, communities, and ecosystems in the region. It is part of the global IDMP programme that the Global Water Partnership (GWP) and the World Meteorological Organization (WMO) launched in Geneva in March 2013 at the High-level Meeting on National Drought Policy (HMNDP). Overall, the IDMP HOA builds climate resilience, reduce economic and social losses, and alleviate poverty in drought-affected regions within the HOA through an integrated approach to drought. Specifically, the program operates in Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda covering all the focal countries for the DRESS-EA Project.

The programme facilitates collaborative and integrated approaches to achieve sustainable management of water and drought in the drought-prone areas of the HOA mainly focusing on enhancing strong partnership and strengthening capacities with the overall aim of developing resilience to drought and climate change in the HOA following an *Integrated Water Resource Management (IWRM) approach*. Its particular contribution is to strengthen partnership and influence policy and practice towards the better integrated management of drought in the HOA in a changing climate. The DRESS-EA Project will supplement this project by strengthening the capacities of different institutions in the focal countries to generate, package and disseminate drought information as well as supporting the implementation of adaptation actions. (1)

The *Agricultural Climate Resilience Enhancement Initiative (ACREI) Project* (Ethiopia, Kenya, and Uganda) focuses on enhancing the capacity of communities to cope and adapt to climate variability by building their resilience and their livelihoods which are dependent on climate-sensitive resources. The interventions are intended to technically improve climate forecasts using a regional approach and build the capacity of communities to understand and appropriately use climate information and related agro-advisories in decision-making to climate-proof their livelihoods, and thus enhance their food and nutrition security. The Project uses Agro-pastoralist Field School (APFS) approach, an adaptation of the well proven Farmer Field School approach as its main delivery mechanism that builds strongly on previous experiences. The Project uses Climate-sensitive APFS interventions in engaging communities in participatory group learning and experimentation coupled with Village Community Banking approach (VICOBA) to support community uptake of strategies and practices for resilient local food and income systems (2). The DRESS-EA Project will supplement efforts of this project by further simplification and packaging of drought information and support drought actions. The projects also are focusing on different parts of the countries (Uganda and Kenya) that are the same while others are different countries altogether (Djibouti and Sudan).

Strengthening IGAD's capacity to enhance drought resilience in the Horn of Africa (SCIDA-II). (2016-2018). The main objective of the project is to strengthen IGAD's competencies and services in order to help coordinate and implement the Drought Disaster Resilience and Sustainability

Initiative (IDDRSI). IDDRSI's objectives are linked more closely with the fight to eliminate the causes of conflict and migration. The project uses the approach of building resilience by strengthening IGAD's and its Member States' capacity to develop adequate proactive policies and interventions to build drought disaster resilience and the project builds on the measures GIZ conducted in support of IDDRSI during the first phase from May 2012 through to December 2015 and covers all IGAD Member States. The project focuses on improving internal capacity for IDDRSI support at the IGAD Secretariat and within its institutions, boosting IGAD's capacity to deliver IDDRSI support services and to facilitate Member State implementation of cross-border IDDRSI activities, strengthening specific IGAD capacities for managing natural resources within selected IDDRSI clusters, strengthening peace and security as an integral part of cross-border IDRSSI measures as well as assisting IGAD to build up the basic capacity it needs to deal with the drought resilience-migration nexus (3). The capacity built by this project will contribute to the smooth implementation of the DRESS-EA Project and help upscale the capacity building component of the project for implementation of concrete adaptation actions.

At the *Famine Early Warning Systems Network (FEWS NET),* we use a methodology known as scenario development to assist in projecting food insecurity and future food assistance needs. FEWS NET has adapted common scenario building concepts to help analysts make sense of the complex food security landscape. Our process provides a logical structure to think through the interactions among the many variables that affect food security. At FEWS NET, scenario development is the methodology we use to make projections about acute food insecurity outcomes. This approach is the basis of the analysis presented in our food security outlooks and updates. Scenario development allows FEWS NET to meet its core mandate of giving decision makers early warning about potential food security crises. (4)

The *Building Resilient Communities, Wetlands Ecosystems, and Associated Catchments in Uganda project* was approved in approved in December 2016 with the aim of enhancing Ugandan subsistence farmers' ability to deal with climate impacts including drought. It is estimated that 4 million people who live in and around Uganda's wetlands rely on them for food security. The impact of climate change, coupled with other environmental stresses, is increasing the degradation of these wetlands and associated ecosystems.

The Project is intended to will assist the Government of Uganda to take climate change effects into account in managing wetlands and associated ecosystems including include increased climate variability and extreme weather events, such as droughts, floods, high temperatures and violent storms.

It will also help Uganda to restore critical wetlands to improve ecosystem services - such as replenishing groundwater, improving flood control, and enhancing the livelihoods of subsistence farming communities through fishing and agriculture as well as enhancing the skills of people to diversify their livelihoods and become more resilient to climate shocks. The project will improve the ability of communities in sensitive wetland areas to reduce climate risks and prepare them for climate-related disasters including through decentralized early warning systems. The Project targets the south-western and eastern regions of the country that are home to some most vulnerable people more than half of them women. (5)

The implementation of the DRESS-EA project will supplement the activities of this project as it will improve access to information of the most vulnerable people and help in the up-scaling capacity building of the government and local communities in the implementation of adaptation actions in the project focal areas (Karamoja region).

The *Drought resilience in northern Kenya Project* focuses on the counties of Marsabit and Turkana in northern Kenya with the aim of supporting the county governments to improve the overall conditions for increasing resilience to drought of the ecosystems and local communities.

The Project offers technical advice to the governments of these two agrarian counties on implementing the initiated reforms and on restructuring, training, back-up and direct consulting activities that enables state and non-governmental players to elaborate sustainable policies and strategies that enhance resilience to drought in the counties.

Different stakeholders work together to create and support structures for a better exchange of knowledge between the counties, the national government and other decision-makers and the project assist the county governments in knowledge-based and results-oriented planning, steering and financing of preventive measures. This facilitates the coordinated, effective implementation of state policies and programmes that will improve drought resilience among the inhabitants of Turkana and Marsabit.

In addition, the project supports those responsible in the agricultural institutions of the county governments in developing holistic approaches for increasing resilience to drought. The county governments cooperate with non-governmental organizations, the private sector and grassroots organizations with a view to developing and coordinating effective service systems to be implemented at the local level in selected agro-ecological areas with cooperatives and other user communities. Activities will focus on providing agricultural extension services, training, and organizational advice.

The project is working with the tried-and-tested practices and processes initiated by the predecessor project and developing them further. These include plans for the agricultural sector, which are being drawn up as the basis for follow-on measures, in cooperation with decision-makers in Turkana and Marsabit counties. The project supports training activities in order to strengthen the county governments' capacities for making decisions and taking action as well as supporting user-oriented training courses on geographical information systems (GIS) in the counties to bring about a lasting improvement in regional planning (6).

The development objective of the *Rural Community Development and Water Mobilization Project for Djibouti* is to increase access of rural communities to water and enhance their capacity to manage water and agro-pastoral resources in the project areas using a participatory approach to community-based development. The restructuring is to entail following changes: (i) include some additional small activities, for example, protection against floods of water infrastructure constructed under the project, monitoring of works, small equipment for the beneficiaries, etc.; include additional financing for the recruitment, within the project implementation unit (PIU) of a regional coordinator and support staff for Tadjourah region and amend the definition of the open-air reservoirs which were constructed with a capacity of about 20,000 m, without change in the unit cost; (ii) update the results framework to adequately measure all relevant objectives and achievements of the project; (iii) update the number and or the unit cost of some activities

(cisterns, income generating activities, beneficiaries and staff capacity building program, etc.); (iv) take into account the actual cost of some expenses which were underestimated in the actual cost tables (incremental costs, income generating activities, etc.); and (v) split the unallocated amount between the three categories of the project. The project abstract is drawn from the PAD, SAR or PGD and may not accurately reflect the project's current nature (7). The proposed project will supplement the activities of this project especially in areas of capacity building and increasing access to water resources by the local communities.

The '*Adapt for environment and climate resilience project' (ADAPT)*, being implemented in Sudan aims to drive change for a better future. It's led by the Ministry of Environment and Natural Resources, in coordination with the Ministries responsible for water resources, agriculture, forestry, and livestock. The project will help over one million people to build resilience and cope with climate shocks, improve policy and decision making through strengthened data, analysis and capability in government, help mobilize large-scale climate financing, and make humanitarian and development investments more environmentally sustainable and 'climate-smart'.

The project focuses on Championing and supporting better management and governance of water resources, better management, and governance of forests and rangelands and better understanding and adaptation to climate change. This will be achieved through by providing expert advice and guidance to key partners, improving science and make data available to inform decisions and strengthening institutions and policies. The project will strengthen environmental institutions and integrate sound environmental governance and climate change adaptation into policies and plans. It will leverage financing to increase the implementation of adaptation actions (8).

The DRESSEA project will complement these initiatives of the ADAPT project and where possible upscale the interventions that have proved to be working. The key experiences gained at the national level, sub-national and local levels will help in the implementation of the DRESS-EA Projects as both projects are focusing on increasing the resilience of ecosystems and communities.

H. Learning and knowledge management component

This component of the project will help facilitate experience sharing and cross-learning of innovative drought adaptation interventions in the Project focal countries. This will be achieved by generating knowledge on drought risk management, concrete drought adaptation actions. It will also consist in packaging it appropriately according to the target audiences/stakeholders and sharing it through electronic and print media and forums at regional, national, sub-national and local levels.

The project will support generation and documentation of case studies, good practices and lessons learned from the implementation of this project and other innovative case studies and successful drought management interventions. The Project will address challenges and create response strategies to help future design and scaling-up of project interventions, and policy/practice influencing in the focal countries and the IGAD region as a whole.

This will enable development/production of appropriate awareness materials i.e. print materials, posters, flyers, video documentaries, and others as well as briefs (technical and policy) to facilitate

influencing practices or policies at regional, national, sub-national and local levels. The project will also organize and facilitate awareness raising events, forums, and platforms at all levels to facilitate joint learning and experience sharing among various stakeholders.

The project will organize and facilitate both inter and Intra-community and country exchange visits and tours to areas with successful drought management interventions to enable experience sharing among extension officers, farmers, pastoralists, and other key project stakeholders share experiences at regional and local levels. Such visits and tours will be organized targeting women and youth among the smallholder farmers and pastoralists in the region.

To emphasize the regional approach this component will be aligned to the IDDRSI strategic objective on enhancing generation, access, use and integrated management of research, knowledge, technology, and innovations in the IGAD region. The strategy highlights documentation and sharing of lessons learned and evidence-based good practices and promising technologies amongst key stakeholders for adoption and scaling up.

I. Consultative process

At the regional level, the development of this concept is being spearheaded by Global Water Partnership Eastern Africa a regional organization covering over 9 countries in the region Uganda, Kenya, Egypt, Eritrea, Somalia, Ethiopia, Sudan, Rwanda, and Burundi.

This being a regional project to the consultation process was undertaken. During the project design, several consultations were conducted with key stakeholders at the local, sub-national, national and regional level to assess the project activities that may require undertaking Environment Impact Assessment (EIA) or Environment Impact Reviews (EIR). Detailed studies of the activities listed to assess potential impacts and their mitigation measures will be undertaken at the full proposal development phase.

The consultation process used several methodologies. These included key informant interviews, focused group discussions and reconnaissance surveys. Individual meetings were held with representatives of the countries from the EE and telephone calls to stakeholders who were difficult to physically meet but recommended to provide input.

In addition, a regional validation meeting was organized in Entebbe, Uganda on 15th and 16th March 2018 (Workshop report attached Annex 1). The aim of the meeting was to:

i. To provide information to key stakeholders on the Adaptation Fund and the current Concept note development processes
ii. To facilitate the integration of inputs by key stakeholders and triangulating the information collected from stakeholders and literature.
iii. To concretize on gathering final opinion on the target sites in each country and to clarify on the DRESS-EA project activities.

Care has been taken to ensure participation and collaboration of all key stakeholders right from the pre-concept stage up to this level and the same process will be followed up to full proposal and implementation stages. Among the key stakeholders that were consulted during the consultative workshop held in Entebbe, government officials from the Ministry of Agriculture Water Fisheries and Livestock for Djibouti, the Ministry of Environment and Forests for Kenya, Ministry of Water Resources, Irrigation and Electricity for Sudan and the Ministry of Water and

Environment for Uganda as well as officials at lower government levels. The workshop also allowed the participation of other stakeholders including non-government, the private sector, development partners, research/academics as well as farmers and pastoralists. This approach is intended to create ownership by the various stakeholders and ensure sustainability of project interventions by creating institutionalized systems. This is also expected to establish a mechanism for scaling-up similar approaches and interventions in the future once the project is funded.

The process of consultations with the different stakeholders at this stage has mainly focused on the project nature and its specific role in enhancing the resilience of the most vulnerable communities. During the consultative process activities and adaptation measures to be included by the project, defined key stakeholders, their roles, responsibilities, and contribution during project implementation have been discussed; identified project management structures and issues of sustainability and ownership, especially by communities and local government. Others have included recognition of the role of women and youth in the implementation of the project, coordinating and collaborating with other existing projects, identification of priority problems/issues and possible solutions, identification of risks and/or possible conflicts and resolution mechanisms as well as projects/initiatives for possible synergies.

The proposed sites were determined during country level stakeholder consultation process taking into account a number of factors including the severity of the drought in the proposed areas as well as the level of vulnerability of the smallholder farmers and pastoralists in those areas.

In order to build on this initial consultative process utilized during the overall project design and preparation, during the full proposal development stage a number of follow-up consultative activities will be undertaken to ensure that the end clients and target communities are adequately consulted and their views are taken into account in project implementation. Comprehensive community level consultations in the focal countries and target areas, including with vulnerable groups such as female-headed households and key informants including elders and opinion leaders will be undertaken during the full proposal development stage to ensure that views of all key stakeholders are adequately captured and represented. In addition to all identified beneficiaries and the targeted population at the local and national level, vulnerable groups and gender considerations will be taken care of in compliance with the Environmental and Social Policy of the Adaptation Fund. The project consultation process will be inclusive and appropriately consider gender as a key issue towards planned interventions. To ensure effective implementation of the project components, detailed information will be deliberately collected from population/community categories including men and women and ensuring representation of the elderly, disabled, children, youth and socio-economically disadvantaged groups. Gender-sensitive tools such as gender analysis will be used to collect the data. The Gender Analysis tool creates a “gender looking-glass” through which the community can be examined.
The consulting team will make a deliberate effort to interact with the various groups of men and women (different social-cultural groups, age, and location) in addition to the end users at the community level who are the most vulnerable. In order to allow an effective gender mainstreaming into decision making, the project will ensure the following:

i) Gender equality and women empowerment by significantly involving women and using appropriate gender tools such as gender mapping and analysis during planning, implementation, monitoring, and evaluation of the project.

ii) The project will ensure that women play an adequate part in the four components of the project i.e. early warning, capacity building, drought adaptation actions and knowledge management by deliberately targeting 40% of the beneficiaries/participants being women.

Relevant benefits expected by women and their roles will be emphasized, and the information presented and transmitted to the women in this regard will be made accessible despite the challenges they face. In order to ensure gender mainstreaming and responsiveness from the project design step to the implementation phase, the project aims to reach 50% of women among the beneficiaries. It is also important to ensure that at least 40% of women are involved and actively participate in the various activities under the 4 components of the project. For instance, in capacity building meetings or workshops, management committees such as the water management committees, drought management information sharing platforms, developing and formulating by-laws and ordinances for groundwater sources management in communities within the four selected countries, women should constitute at least 40% of each target group. At every stage of providing inputs such as for early warning devices, soil and water conservation, climate-smart agricultural practices, range, and livestock management 50% of the women will be the sole beneficiaries. Examples of the specific activities in which 50% women participation will be targeted include.

- Supporting or equipping project beneficiaries (pastoralist, farmers and extension agents) to access EW information
- Holding inter-ministerial and sectoral meetings for data sharing
- Support national, regional and local EW information sharing Forums (including farmers and pastoralist associations)
- Supporting regular stakeholder EW information feedback platforms for farmers and pastoralists
- Holding quarterly stakeholder meetings on EW information utilization for national and sub-national stakeholders
- Popularization and Dissemination of the reviewed DMPs for use by the farmers and pastoralists
- Supporting formulation of bye-laws and ordinances at sub-national and lower political units. The support required is facilitating the organization of a workshop for formulating as well as deliberating on the specific bye-laws.
- Undertaking exchange visits and learning tours for cross-learning in areas with successful drought management innovations including groundwater management initiatives
- Facilitating community training workshops for farmers and pastoralists in drought risk management and adaptation measures utilizing the farmer field school approach
- Supporting farmers and pastoral groups to establish learning centers for innovative Climate Smart agricultural extension services. In this activity farmers and pastoralists will be provided with inputs
- Supporting protection of water wells and springs to ensure quality, quantity and efficient water use by providing inputs, for instance, live markers around the wells.
- Training the established water management committees to protect water wells and springs to ensure quality, quantity and efficient water use
- Supporting farmers and pastoralists to prepare high-value silage and hay for livestock during dry spells.
- Training communities in preparing high-value silage and hay for livestock to increase production of livestock products.
- Training in preparation of nutritious silage and hay is a function of its exposure to appropriate weather condition, methods of collection of materials from the field, using optimum temperatures for curing.

iii) The involvement of women in the activities that bring them to the forefront of making

constructive and impactful decisions. The project design integrates gender considerations in the regional context and will involve gender-sensitive approaches as a way of ensuring active participation. For example, using women representatives at the various existing levels will add value and strengthen the consultation and decision-making process. Mainly, this is because the women representatives are already in leadership positions and have the experience to share from past or on-going interventions.

iv) Specific gender responsive consultations on Income Generating Activities (IGAs) will also be deliberately emphasized for women. These are growing of sisal and *Aloe vera*, art crafts, pottery, poultry, energy saving stoves and briquettes making. It is well known that women manage homes daily with numerous domestic chores. Therefore consulting and eventually promoting IGAs that stay home women and mothers can engage in will be a vital innovative gender responsive consideration in the proposed project. Also under Activity 4.1.2.4: on developing gender responsive and scale-up strategies for drought, CC and early warning technologies among women, and other vulnerable groups, through a study will provide adequate information regarding gender considerations even beyond the lifespan of the project.

J. Full cost of adaptation reasoning.

Increased use of cost-effective EWS by stakeholders: USD 1,500,000

Smallholder farmers and pastoralists face challenges of accessing timely and accurate climate information for planning and responding to drought risks. The current EWS are inadequate causing crop failure, the death of livestock, conflicts and food insecurity.

There is actually need to strengthen the capacity of existing EWS in the focal areas to be able to generate, analyze, package and disseminate timely early warning information to the farmers and pastoralists. This will enable them to plan their activities taking into account this information and increasing their resilience to drought.

The project will help to develop efficient and effective EWS systems by assessing the status of EWS in the target countries, equipping and upgrading selected weather stations, constructing, renovating and equipping EW information centers. DRESS-EA project will support the integration of traditional EWS with modern EW technologies, such as remote sensing derived products, time series of bioclimatic variables, as well as enabling project beneficiaries to access EW information (e.g. devices including, brochure, SMS, Radio etc.)

The project will also strengthen institutional linkages for EW information where they exist and establish new ones where they don't exist. This will focus on: i) developing or reviewing EW information sharing frameworks at regional, national and sub-national levels, ii) developing and implementing strategy to operationalize the frameworks, iii) holding inter-ministerial and sectorial meetings for data sharing, iv) supporting national, regional and local EW information sharing Forums (including farmers and pastoralist associations) and v) supporting Incorporation of EW information into planning and budgeting processes of targeted countries.

In addition, a feedback mechanism for EW information will be developed through supporting regular stakeholder EW information feedback platforms for farmers and pastoralists. This feedback mechanism will consist on holding quarterly stakeholder meetings on EW information utilization for national and sub-national stakeholders, conducting KAP surveys on EW information

as well as developing feedback user-friendly tools on accessing, utilizing and reporting EW information to mandated institutions.

Drought resilience of key stakeholders at regional, national and local levels strengthened: USD 1,750,000

There is an inadequate capacity to integrate drought risk management interventions into development plans; concrete drought adaptation actions and responses at the community level with limited budget allocation for drought risk management at national level.

Given this situation where Communities' drought coping mechanism is weak, the project plans to train various stakeholders. In this respect, the Training of Trainers (TOT) model will be applied. This will cause a multiplier effect of the project interventions. The key stakeholders to be trained include: Regional Staff i.e. those involved in capacity building at regional level, gender and youth focal points and staff involved in development projects; National staff of the targeted countries- in the responsible ministries; Sub-national (local government staff and staff from selected civil society organizations working on similar interventions in the project areas of the countries.

To further increase uptake of project interventions, the project will support the establishment of Farmer and Pastoral Field Schools (F&PFS). These will be structures at the local level and a vehicle for inclusive participation of communities. The FFS and PFS are aimed at creating a cohesive structure at local levels so they can share and learn from each other. This cross-learning will promote sustainability of project interventions.

This component aims at building the capacity of stakeholders to enhance their drought resilience at regional, national and local levels by improving the adaptive capacity of institutions, farmers, and pastoralists in drought management. This will be done through i) undertaking capacity needs assessment to identify gaps and hindrances to effective drought management, ii) developing capacity building plans for regional, national and sub-national levels, iii) developing capacity building curriculum and tools, iv) undertaking exchange visits and tours for cross-learning in areas with successful drought management innovations including groundwater management initiatives and v) supporting establishment and management of field learning centers. In addition to capacity building activities, the project will support; management of EW information centers, training, extension staff and artisans in drought adaptation interventions as well as facilitating community training workshops for farmers and pastoralists in drought risk management measures.

Furthermore, the project aims to develop or review drought management plans at regional, national and sub-national levels. It targets popularizing and integrating the drought management plans into the national strategies and development plans. The project will also lead to the formulation of bye-laws and ordinances at sub-national and lower political units. Regional and national drought management frameworks will be reviewed and strengthened and new ones developed where necessary, including regional and national drought management platforms to coordinate partner efforts. Finally, stock route agreements will be formulated and implemented to reduce conflicts among pastoralists.

Increased uptake and application or usage of drought adaptation actions: USD 6,279,920

Inappropriate and limited drought adaptation technologies are causing low crop and livestock food production levels leading to food insecurity and low incomes. Severe droughts seriously undermine crop and livestock production affecting yields and incomes of smallholder farmers and pastoralists. It affects the amount of water available for crop and animal production, the quality of rangelands and pastures and productivity of soils for crop production.

These will be addressed through: baseline studies, improving, developing and introducing innovative adaptation actions for soil and water conservation, water harvesting and storage structures, restoring and improving underground water sources, promoting adaptive agricultural practices in order to improve crop production, enhancing adaptive livestock and rangeland practices and creating an enabling environment for smallholder farmers and pastoralists adaptive activities. The Project will also support smallholder and pastoralists groups to undertake income generating activities(IGAs) including growing of sisal and *Aloe vera*, art crafts; beekeeping; briquette making; poultry and where applicable community tourism as well as provide competitive small grants targeting smallholder farmers and pastoralist associations to undertake IGAs or enhance their drought adaptation actions.

Increased awareness on drought risk management: USD 1,192,000

There is a limited awareness on drought risks and adaptation actions amongst stakeholders leading to poor planning and responses to drought risks and disasters with low crop and livestock yields hence food insecurity and low incomes.

The project will support knowledge management and awareness creation through documentation of good practices and lessons on drought management. This will involve generating, packaging and disseminating EW information, documentation of lessons and best practices from project interventions. The knowledge and awareness raising component will allow packaging information dissemination materials in appropriate forms to ease uptake (e.g. policy briefs, brochures) and sharing and dissemination of knowledge and information through the use of existing and popular platforms e.g. electronic and print media, telecom that is easily accessible by the stakeholders.

In addition, the project will support existing channels/networks for information generation and dissemination (e.g. IDDRISI platform and national platforms), engage policymakers in the dissemination of drought management information and best practices as well as supporting drought management working groups to share and disseminate the information.

K. Project sustainability

The design of the project has considered the sustainability of all project interventions in all aspects including environmental, economic, technical, social and institutional sustainability

Environmental sustainability: The project will ensure environmental sustainability through strengthening the resilience of smallholder farmers and pastoralists through the EWS and the adaptive infrastructure to be developed, will on the one hand, allow to cope with drought-related crisis situations and on the other hand to avoid overexploitation of natural resources to compensate losses due to drought impacts. As regards to the project implementation, an Environmental and Social Management Framework (ESMF) will be developed and will act as a guide on handling environmental and social issues. For activities that are anticipated to have significant social and environmental impacts, independent Environmental and Social Impact

Assessments (ESIAs) will be undertaken and approval sought from relevant Environmental Authorities depending on the laws of each of the focal countries. The ESMF has an environmental and social monitoring plan that will guide periodic monitoring and evaluation to track changes that could have adverse environmental and social impacts and ensure adequate mitigation.

Economic sustainability: This will be promoted through supporting existing and or new community groups with small competitive grants that enable them to scale up the innovative drought adaptation actions that generate additional incomes. To ensure economic sustainability especially of the targeted communities, the smallholder farmers and pastoralists the project will support women and youth groups with income generating activities, support improved crop and livestock production with improved and drought-tolerant crop varieties and animal breeds as well as organizing the farmers and pastoralists in cooperatives or strengthening the existing ones and linking them to markets to be able to sell their products. In addition, the project will support the farmers and pastoralists to add value to their animal and crop products so that they can be able to fetch higher market prices as well as prolonging their shelf lives. All these will help the farmers and pastoralists to enhance their incomes, improve their livelihoods and ensure economic sustainability. However, to ensure that the infrastructure constructed by the project is economically/financially sustained and maintained a number of initiatives have been proposed. First of all, in the proposed project, we have indicated that project will either establish or support existing interventions including small-scale infrastructure such as weather stations, ground and surface water sources, watering points and community learning centres. Secondly, we propose to incorporate drought adaptation or management activities and interventions (e.g. on EW information) into planning and budgeting processes at different levels in the targeted countries; develop and/or update existing drought management plans (DMPs) at national and sub-national levels that integrate climate change (CC) aspects and adaptation actions to deliberately infuse the interventions into the stakeholder /community structures for sustainability. Thirdly, the project intends to provide competitive small grants targeting smallholder farmers and pastoralists and their associations to undertake innovative water harvesting and storage infrastructure and innovative IGAs or drought adaptation actions. Such deliberate efforts proposed in the concept aim at demonstrating that some finances will be availed after project closure so that the small-scale infrastructure developed during the project can be maintained easily. It is expected that such efforts should encourage the communities, extension agents/staff and the local government leaders to continuously plan, budget and avail some little funds collectively for small-scale infrastructure maintenance. This will mainly apply to water infrastructure where all water users will be encouraged to form user associations with executive committees that will be charged with taking care of the constructed water sources. They also ensure that such and other infrastructure are regularly maintained and remain in good conditions. Alternatively, farmer and pastoralist group/cooperative members could be required to pay a small and affordable fee for maintenance of their water sources and other infrastructure. However, it is also important that at full proposal development stage, another idea of developing modalities and supporting the communities to establish a community infrastructure maintenance fund will be considered. At this stage, the Local governments as stakeholders could be explicitly required to budget for maintenance of such infrastructure such that this activity is budgeted for every year, post the project period. In addition, the proposed project under Activity 4.1.2.4: Develop gender responsive and scale-up strategies for drought, CC and early warning technologies among women, and other vulnerable groups, through a study will provide adequate information regarding financial sustainability beyond the lifespan of the project.

***Technical sustainability*:** The project design emphasizes development and upgrading new or existing EWS respectively for technological sustainability. It also proposes the capacity building

of all stakeholders including technical staff handling collection analysis and dissemination of early warning information at regional, national and sub-national levels, extension staff as well as farmers and pastoralists especially in undertaking concrete adaptation actions. This will ensure enhanced resident capacity to process and disseminate early warning and drought-related information to key stakeholders as well as the technical capacity to undertake concrete adaptation actions even long after the project has ended.

Social sustainability: The project design has put emphasis on working with farmer and pastoralist groups as well as women and youth groups but within these same communities. The project will build the capacity of the existing groups and where they don't exist facilitate their formation. The farmer field schools approach, the grants, the marketing initiatives including cooperatives as well as the value addition initiatives will be based on these groups. These will enhance cohesion amongst these groups and as well as social sustainability that will ensure projects' results conservation and valorization even after its end date.

Institutional sustainability: The project design will ensure that *the* project will be implemented using the already existing government structures at regional, national and sub-national levels. At the regional level, the project will be executed by Global water partnership Eastern Africa based in Entebbe Uganda**.** At country level the project will be implemented using the structures of the focal ministries i.e. Ministry of Agriculture Water Fisheries and Livestock for Djibouti, the Ministry of Environment and Forests for Kenya, Ministry of Water Resources, Irrigation and Electricity for Sudan and the Ministry of Water and Environment for Uganda. This coupled with the capacity building of the officials who will be involved in project implementation will ensure that resident capacity will be built within the existing structures and ensure sustainability of project interventions after the project has ended. The development and integration of the drought management plans into country-specific and lower level development plans will also ensure that the activities initiated by the project will continue to receive funding beyond the project lifespan.

L. Environmental and Social impacts and risks

This project was developed in compliance with 15 principles of the Adaptation Fund Environmental and Social Policy this implies the respect of laws, people's rights, gender equity, heritage, biodiversity, and environment. At the stage of Project concept-note, a preliminary E&S assessment has been conducted, and the main results are presented in the table below. In the next step of Full Proposal development, a detailed E&S Impact Assessment will be conducted.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	Further consultations and assessments required during the development of Environmental and social impact framework (ESMF) for the Project	Risk: Low Potential Impact: Low The final project design will be compliant with all relevant regional and national laws following extensive consultation with national and regional stakeholders and development of detailed Environmental and social impact framework(ESMF) for the Project at country levels
Access and Equity	√	Risk: Low Potential Impact: Low Project activities will be accessed equally by the target communities without discrimination Project activities will be executed in compliance with AF' E&S Policy and also with OSS' E&S Policy.
Marginalized and Vulnerable Groups	√	Risk: Low Potential Impact: Low Marginalized groups especially Women and youth will be specially targeted by the project activities especially the IGAs and grant activities in the target projects sites for each country
Human Rights	√	Risk: Low Potential Impact: Low The project will be implemented using the existing government structures at country levels and observations of human rights are a must.
Gender Equity and Women's Empowerment	Further detailed gender analysis will be done at full proposal level to ensure that all gender	Risk: Low Potential Impact: Low The project has a special on focus on women and youth groups especially

	aspects are fully incorporated into the proposal	for income generating activities and grants to ensure that they fully participate and benefit from the project. Also, Participation of women will be encouraged in the field schools
Core Labour Rights	√	Risk: Medium Potential Impact: Medium The Project will ensure that Labor laws are strictly observed in undertaking its activities especially during construction of water harvesting and storage structures. Local farmers and pastoralists will be encouraged to provide labor for their structures and in accordance with the labor laws of each country.
Indigenous Peoples	√	Risk: Low Potential Impact: Low
Involuntary Resettlement	√	Risk: Low Potential Impact: Low The project will work with communities in their locations, and will not in any way promote resettlement of communities to new locations
Protection of Natural Habitats	Project will promote restoration of degraded landscapes in accordance with the existing species in the project sites after assessment and species matching	Risk: Low Potential Impact: Low Degraded areas will be restored with natural vegetation and trees that were cleared from the area.
Conservation of Biological Diversity	Further consultations and assessments required during the development of Environmental and social impact framework(ESMF) for the Project	Risk: Low Potential Impact: Low The final project design will be compliant with all relevant regional and national laws following extensive consultation with national and regional stakeholders and development of detailed Environmental and social impact framework(ESMF) for the Project at country levels
Climate Change	√	Risk: Low Potential Impact: Low Project activities will be developed to enhance the resilience of

		ecosystems and populations to Climate change and drought effects
Pollution Prevention and Resource Efficiency	√	Risk: Low Potential Impact: Low Project activities will not generate pollution and loss of resources. It will contribute to energy efficiency, efficient water use, and prevention of water pollution
Public Health	√	Risk: Low Potential Impact: Low The project will contribute to improving water resources quality and quantities. The EWS will also contribute to prevent communities from natural disasters and avoid epidemics.
Physical and Cultural Heritage	Further detailed gender analysis will be done at full proposal level to ensure that all gender aspects are fully incorporated into the proposal	Risk: Low Potential Impact: Low The project will promote local knowledge and train communities to handle the new technologies without affecting cultural heritage. As regards to physical heritage, the project will not implement activities that will target specific physical assets in the project sites.
Lands and Soil Conservation	√	Risk: Medium Potential Impact: Medium The project component 3 aims to promote appropriate soil and water conservation measures (e.g. terraces, contours, conservation/minimum tillage, pit gardening, Zai pits and home gardening), thus no damages to soil and land resources are expected to occur.

PART III: IMPLEMENTATION ARRANGEMENTS

A. Project management arrangements.

Implementing Entity

The project will be implemented by the Sahara and Sahel Observatory (OSS) who will serve as the Regional Implementing Entity (RIE) and will be in charge of all financial, monitoring and reporting aspects to the Adaptation Fund. The OSS will also provide administrative and management support to the regional executing entity and will be responsible for reporting project related information to the Adaptation Fund.

Executing Entity

The project execution will involve stakeholders at the regional, national and local level, as follow:

At the regional level

Global Water Partnership Eastern Africa (GWPEA) with significant experience coordinating regional development projects will execute the project. GWPEA as a Regional Executing Entity will benefit the DRESS-EA project through mobilizing GWP's extensive experience in demonstrating, documenting and partnership building on water resources management, climate resilience, and drought management. Specifically, GWPEA will support the national Executing Entities in terms of capacity building and knowledge management, creating a cross-learning environment and strengthening the regional partnership building aspect.

The role of GWPEA will be to provide management support (technical and financial) and as well consolidate reports from the executing countries. In addition, GWPEA will support monitoring interventions and specifically, ensure that the regional aspect of the project is well articulated and fulfilled. To guarantee the regional aspect, the project entails the following rules/steps; first, Cooperation/coordination in data and information sharing; secondly, sharing available technology and expertise; thirdly, minimizing and /or eliminating duplication of efforts and fourthly, contributing to regional frameworks in the IGAD region.

At national level

Four National Executing Entities (NEE) will execute the project. The NEE for the project will be i) the Ministry of Agriculture, Water Fisheries and Livestock of Djibouti, ii) Ministry of Environment and Natural Resources-Climate Change Directorate for Kenya, iii) Ministry of Water Resources and Electricity of Sudan and iv) Ministry of Water and Environment- Directorate of Water Resources Management of Uganda. The NEE will be responsible to consolidate the results from the project sites within their respective countries for onward transmission to the Regional Executing Entity. In order to ensure cross-fertilization of project interventions and increase their ownership by stakeholders, the NEE will execute the project in partnership with strategic stakeholders. Each of the Executing Entities has lower established governance units through which project activities will be executed.

The NEE will collaborate with institutions in the respective countries during the project activity execution. These include the Designated National Authorities; Ministries, Departments and Agencies (MDA) that are mandated to support climate resilience and livelihood improvement-

these include Ministries of Agriculture, Ministry of Water and ministries in charge of disasters/drought in the country. In some instances, higher political offices e.g. Office of the Prime Minister (OPM) in Uganda as an overseer and overall coordinator of government ministries may be involved. Furthermore, the project will engage with stakeholders at the sub-national and local levels.

For example, the local government, lower political units, and community structures/committees. Table 4 summarizes executing entities by country and their respective potential partners.

At the local level

The project execution offices will be based at local government offices of the selected project sites in the respective countries. The project execution offices will closely collaborate with local government structures in the execution of the project interventions following the local authorities planning guidelines.

Table 4: National Executing Entities

Country	Executing entity	National Institutions to partner	Role of the institution as a partner
Djibouti	Ministry of Agriculture, Water, Fisheries and Livestock of Djibouti	-Executive Secretariat for Risk and Disaster Management (SEGRC)	-Advises the national committee on natural disaster
Kenya	Ministry of Environment and Natural Resources	-Climate Change Directorate -Kenya Meteorological Department -Ministry of Water and Irrigation	
Sudan	Ministry of Water Resources and Electricity of Sudan	-Ministry of Environment and Physical Development -Higher Council for Environment and Natural Resources	
Uganda	Ministry of Water and Environment	-Directorate of Water Resources Management DWRM -National Environment Management Authority -Department of Disaster Preparedness and Management- Office of the Prime Minister -Uganda National Meteorology Authority -Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) - District Disaster Management Committees (DDMC)	-Coordinates and response to drought-related emergencies including supporting a number of community-based programs

Other partners such as IGAD Secretariat/ICPAC (IGAD Climate and Prediction Application Center) will be involved in providing political support and technical backstopping respectively. IGAD secretariat is coordinating drought activities in the region through the "IGAD Drought Disaster Resilience and Suitability Initiative (IDDRSI) framework.

The DRESS-EA project objectives are consistent with the overall objective of IDDRSI and will, therefore; contribute to the framework goal, which is attaining drought disaster resilient communities, institutions, and ecosystem in ASALs[26] of IGAD by 2027. ICPAC is the technical

[26] Arid and Semi-Arid Lands

arm of IGAD through which the DRESS-EA project will benefit from enormous data/information and experience in seasonal forecasting and drought characterization.

The project organogram below indicates the management structures for the project and how these will interact with each other and at the different levels. The roles and responsibilities of each entity are shown in Table 5.

Organogram

INSTITUTIONAL ARRANGEMENT

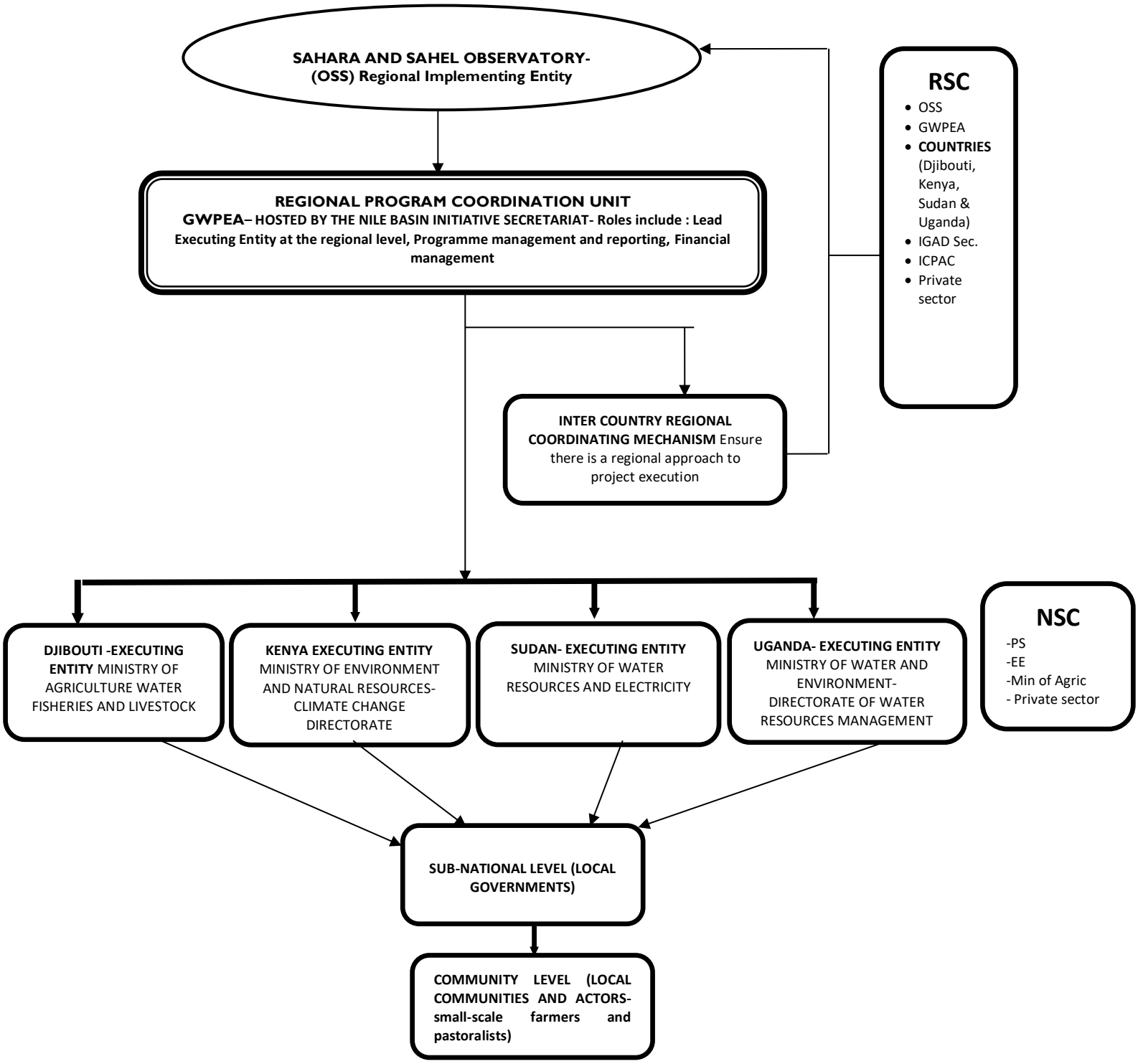


Figure 8: Project Implementation arrangements

Table 5: The key implementing and executing entities and their roles

No	Entities	Role and functions
1	**Sahara and Sahel Observatory (OSS)**: Regional Implementing Entity (RIE)	• Oversee overall financial and monitoring aspects of the DRESS-EA project • Reporting of project consolidated results to the Adaptation Fund • Approval of project annual work plan and budget at the regional level • Approval of annual financial and technical reports • Provide administrative and management support to the regional executing entity
2	**Global Water Partnership Eastern Africa (GWP-EA):** Regional Executing Entity – (REE)	• Project management and execution at the regional level (IGAD region) • Ensure compliance with the project regional dimension • Provide Technical Advice, guidance and support to the project • Communication, networking and partnership building • Supporting executing entities during operationalization of activities at country level • Support in policy influencing at the regional level/ also at country level through Country Water partnerships[27] • Monitoring and evaluation at the regional level and M&E data collecting from NEEs • Providing technical and financial reports to OSS based on national reports • Will be constituted a Regional Implementation Unit (RIU) composed of a Regional Project Manager, Finance Officer, Communication Officer, Monitoring, and Evaluation Officer. The roles of the RIU include: **Regional Project Manager** • Program management (Ensure that project activities are on track and that key results are achieved) • Provide guidance on linkage and consistency of project activities in countries • Communication, networking and Partnership building • Supporting countries in project implementation **Finance Officer** • Support in project financial management • Monitor budgeting and financial expenditures • Ensure correct financial reporting of the executing entities **Communication Officer** • Develop project communication materials • Ensure project publicity and visibility • Networking and partnership building on the international level **Monitoring and Evaluation Officer.** • Design the project's M&E system in consultation with the stakeholders • Review and revise the project M&E tools • Design additional M&E tools, as and when required • Maintain an up-to-date catalog of all project M&E tools and forms • Ensure that all project reports are sent to the correct people and maintain distribution lists for various reports • Conduct secondary verification of all results data received from partners countries and or stakeholders, including conducting verification visits, as appropriate. • Ensure that partners submit reports within the agreed time schedule • Ensure quality of narrative reports prepared by DRESS-EA project partners • Monitor quality of activities within the project by conducting site visits, as appropriate • Analyze the project's M&E data and make recommendations to the project management team
3	Executing countries: Djibouti, Kenya, Sudan and Uganda)	• Support project management and execution at the national level, • Ensuring the project creates a positive impact on the beneficiaries

[27] Country water Partnerships are neutral multi-stakeholder platforms for dialogue and facilitating change in water and climate processes.

		• Consolidation the results from the project sites and link with the REE • Ensure cross-fertilization of project interventions and increase their ownership at the national level • Monitoring and evaluation at national level • Providing technical and financial reports to REE (GWPEA)
4	Local governments (sub-National Level)	• Create a conducive environment for the program execution especially by mobilizing communities and technical experts at the sub-national level • Provide political support and advocacy • Ensure ownership and sustainability
5	Community structures	• Key partners and implementers of the program at the local level • Labor and local material contribution for program activities (in-kind contribution to the project) • Ownership and sustainability by establishing community management structures
Other: Regional level		
6	Regional Steering Committee	• Meet twice a year Provide strategic direction for the project at the regional level
7	Regional Technical Advisory Committee/ Inter-Country Coordinating Committee	The committee will be constituted by the technical experts from the executing entities- and will include Djibouti, Kenya, Sudan and Uganda. Also, GWPEA and ICPAC will be part of the committee. • Meet twice a year • Provide technical guidance to the project • Provide technical support to the implementation of the project • Ensure that the regional aspect of the project is realized
Other-Country level/National Executing Entities		
8	National Project Steering Committee	The NPSC will meet twice a year and will be composed of multi-sectoral stakeholders including Ministry of Agriculture, National Environment Authorities/agencies, National Designated Authorities, climate change departments or directorate, ministry in charge of disasters or droughts. Each of the executing countries will have steering committee structure based on the nomenclature of the ministries, departments, and agencies in the country. • Provide strategic direction for the project at the country level
9	Project Management - Program management at country level-	• Provide guidance on linkage and consistency of project activities in the countries • Communication, networking and Partnership building • Supporting countries in project implementation Overall, project management at country level will be as follows: • A Project Manager will be appointed and stationed at the project focal point in the country (for example- for Djibouti, the project manager will be someone appointed from the Ministry of Agriculture Water Fisheries and Livestock to ensure liaison on project activities among and between the ministry and other institutions and stakeholders such as at sub-national level, field offices, and targeted communities. The project will be implemented within the government/ministry framework to avoid duplication. But also, the project interventions are directly contributing to the government overarching goal, therefore, this structure ensures ownership.

N.B: IGAD secretariat and ICPAC will be strategic partners. The role of IGAD secretariat will be to ensure collaboration for regional program activities such as capacity building, information sharing, partnership building and policy support. While ICPAC will support technical backstopping. This will include enhancement of capacity on early warning information and sharing experiences in seasonal forecasting and drought characterization.

The overall highest decision-making body of the DRESS-EA project is the Regional Steering Committee (RSC) composed of key stakeholders mentioned in Table 2. The RSC will meet twice a year. The RSC is a policy and oversight committee that will supervise the project at the regional

level. It is composed of two members from each of the executing countries (Djibouti, Kenya, Sudan and Uganda), one committee member will represent the project from the Country executing entity and another representative will come from the sub-national levels- where activities are undertaken on the ground. Overall, the composition of the RSC will be 13 and is shown in Table 6, one from the Regional Executing Entity REE (GWPEA) and one from the Regional Implementing Entity (OSS). Also, the RSC will be composed of one member each from Regional Economic Community representation (IGAD) and its technical wing (ICPAC) and from the private sector. Therefore, the total RSC membership will be Thirteen (13).

Table 6: Summary of RSC DRESS-EA composition

No	Institution Committee composition	Number
1	RIE- OSS	1
2	REE-GWPEA	1
3	Djibouti (one committee member from the Executing entity and another from the sub-national level)	2
4	Kenya- same as above	2
5	Sudan- same as above	2
6	Uganda- same as above	2
7	IGAD Secretariat	1
8	ICPAC	1
9	Private Sector	1
	Total	**13**

At the country level, each executing entity will have a Project National Steering Committee (PNSC). The PNSC will be composed of representative stakeholders from the following institutions*:* Executing Entity (secretary to the committee), NDA, National Environment Agency, Ministry of Agriculture, Climate Change Directorate, and Ministry in charge of Drought/disasters. To involve support and contribution from the private sector, it is proposed that the PNSC includes a private sector member on the steering. To ensure gender equity, the composition of the Project National Steering committee will have at least 40% representation by women. This will empower women by providing them with an opportunity in decision making.

B. Financial and risk management measures

The fact that the project is multinational in nature, its anticipated that there will be both financial and project management risks during its implementation. Due to different political and geographical context of the countries, it is expected that they may face challenges /risks that are either similar or different. Overall, the anticipated project risks are summarised by country in the table below:

Table 7: Project Risks and their Mitigation measures

Risk	Country	Rating	Risk Mitigation Measure
Political conflicts in some countries.	Sudan	Medium	-The project will identify and work in relatively safe regions of the country -From the financial perspective, funds will be disbursed in small tranches to reduce the risk of having large project funds being trapped in a political conflict

Inter-clan/tribe conflicts in pastoral areas	Djibouti, Kenya, Sudan, Uganda	high	-Involvement of traditional leaders in planning, implementation, monitoring and evaluation processes of the project -Massive sensitization on the relevance of the project at the project initiation stage. This will be done through portable mobile loudspeakers to raise awareness.
Low collaboration amongst the relevant technical institutions	Djibouti, Kenya, Sudan Uganda	Low	-The relevant institutions have been identified and more will be identified during the project baseline development stage. The institutions will be engaged in the early stages of project implementation, during progress reviews, reporting, and another vital process
Local communities (small-scale farmers and pastoralists) with limited participation and willingness to promote project initiatives	Djibouti, Kenya, Sudan Uganda	Low	-The project plans sensitization at local community level and ensuring active involvement of community leaders especially the target audiences i.e. the farmers and pastoralists. -Community-Based Organizations (CBO) in the targeted sites will be sensitized on the project relevance and they will be engaged with the purpose to create linkages in project implementation
Poor monitoring and evaluation and delayed delivery of outputs	Djibouti, Kenya, Sudan Uganda	Low	-The project will develop a detailed participatory M&E framework with the key project partners -Regular follow-ups and timely continuous monitoring and evaluation
Limited capacity, especially in areas of water security and integrated drought management in the targeted sites	Djibouti, Kenya, Sudan Uganda	Medium	-Capacity building components within the project to have aspects of water security and integrated drought management. This will be done by training targeted audiences in Integrated Water Resources Management tools for drought risk management. -Linkages of project beneficiaries to on-going capacity development efforts of resilience building in the region and countries. In this way, project beneficiaries will be connected to successful on-going capacity building initiatives in the region and focal countries that will be identified.
Management of funds by countries- accountability etc.	Djibouti, Kenya, Sudan, Uganda	Low	-The project will undertake training in financial management targeting the financial managers and project managers in the countries. -Training on finance to non-finance personnel will be organized to provide basic knowledge in the financial handling of project funds. It is proposed that the slot to support financial management will be incorporated as part of M&E
High expectations by the targeted audiences (small-scale farmers and pastoralists)	Djibouti, Kenya, Sudan Uganda	High	More awareness raising tailored to the targeted audiences- on the objectives and expected outputs and outcomes of the project.
Dependence on handouts- NGO's in the	Djibouti, Kenya,	Medium	- The project requires to establish multi-stakeholders' forum in the targeted sites and

project site providing free materials without ensuring ownership	Sudan Uganda		share the mode of operations and codes of conduct in service delivery. - Project to support meetings with the purpose to harmonize the emerging challenges that may result from supporting communities through the provision of handouts. There are some projects/institutions in the targeted sites supporting similar interventions and to provide 100% of support including what would be the in-kind contribution of targeted communities. This can potentially promote laziness amongst the communities. The project proposes to collaborate with existing such institutions with aim of streamlining the support to communities, encouraging them to be more productive using the project catalytic funds
Project financial management	Djibouti, Kenya, Sudan Uganda	Medium	-Strengthen the project financial management and accountability systems through using the proper and approved procedures- in compliance with Adaptation Fund and OSS regulations and standards. -Separation of roles in financial management will strictly be enforced and adhered to.
Communication in the project	Djibouti, Kenya, Sudan Uganda	Low	-The project will ensure that some of the project staff within National Executing Entities are fluent in the local language of the project areas

C. Environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

The Environmental and Social Policy of the Adaptation Fund requires that projects /programme activities comply with environmental and social safeguard standards to enhance sustainable development benefits and avoid unnecessary harm to the environment and affected communities (Environmental and Social Policy of the Adaptation Fund, 2016). This is important in avoiding, minimizing or mitigating harm which would otherwise endanger living in harmony amongst the communities and other stakeholders. Furthermore, the policy is clear on the potential environmental and social risks and requires that the implementing entity screens the project activities to identify any potential environmental and social impacts and risks. The E&S policy categorizes project activities by nature of adverse impacts that may be caused. The DRESS-EA project environmental and social risks screened, was found to have limited significant environmental or social impacts as per the Environmental and Social Policy of the Adaptation Fund. The identified risks that could occur are under component 3 which will concentrate on concrete adaptation actions. The impacts levels are evaluated to be low or medium risks, thus the project will be under Category B. This means that the project activities have small-scale impacts, limited to the project area and easily mitigated through good environmental and social management practices.

The project will undertake environmental impact assessment and environmental impact reviews (depending on the scale of the threat of project activities). During this concept development stage, the screening of project activities has been done and a list of the activities which require detailed

studies and assessments have been identified in PART II section L. This information has been obtained by the project proponents in partnership with the affected communities (the target group). During the concept development, the project identified beneficiaries and targeted population at local and national level including vulnerable groups. Gender considerations were taken care of in compliance with the Environmental and Social Policy of the Adaptation Fund.

Table 8: Identified risk and their proposed risk management measures

No	Identified risk	Level of risk (High, Medium and Low)	Risk Management measures
1	Water harvesting, storage, and irrigation facilities may aggravate some diseases such as malaria	Low	Raise awareness through community-based health workers on malaria and other water-related diseases
2	Groundwater resources threatened by overexploitation	Medium	Raise awareness through community training on water use Develop regulatory framework and guidelines on groundwater sources Monitoring water resources with EWS equipment
3	Introduction of drought-tolerant crop varieties- this means the local varieties will get extinct	Low	-Promote conservation of local crop varieties -Screening of crop varieties to be introduced to assess their impacts (crops that may cause significant negative impacts to the environment should be rejected)
4	Biodiversity loss and natural habitats degradation	Medium	- Integrate biodiversity sustainable management in the resilience and adaptation related practices - Capacity building of smallholder farmers and pastoralists to ensure efficient governance of natural resources. - Avoidance introduction of invasive species or new pests and diseases into the project sites
5	Land and soil degradation	Medium	- Promote improved agricultural practices such as soil and water conservation practices - Water harvesting and irrigation will be ensured and promoted by the project.

			- Promote community-based approach to executing the project activities
6	Lack of gender equity and women's empowerment in project implementation and outcomes	Medium	Gender equity and women's empowerment are ones of the project main assumptions: - Aim for 40% participation of women in project activities and 40% of project direct beneficiaries to be women - Encourage equal participation of men and women in the project activities and in particular capacity building.
7	Exclusion of marginalized and Vulnerable Groups	Low	Target the most vulnerable and threatened communities by drought. - Ensure that project activities target and support the most vulnerable including women, women-headed households, children, and youth. - Conduct community level consultations in the target sites, including with vulnerable groups, female-headed households
8	Compliance with the law		Project design will be compliant with all relevant international, regional and national laws following extensive consultation with regional and national stakeholders.

D. Monitoring and evaluation arrangements and budgeted M&E plan

The project Monitoring and Evaluation (M&E) arrangements will aim at providing a regular overview of the progress of implementation of activities in terms of input delivery, work schedules and planned outputs/targets. It will involve routine information gathering, analysis and reporting to partners, executing institutions, communities, and other stakeholders. The evaluation component shall represent a systematic and objective assessment of project components or activities in terms of their design, implementation, and results. In addition, the project evaluation will deal with strategic issues such as project relevance, effectiveness, and efficiency, as well as impact and sustainability, considering specified expected outcomes.

Scope of Monitoring and Evaluation

There will be a robust and comprehensive monitoring and evaluation of the project by DRESS-EA and partners. In this case, strict adherence to the approved monitoring plan will be ensured. Moreover, the M&E activities will be participatory and will involve all the key stakeholders. Information on key stakeholders will be gathered through the stakeholder analysis. M&E will be carried out from the onset of project implementation up to the end of the project when the evaluation will be carried out. The M&E activity will be carried out at both the national and regional levels. We propose that the M&E will be conducted at two levels; **first**, assessing the extent of implementation of planned activities and **secondly**, assessing the achievement of results (outputs, outcomes, and impacts). Since the project will be implemented for four years, there is anticipation that some impacts will be achieved in the final years of the project i.e. before project termination. The ***first level*** *M&E* will involve;

i. Assessing whether activities are implemented in accordance with timeframe as contained in the project work plan
ii. Examining whether activities are being implemented with high quality, quantity and with the right target group

While for the ***second level***, it will entail;

i. Assessing the extent to which the project expected results have been achieved including documenting unexpected results.
ii. Assessing whether the planned activities contributed to the project results.
iii. Assessing the relevance of the project design, effectiveness of the interventions, efficiency, sustainability, and impact of the project

Monitoring and Evaluation Work plan

The DRESS-EA project monitoring work plan will guide the data/information to be collected for monitoring. Table 9 shows the M&E activities and their budget implication.

The Regional and National Project Management Units will coordinate to organize preparatory mission of key project stakeholders to develop a Project M&E framework. The stakeholders will include the Regional Implementing Entity (OSS) and Executing Entities- who include the Regional Executing Entity (GWPEA) and National Executing Entities of Djibouti, Kenya, Sudan and Uganda. The stakeholders to undertake monitoring and evaluation exercise have to visit the project sites and interact with the targeted key stakeholders for feedback about the project execution.

A Project inception workshop will be organized in the first quarter of project start. The workshop will involve diverse stakeholder base from the entire project chain (local communities, sub-national. national and regional stakeholders). Also, this workshop is critical to building ownership from the start of project implementation. Furthermore, the workshop will provide among other things, the following: the M&E activities which include the annual M&E work plan, stakeholders identified for M&E activities, M&E tools, and the expected deliverables of the M&E exercise.

N.B: Monitoring will be done at quarterly at national levels and aggregated semi-annually to generate a semi-annual report.

Quarterly monitoring report will provide project information on:

- Extent of project activity execution in the quarter
- Results generated in the short-term (on a quarterly basis)
- Record early lessons and best practices on a cumulative basis.

Annual monitoring report is expected to have the following content:

- An annual review of the project implementation status including extent of implementation of the annual work plan against the set targets and outputs
- An annual report providing a verification of achievement extent of the results framework

Annual reflection workshop at regional level on monitoring results and M&E system

- This workshop will target key project stakeholders. The aim of the workshop is to disseminate the results of the annual monitoring exercise. The workshop is important to validate the annual results and cascade the results to a wider network to increase on project ownership.

Mid-term evaluation

- External consultants will be recruited to undertake the mid-term evaluation. The mid-term evaluation will take place after two years of project start. The purpose of the mid-term exercise is to determine progress towards achieving the project outcomes. The mid-term evaluation will also identify weaknesses of project implementation. The elements that are not very successful at this stage but show promise will be modified for improvement. Successful elements will be expanded accordingly to ensure visibility of project impacts.

Terminal Project Evaluation

- At project end, there will be an independent third-party evaluation. The main focus of this evaluation is to assess the project results against the set targets in the results framework. In addition, the final evaluation will ensure that the modifications made at the mid-term review have been incorporated. The Terminal Project Evaluation will generate recommendations for follow-up activities.

M&E Communication plan

The M&E communication plan will monitor communication actions on project achievements. Also, the plan will target disseminating M&E results to stakeholders within and outside the DRESS-EA project is a key priority in this monitoring plan. DRESS-EA will disseminate findings and recommendations to major stakeholders involved. The project results are important for a diversity of audiences including the vulnerable persons such as women, children, and disabled and elderly groups. Furthermore, M&E project information may be of interest among community organizations, small-scale farmers, pastoralists, youth, media, government officials and social service agencies at the national level. While at the regional level, the teams in the Regional Economic community and lake/river basin organization and other stakeholders may need to learn of the results for purposes of improvement in their institutions. Furthermore, the project will participate in relevant conferences and workshops to share the lessons and best practices from the interventions. This arrangement is useful because it causes a multiplier effect and leads to replication of best practices. The project is complementary to the already existing efforts in the region, as such a two-way flow of information between DRESS-EA and the identified projects in the region is proposed. This will help concretize and interventions as well as contribute to learning and knowledge sharing.

Table 9: Monitoring & Evaluation Work Plan and Budget

No	Type of M&E Activity	Responsible Parties	Budget (US$)	Timeframe
1	Preparation of Project M&E framework and preparatory mission	Focal points of key institutions: OSS and the executing entities (GWPEA, Djibouti, Kenya, Sudan and Uganda)	39,850	Within the first quarter of project start.
2	Inception workshop and report	GWPEA and Project National Focal point	55,000	Within the first quarter of project start.
3	Quarterly monitoring report	Project Management Units at Regional and National levels- M&E Officer	23,000	Quarterly
4	Annual monitoring report	Project Management Units at Regional and National Levels M&E Officer	39,750	Yearly (every year for project period)
5	Annual reflection workshop on monitoring results and M&E system	Project Management Units at Regional and National Levels M&E Officer -M&E Officer	39,750	Yearly (every year for project period)
6	Mid-term evaluation	-PMU- Regional and national coordinators -External Evaluators	30,000	At mid-point of project execution
7	Terminal project Evaluation	-PMU- Regional and National coordinators -External Evaluators	39,750	At least three months before the end of the project
8	Terminal project report	-PMU- Regional coordinator -Local consultant	20,000	At least three months before the end of the project
	Total cost		**287,100**	

*** The M&E work plan and Budget excludes project staff time*

E. Results framework, including milestones, targets, and indicators

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Objective: To increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through the establishment of appropriate early warning systems and implementation of drought adaptation actions in the IGAD region.	• Number of EWS beneficiaries and users • Number of beneficiary communities of adaptation measures • Proportion (%) of smallholder farmers and pastoralists with increased incomes.	*(To be determined at baselines)*	• Number of EWS beneficiaries and users (to be determined) • Number of beneficiary communities of adaptation measures (to be determined) • At least 20% of smallholder farmers and pastoralists with increased incomes.	Number of EWS beneficiaries and users (*to be determined*) Number of beneficiary communities of adaptation measures (*to be determined*) At least 60% of smallholder farmers and pastoralists with increased incomes.	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	OSS, GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	• Inter-tribal conflicts based on water and other resources access and use • Adequate security to enable project implementation (Assumption) • Political will
Component 1: Development and enhancement of a regional Drought Early Warning System (Investments in Early warning)							
Outcome 1.1 Increased use of effective Early Warning Systems by stakeholders	• Proportion of targeted farmers and pastoralists that access and integrate EW information into seasonal calendars	Most smallholder farmers and pastoralists do not utilize EWS in their seasonal calendars thus have suffered crop and livestock losses during drought.	At least 30% of targeted smallholder farmers and pastoralists access and integrate EW information into seasonal calendars	At least 70% of targeted smallholder farmers and pastoralists access and integrate EW information into seasonal calendars	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	OSS, GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	• EW systems are functional • Smallholder farmers and pastoralists receive EW information timely

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 1.1.1 Efficient and effective EWS in place/developed	• EWS status report • Number of weather stations set up and upgraded with Remote sensing derived products, time series of bioclimatic variables, • Number EW prototypes at national and regional levels developed • Number of EW information centers constructed, renovated and equipped • Number of times EW information has been released by mandated institutions as planned • Number of farmers and pastoralists utilizing EW information	• Poor early warning systems exist in the focal countries • EW information rarely received	• An EWS status report • One EW prototype at national and regional levels developed • At least modern weather station set up in project sites of each country • At least one existing weather station upgraded in project sites of each country • One EW information center constructed/renovated in project sites of each country • At least 20% of farmers and pastoralists utilize EW information in their farming calendars	• An EWS status report per country • One EW prototype at national and regional levels developed • Two modern weather station set up in project sites of each country • Two existing weather station upgraded in project sites of each country • One EW information center constructed/renovated in project sites of each country • At least 70% of farmers and pastoralists utilize EW information in their farming calendars	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	Timely release of project funds

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 1.1.2 Institutional linkages for EW information established	• Framework agreement document • A strategy document • Minutes of meetings • Approved plan (document) incorporating EW information	Weak or non-existing EW information in project sites	• 1 EW information framework agreement developed/reviewed in each country • 1 strategic document developed • 1 inter-ministerial Meeting minutes at regional; • 2 meetings minutes at national level • 2 meetings minutes at the sub-national level. • 1 document copy of approved plans incorporating EW information	• 1 EW information framework agreement developed/reviewed in each country • One strategic document developed • 1 inter-ministerial Meeting minutes at regional; • 2 meetings minutes at the national level and • 2 meetings minutes at the sub-national level. • 1 document copy of approved plans incorporating EW information	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	Cooperation among project partner countries

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 1.1.3 Feedback mechanism for EW information developed.	• Minutes of stakeholder meetings • Number of information sharing platforms established • Number of Press releases • KAP survey report • A tool for accessing, utilizing and reporting EW information developed	Poor feedback mechanism from users to mandated institutions	• copies of Minutes 8 meetings per country • copies of Minutes 8 Joint meetings per country • At least 8 press releases per country • KAP survey report • A tool for accessing, utilizing and reporting	• 16 meetings per country • 16 joint meetings per country • At least 16 press releases per country • KAP survey report • A tool for accessing, utilizing and reporting	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	
Component 2: Strengthening capacities of key stakeholders at regional, national and local levels (Strengthening the capacity of stakeholders)							
Outcome 2.1: Drought resilience of key stakeholders at regional, national and local levels strengthened	• Number of staff in targeted institutions at regional and national and local level with enhanced capacity in drought management • Percentage of farmers and pastoralists with increased knowledge and skills in drought adaptation actions	Inadequate capacity of institutions, farmers, and pastoralists to undertake drought adaptation measures	• Number of staff in targeted institutions trained (to be determined) • At least 30% of targeted farmers and pastoralists trained	• Number of staff in targeted institutions trained (to be determined) • At least 80% of targeted farmers and pastoralists trained	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 2.1.1: Drought management plans (DMPs) developed	• Number of DMP,s • Number of DMPs translated and distributed • Number of national and sub-national plans with DM component integrated • Bye-laws and ordinances formulated	No outstanding drought adaptation and management components in national and sub-national plans	• At least 1 national and 1 sub-national plans reviewed/developed per country • At least 1 national and 1 sub-national plans translated • At least 1 DMP, integrated into national and sub-national plans per country • At least 1 Bye-law and 1 ordinance formulated per country	• At least 2 national and 2 sub-national plan reviewed/developed per country being implemented • At least 2 national and 2 sub-national plans translated • At least 2 DMPs, integrated into national and sub-national plans per country • At least 2 Bye-laws and 2 ordinances formulated per country	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 2.1.2: Adaptive capacity of institutions, farmers, and pastoralists in drought management improved	• Capacity needs assessment report • Copies of capacity building plans, • Copies of training manuals • Number of stakeholders trained • Number of learning centers established	Farmers and pastoralists have inadequate knowledge and skills to undertake drought adaptation actions	• 4Capacity needs assessment report • 4 Copies of capacity building plans • 4 Copies of training manuals • At least30% of targeted stakeholders trained • 4 learning centers for farmers and pastoralists established per country	• 4 Capacity needs assessment report • 4 Copies of capacity building plans • 4 Copies of training manuals • At least 80% of targeted stakeholders trained • 12 learning centers for farmers and pastoralists established per country	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	
Outcome 2.2: Partnerships for drought management at regional, national and local levels strengthened	• Number of Functional frameworks for drought management at different levels per country	The existing frameworks are not fully utilized to undertake drought adaptation measures. In some areas, partnerships are lacking.	At least 3 Functional frameworks for drought management established	At least 6 Functional frameworks for drought management established	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Output 2.2.1: New/existing regional and National arrangements /networks for drought management supported	• Number of platform events organized and press releases on drought management issues • Number of partnership agreements or MOUs reviewed or developed • Number of drought adaptation proposals developed jointly	Regional and national arrangements/networks for drought management are either weak, dysfunctional or lacking	• At least 2 press releases each year per country • At least 2, partnership agreements/MOUs, and 2 platform events each year per country • At least 2 regional proposals per year	• At least 8 press releases each year per country • At least 4, partnership agreements/MOUs, and 8 platform events each year per country • At least 4 regional proposals developed and submitted for funding	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Component 3: Supporting innovative drought adaptation actions (Drought and climate change adaptation actions)							
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions	• Percentage of farmers and pastoralists undertaking drought adaptation actions • Percentage increase in crop and livestock production	There are limited opportunities and options for undertaking drought adaptation actions for farmers and pastoralists	• At least 30% of farmers and pastoralists are undertaking drought adaptation actions • At least 30% of smallholder farmers and pastoralists have alternatives	• At least 60% of farmers and pastoralists are undertaking drought adaptation actions • At least 60% of smallholder farmers and pastoralists have alternatives	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	
Result	**Indicators**	**Baseline**	**Milestones (After 2 years)**	**End of Project Targets**	**Means of Verification**	**Responsible Parties**	**Risks and Assumptions**
Output 3.1.1: Innovative water and soil conservation structures constructed	• Number of assessment reports on surface water potential and WMP • Number of water harvesting and storage structures constructed • Number of mini-irrigation systems constructed • Number of water wells and springs protected • Number of farmers and pastoralists undertaking soil and water conservation technologies	Farmers are constrained by high water losses due to limited technologies for water storage	• 4 assessment reports on surface water potential and WMP • At least 12 water harvesting and storage units constructed • At least 6 mini-irrigation systems constructed • At least 3 water well/spring/oasis protected • At least 30% of smallholder farmers and pastoralists undertaking water and soil conservation measures	• 4 assessment reports on surface water potential and WMP • 36 Units of water harvesting and storage constructed • 14 mini-irrigation systems constructed • 9 water wells, springs/oases protected • At least 70% of smallholder farmers and pastoralists undertaking water and soil conservation measures	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 3.1.2: Groundwater sources established/ improved	• A report on groundwater assessment • A report/Guidelines/regulations on groundwater resources developed • Area (acreage) of degraded site restored	Information on groundwater sources is inadequate Guidelines/regulations for protection and management of groundwater sources are lacking	• Groundwater assessment report • At least two sets of Guidelines for groundwater regulation per country developed • At least 20% of the degraded sites restored	• Groundwater assessment report • At least two sets of Guidelines for groundwater regulation per country being implemented • At least 60% of the degraded sites restored	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 3.1.3: Adaptive agricultural practices for improving crop production promoted	• Number of farmers and pastoralists supported with crop varieties, • Kilograms of seed/cuttings of drought-resistant crop varieties bought and distributed • Number of agroforestry tree seedlings bought and distributed • Quantities of inputs for irrigated agriculture • Number of small irrigation units • Number of farmers engaged in climate-smart agricultural practices	• Crops varieties being grown are susceptible to drought conditions • Degraded landscapes that have reduced the ground recharge capacity of water catchment areas • There are limited/no small irrigation schemes • Climate adaptive agricultural practices are inadequate	• At least 20% of the target farmers have accessed improved and drought-resistant crop varieties • At least 9 tons of seeds/cuttings for drought-resistant crop varieties distributed in each country • At least 20% of the target pastoralists have accessed drought tolerant and fast growing pasture seeds • At least 30 hectares of degraded landscapes restored in each country • At least 4 irrigation units • At least 20% of targeted farmers undertake Climate-Smart Agriculture (CSA)	• At least 70% of the targeted farmers and pastoralists have accessed drought-resistant crop varieties • At least 15 tons of seeds/cuttings for drought-resistant crop varieties distributed in each country • At least 50% of the target pastoralists have accessed drought tolerant and fast growing pasture seeds • At least 100 hectares of degraded landscapes restored in each country • At least 8 irrigation units • At least 60% of targeted farmers undertake Climate-Smart Agriculture (CSA)	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Output 3.1.4: Adaptive livestock and rangeland practices enhanced	• Area/acreage of rangeland improved with rangeland management practices • Number of stock routes agreements • Number of pastoralists supported with improved animal breeds • Livestock numbers bought and distributed • Number of hydroponic units established • Quantities of improved grass varieties seed • Percentage reduction in mortality of livestock • Increase in quantities of livestock products (milk and beef etc.) • Number of households with improved feeds and pastures • Number of meetings of associations/groups /cooperatives of livestock	• Low drought tolerance capacity of the current animal breeds • Poor quality of varieties of animal feeds • Conflicts amongst neighboring communities due to inadequate water and pastures in different rangelands	• At least one stock agreement signed per country • About 15% Area/acreage of rangeland improved with rangeland management practices • 80 pastoralists supported with improved livestock breeds per country • 90 Livestock bought and distributed in each country • 20 hydroponic units established per country • At least 8 tonnes of improved grass varieties distributed in each country • At least 20% of the target pastoralists have accessed drought tolerant animal breeds • Livestock mortality attributed to drought-reduced by 5% • At least 40 households with improved feeds and pastures	• At least 4 stock route agreements signed per country • About 40% Area/acreage of rangeland improved with rangeland management practices • 160 pastoralists supported with improved livestock breeds per country • 170 livestock bought and distributed in each country • 40 hydroponic units established per country • At least 16 tonnes of improved grass varieties distributed in each country • At least 70% of the target pastoralists have accessed drought tolerant animal breeds • Livestock mortality attributed to drought-reduced by 10% • At least 80 households with improved feeds and pastures	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

			• 6 meetings for at least 4 associations per country	• 12 meetings for at least 5 associations per country			
Output 3.1.5: Enabling environment for smallholder farmers and pastoralists adaptive activities created	• Number of pastoralists and smallholder farmers accessing Index-based weather insurance • A report on drought risk assessments on the agriculture value chain • Minutes of meetings and workshops for farmer and pastoralists associations/cooperatives meetings	• Index-based weather insurance is lacking • High crop and livestock losses due to weather-related events • Functional Farmers and Pastoralists associations and cooperatives are lacking	• At least 5% of targeted smallholder farmers and pastoralists have an Index-based weather insurance scheme • 1 report on drought risk assessments on the agriculture value chain • 4 meetings for at least 4 farmer and/or pastoralist associations or cooperatives in each country	• At least 15% of smallholder farmers and pastoralists have an Index-based weather insurance scheme • 1 report on drought risk assessments on the agriculture value chain • 8 meetings for at least 5 farmer and/or pastoralist associations or cooperatives in each country	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 3.1.6: Environmental friendly IGAs ([e.g., Pottery, Beekeeping, Energy saving stoves, Briquettes making, and interlocking bricks) promoted	• Number of business enterprises promoted • Number of households undertaking IGAs • Number of women and youth groups involved in the implementation of IGAs • Number of groups supported by grants • Number of groups/cooperatives supported to undertake value addition for their agricultural products	• Inadequate opportunities and resources especially for youth and women groups to undertake IGAs	• At least 3 IGAs undertaken by households, women and youth groups in each country • At least 80 Households supported to undertake IGAs per country • At least 4 women and youth groups undertaking at least 1 IGA in each country • At least 2 women and youth groups were given grants to undertake adaptation actions per country • At least 3 cooperatives supported to add value to their crop and livestock products for each country	• At least 3 IGAs undertaken by households, women and youth groups in each country • At least 160 Households supported to undertake IGAs per country • At least 5 women and youth groups undertaking at least 1 IGA in each country • At least 2 groups given grants to undertake adaptation actions per country • At least 9 cooperatives supported to add value to their crop and livestock products for each country	• Project implementation reports • Field visits • M&E reports Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda Farmers and pastoralists	

Component 4: Knowledge management and information sharing (Knowledge management)							
Result	**Indicators**	**Baseline**	**Milestones (After 2 years)**	**End of Project Targets**	**Means of Verification**	**Responsible Parties**	**Risks and Assumptions**
Outcome 4.1: Knowledge and awareness on drought risk management Increased	• Percentage of households of targeted farmers and pastoralists practicing drought adaptation actions	Small percentage of farmers and pastoralists with access to adequate information and knowledgeable in drought management issues and interventions	At least 40% of the targeted actors participating in regional information sharing platforms	At least 80% of the targeted actors participating in regional information sharing platforms	• Project implementation reports • •Field visits • •M&E reports • •Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	Partners at the regional level are willing to engage with the project and each other
Output 4.1.1 Good practices and lessons on drought management, EWS, and Climate Change impacts documented and disseminated	• Number of knowledge products e.g. documents on lessons and best practices from project interventions • Number of case studies and lessons learned documented and shared projects	Limited information on successful cases studies and documentation of lessons learned learned from implementation of drought management projects in the region	• 2 brochures, 2 publications (documents) on lessons and best practices from project interventions • At least 4 case studies /lessons on drought management, EWS and CC impacts learned documented, packaged and shared with key stakeholders for upscaling and informing project interventions	• 4 brochures, 3 publications (documents) on lessons and best practices from project interventions • At least 8 case studies /lessons learn documented, packaged and shared with key stakeholders for upscaling and informing project interventions	• Project implementation reports • Field visits • M&E reports • Interviews with smallholder farmers and pastoralists and community leaders	GWPEA, and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	Target projects are willing to share information

Result	Indicators	Baseline	Milestones (After 2 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 4.1.2 Drought information management strengthened	• Number of MOUs or agreements • Number of meetings • Number of platforms or fora organized jointly • Number of media features (e.g. electronic and print media shows • A gender responsive and scale-up strategy document for drought, CC and early warning technologies for vulnerable groups	• Limited opportunities including platforms and forums for information sharing drought management information • No existing/updated gender responsive and scale-up strategy document for drought, CC and early warning technologies for vulnerable groups in the region	• Minutes of 4 regional meetings held for information generation and sharing • Minutes of 4 meetings on policy engagement at the national level • At least two information sharing events organized per country • At least 2 MOUs or agreements with drought management working groups • A gender responsive and scale up strategy	• Minutes of 8 regional meetings held • Minutes of 8 meetings on policy engagement at the national level • At least 6 information sharing events organized per country • At least 4 MOUs or agreements with drought management working groups • A gender responsive and scale up strategy	Project implementation reports •Field visits •M&E reports •Interviews with smallholder farmers and pastoralists and community leaders	GWPEA and Focal Ministries in Djibouti, Kenya, Sudan and Uganda	

F. The project alignment with the Results Framework of the Adaptation Fund

Project Objective(s)[28]	**Project Objective Indicator(s)**	**Fund Outcome**	**Fund Outcome Indicator**	**Grant Amount (USD)**
Increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through the establishment of appropriate early warning systems (EWS) and implementation of drought adaptation actions	Number of EWS beneficiaries/users	**Outcome 1:** Reduced exposure at the national level to climate-related hazards and threats	1. Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis	**11,009.02**
	Number of direct and indirect beneficiaries of climate change adaptation interventions	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at the local level	3.1. Percentage of the targeted population aware of predicted adverse impacts of climate change, and of appropriate responses	
			3.2. Modification in the behavior of the targeted population	
		Outcome 4: Increased adaptive capacity within the relevant development and natural resource sectors	4.1. Development sectors' services responsive to evolving needs from changing and variable climate	
			4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	
	Proportion (%) of smallholder farmers and pastoralists with increased incomes	**Outcome 6:** Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure (increased) access to livelihood assets	
			6.2. Percentage of targeted population with sustained climate-resilient livelihoods	
		Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Outcome 1.1 Increased use of effective Early Warning Systems by stakeholders	Proportion of targeted farmers and pastoralists that access and integrate EW information into seasonal calendars	**Output 1:** Risk and vulnerability assessments conducted and updated at a national level	1.1. No. and type of projects that conduct and update risk and vulnerability assessments	**1,500.00**
			1.2 Development of early warning systems	
Outcome 2.1: Drought resilience of key stakeholders at regional, national and local levels strengthened	Number of staff in targeted institutions at regional and national and local level with	**Output 2.1:** Strengthened capacity of national and regional centers and networks to respond	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events	**1,310.00**

[28] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

	enhanced capacity in drought management	rapidly to extreme weather events		
	Percentage of farmers and pastoralists with increased knowledge and skills in drought adaptation actions	**Output 2.2:** Targeted population groups covered by adequate risk reduction systems	2.2.1. Percentage of population covered by adequate risk-reduction systems	
			2.2.2. No. of people affected by climate variability	
Outcome 2.2: Partnerships for drought management at regional, national and local levels strengthened	Number of Functional frameworks for drought management at different levels per country	**Output 2.1:** Strengthened capacity of national and regional centers and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events	**440.00**
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions	Percentage of farmers and pastoralists undertaking drought adaptation actions	**Output 4:** Vulnerable physical, natural, and social assets strengthened in response to climate change impacts, including variability	4.1.1. No. and type of health or social infrastructure developed or modified to respond to new conditions resulting from climate variability and change (by type)	**6,279.92**
			4.1.2. No. of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change (by asset types)	
	Percentage increase in crop and livestock production	**Output 6:** Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	6.1.1.No. and type of adaptation assets (physical as well as knowledge) created in support of an individual or community-livelihood strategies	
			6.1.2. Type of income sources for households generated under climate change scenario	
Outcome 4.1: Knowledge and awareness on drought risk management Increased	Percentage of households of targeted farmers and pastoralists practicing drought adaptation actions	**Output 3:** Targeted population groups participating in adaptation and risk reduction awareness activities	3.1.1 No. and type of risk reduction actions or strategies introduced at the local level	**1,192.00**
			3.1.2 No. of news outlets in the local press and media that have covered the topic	

G. *Detailed budget*

Component/Outcome/Output/Activity	Djibouti	Kenya	Sudan	Uganda	Total Budget ('000 USD)	Budget notes
COMPONENT 1: Development and enhancement of a regional Drought Early Warning System	375.00	375.00	375.00	375.00	**1,500.00**	
Outcome 1.1: Increased use of effective Early Warning Systems by stakeholders	375.00	375.00	375.00	375.00	**1,500.00**	
Output 1.1.1: Efficient and effective EWS in place/developed	172.00	172.00	172.00	172.00	**688.00**	
Activity 1.1.1.1 Assess the status of EWS in the target countries and the update options of traditional EWS with modern EW technologies	12.00	12.00	12.00	12.00	48.00	Studies assessed @30 man days @ USD 300/day and associated costs of USD 3,000 in each Country
Activity 1.1.1.2 Develop an EWS prototype to be used at the regional and national levels	10.00	10.00	10.00	10.00	40.00	Study: Studies assessed @20 man days @ USD 300/day associated costs of USD 4,000 in each Country
Activity 1.1.1.3 Equip/upgrade selected weather stations and Remote sensing derived products, time series of bioclimatic variables, etc.	80.00	80.00	80.00	80.00	320.00	Set up two modern weather station @USD 30,000 each and upgrade two other weather stations @USD 10,000 @in each Country
Activity 1.1.1.4 Construct/renovate and equip EW information centers including data base	40.00	40.00	40.00	40.00	160.00	Construct /renovate one center @USD 30,000 and USD 10,000 for equipment in each country
Activity 1.1.1.5 Support/Equip project beneficiaries (pastoralist, farmers, and extension agents) to access EW information (e.g. devices including, brochure, SMS, Radio etc.)	30.00	30.00	30.00	30.00	120.00	Involves buying EW information devices for targeted pastoralist, farmers and extension agents
Output 1.1.2: Institutional linkages for EW information established	124.00	124.00	124.00	124.00	**496.00**	
Activity 1.1.2.1 Develop/Review EW information sharing frameworks at regional. National and sub-national levels	20.00	20.00	20.00	20.00	80.00	At least one EW information framework @ USD 20,000 e.g. agreement developed/reviewed in each country

Activity 1.1.2.2 Develop an implementation action plan to operationalize the frameworks	12.00	12.00	12.00	12.00	48.00	Consultancy @30 man days @USD 300 and associated costs of USD 3,000
Activity 1.1.2.3 Hold inter-ministerial and sectoral meetings for data sharing	40.00	40.00	40.00	40.00	160.00	One inter-ministerial meeting per year @USD 6,000 and two sectoral meeting per year @USD 2,000 for each country managed centrally at the regional level.
Activity 1.1.2.4 Support national, regional and local EW information sharing Forums (including farmers and pastoralist associations)	40.00	40.00	40.00	40.00	160.00	One meeting at regional @ USD 4,000 per year; 2 meetings at national level @USD 2,000 per year and 2 meetings at sub-national level @USD 1,000 per year in each country for three years.
Activity 1.1.2.5 Support Incorporation of EW information into planning and budgeting processes of targeted countries	12.00	12.00	12.00	12.00	48.00	Two meetings per country per year @USD 3,000 for the first two years.
Output 1.1.3: Feedback mechanism for EW information developed	79.00	79.00	79.00	79.00	**316.00**	
Activity 1.1.3.1 Support regular stakeholder EW information feedback platforms for farmers and pastoralists	20.00	20.00	20.00	20.00	80.00	Four meetings per year @USD 1,250 for farmers and pastoralists in each country
Activity 1.1.3.2 Hold quarterly stakeholder meetings on EW information utilization for national and sub-national stakeholders	33.00	33.00	33.00	33.00	132.00	Four joint national and sub-national level meetings per year @USD 4,125 for two years in each country
Activity 1.1.3.3 Conduct KAP surveys on EW information	15.00	15.00	15.00	15.00	60.00	Studies @ 30 man days @USD 300 and associated costs of USD 6,000 per country
Activity 1.1.3.4 Develop periodic feedback user-friendly tools on accessing, utilizing and reporting EW information to mandated institutions	11.00	11.00	11.00	11.00	44.00	One meeting to develop the tool @ USD 5,000 and subsequent meetings to review the tool @USD 2,000 per country for three years.

COMPONENT 2: Strengthening the capacity of stakeholders to manage drought risks due to Climate Change effects	437.50	437.50	437.50	437.50	**1,750.00**	
Outcome 2.1: Drought resilience of key stakeholders at regional, national and local levels strengthened	327.50	327.50	327.50	327.50	**1,310.00**	
Output 2.1.1: Drought management plans (DMPs) integrating CC aspects and adaptation actions developed	90.00	90.00	90.00	90.00	**360.00**	
Activity 2.1.1.1 Develop/update existing DMPs at national and sub-national levels integrating CC aspects and adaptation actions	30.00	30.00	30.00	30.00	120.00	Consultancy @ 60 man days spread over one year @USD 300 and associated costs of USD 12,000 per country
Activity 2.1.1.2 Popularization and Dissemination of the reviewed DMPs for use by the farmers and pastoralists	12.00	12.00	12.00	12.00	48.00	This involves translating DMPs, printing and dissemination @USD 4,000 per year for three years
Activity 2.1.1.3 Support integration of DMPs into the national and sub-national development plans	18.00	18.00	18.00	18.00	72.00	Consultancy of 30 man days @USD 300 and associated costs (two workshops) of USD 9,000 per country
Activity 2.1.1.4 Support formulation of bye-laws and ordinances at sub-national and lower political units	30.00	30.00	30.00	30.00	120.00	Involves hiring a facilitator @60 man days @USD 300 spread in two years and holding 4 consultative meetings per year @USD 1,500
Output 2.1.2: Adaptive capacity of institutions, farmers and pastoralists in drought management improved	237.50	237.50	237.50	237.50	**950.00**	
Activity 2.1.2.1 Undertake a capacity needs assessment to identify gaps and hindrances to effective drought management	30.00	30.00	30.00	30.00	120.00	Studies assessed @60 man days @ USD 300/day and associated costs of USD 12,000 per country
Activity 2.1.2.2 Develop capacity building plans for regional, national and sub-national levels	12.00	12.00	12.00	12.00	48.00	Consultancy @20 man days @USD 300 and associated costs of USD 6,000 per country
Activity 2.1.2.3 Develop capacity building materials	7.00	7.00	7.00	7.00	28.00	Consultancy @10 man days @USD 300 and associated costs of USD 4,000 per country

Activity 2.1.2.4 Undertake exchange visits and learning tours for cross-learning in areas with successful drought management innovations including groundwater management initiatives	30.00	30.00	30.00	30.00	120.00	Exchange visits and learning tours @USD 10,000 per year per country for three years
Activity 2.1.2.5 Train staff managing EW information centers	20.00	20.00	20.00	20.00	80.00	Involves an initial and follow up training @USD 10,000 per country for two years
Activity 2.1.2.6 Train extension staff and artisans in drought adaptation interventions	30.00	30.00	30.00	30.00	120.00	Involves three annual pieces of training @USD 10,000 per country for three years
Activity 2.1.2.7 Facilitate community training workshops for farmers and pastoralists in drought risk management and adaptation measures utilizing the farmer field school approach	60.00	60.00	60.00	60.00	240.00	Two quarterly community training @ USD 2,500 for three years in each country
Activity 2.1.2.8 Support farmers and pastoral groups to establish learning centers for innovative Climate Smart agricultural extension services	48.50	48.50	48.50	48.50	194.00	This involves the construction of 4 learning centers for farmers and pastoralists @USD 5,000 per learning center and USD 9,500 for operational costs per country for three years
Outcome 2.2: Partnerships for drought management at regional, national and local levels strengthened	110.00	110.00	110.00	110.00	**440.00**	
Output 2.2.1: New/existing regional and National arrangements /networks for drought management supported	110.00	110.00	110.00	110.00	**440.00**	
Activity 2.2.1.1 Support review/development of MoUs, protocols and stock route agreements for Drought Management and reducing conflict between farmers and pastoralists	60.00	60.00	60.00	60.00	240.00	Consultative meetings and workshops at regional @USD 5,000, national @USD 10,000 and local levels @ USD 5,000 per year per country for three years
Activity 2.2.1.2 Facilitate the establishment of regional and national drought management multi-sectoral/stakeholder platforms to coordinate partner efforts	30.00	30.00	30.00	30.00	120.00	Involves coordination of regional and national partners to dialogue on drought management aspects @USD 30,000 per country per platform for the project duration of 4 years
Activity 2.2.1.3 Support regional and national partners to jointly mobilize resources for Drought Management in a changing climate context	20.00	20.00	20.00	20.00	80.00	Involves Coordination of partners to mobilize

						resources @ USD 20,000 per Country per year
COMPONENT 3: Drought and Climate Change adaptation actions	1492.48	1577.48	1667.48	1542.48	**6,279.92**	
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions	1492.48	1577.48	1667.48	1542.48	**6,279.92**	
Output 3.1.1: Innovative water and soil conservation structures constructed	315.00	420.00	460.00	355.00	**1,550.00**	
Activity 3.1.1.1 Undertake assessment on surface water utilization/potential/availability and develop water Management Plans in project sites	30.00	30.00	30.00	30.00	120.00	Studies assessed @60 man days @ USD 300/day and associated costs of USD 12,000 per country
Activity 3.1.1.2 Construct appropriate, innovative water harvesting and storage infrastructure (e.g. simplified water tanks, water jars, sunken dams, micro-dams, sand dams, water pans, valley dams, rock water harvesting, roadside water harvesting facilities, water ponds, and locally dug underground tanks, deep and shallow wells	120.00	200.00	240.00	160.00	720.00	Innovative water harvesting and storage infrastructure: Djibouti 6 units; Kenya 10 Units; Sudan 12 units and Uganda 8 Units @ unit @USD 20,000
Activity 3.1.1.3 Construct mini-irrigation and water delivery systems (e.g. gravity flow scheme, micro-irrigation systems, check dams, drip irrigation borehole irrigation, and solar powered irrigation systems)	75.00	100.00	100.00	75.00	350.00	Mini irrigation and delivery system: Djibouti 3 units; Kenya 4 Units; Sudan 4 units and Uganda 3 Units @ unit @USD 25,000
Activity 3.1.1.4 Support protection of water wells and springs to ensure quality, quantity and efficient water use	45.00	45.00	45.00	45.00	180.00	Protection of 3 water wells, springs and oases per country @ USD 15,000
Activity 3.1.1.5 Promote appropriate soil and water conservation measures (e.g. terraces, contours, conservation/minimum tillage, pit gardening, Zai pits and home gardening)	45.00	45.00	45.00	45.00	180.00	Soil and water conservation measures estimated @USD 15,000 per country per year for three years
Output 3.1.2: Ground water sources established/ improved	115.00	115.00	115.00	115.00	**460.00**	
Activity 3.1.2.1 Undertake assessment on ground water utilization/potential/availability and develop groundwater Management Plans in project sites	30.00	30.00	30.00	30.00	120.00	Studies assessed @60 man days @ USD 300/day and associated costs of USD 12,000 per country
Activity 3.1.2.2 Review/develop regulatory framework and guidelines on ground water sources	40.00	40.00	40.00	40.00	160.00	Consultative meetings and workshops at regional @USD 5,000, national @USD 10,000 and local levels @ USD 5,000 per year per country for two years

Activity 3.1.2.3 Restore degraded water catchments to improve recharge rates of groundwater	45.00	45.00	45.00	45.00	180.00	This involves improving ground cover e.g. planting of grasses, shrubs and some trees @USD 15,000 per country for 3 years
Output 3.1.3: Adaptive agricultural practices for improving crop production promoted	280.00	260.00	310.00	290.00	**1,140.00**	
Activity 3.1.3.1 Promote fast growing and drought resistant crop varieties (e.g. varieties in Gramineae and Leguminosae families	60.00	60.00	60.00	60.00	240.00	Cost of buying and distributing drought-resistant crops seeds/cuttings @USD 20,000 per country for three years (Create resistant crop varieties nurseries for the benefit of smallholder farmers)
Activity 3.1.3.2 Promote agrosilvopastoral systems (dryland agroforestry) (e.g. fast growing multi-purpose tree species such as *Acacia mearnsii*, integrated with crops and livestock rearing)	30.00	30.00	30.00	30.00	120.00	Involves costs for raising agroforestry tree/shrub seeds/seedlings and associated components @USD 10,000 per country for three years (Create agrosilvopastoral seeds nurseries for the benefit of smallholder farmers)
Activity 3.1.3.3 Provide inputs for irrigated agriculture technologies (Drip irrigation, small irrigation etc.)	100.00	80.00	100.00	80.00	360.00	Drip irrigation and small-scale irrigation infrastructure: Djibouti 10 units; Kenya 8 Units; Sudan 10 units and Uganda 8 Units @ unit @USD 10,000
Activity 3.1.3.4 Promote climate smart agricultural practices	90.00	90.00	120.00	120.00	420.00	Climate smart agricultural infrastructure: Djibouti 6 units; Kenya 6 Units; Sudan 8 units and Uganda 8 Units @ unit @USD 15,000
Output 3.1.4: Adaptive livestock and rangeland practices enhanced	261.01	261.01	261.01	261.01	**1,044.04**	
Activity 3.1.4.1 Promote improved rangeland management practices (e.g. developing of rangeland management plans, reduction livestock stocking, integrated pest and disease management)	60.00	60.00	60.00	60.00	240.00	Consultancy for rangeland management planning @ 30 man days @USD 300 and associated costs of USD 6,000 per country; and meetings and

						workshops @ USD 15,000 per country per year for three years
Activity 3.1.4.2 Support introduction of drought-tolerant livestock breeds	90.00	90.00	90.00	90.00	360.00	This involves the cost of buying drought tolerant livestock breeds @USD 30,000 per country per year for three years
Activity 3.1.4.3 Promote hydroponic systems for growing nutritious fast growing cereals for livestock (animal feeds)	40.00	40.00	40.00	40.00	160.00	This involves the cost of an average household hydroponic unit and seed for the fast-growing cereals @USD 2,000 for 10 households per year per country for two years
Activity 3.1.4.4 Support farmers and pastoralists to prepare high-value silage and hay for livestock during dry spells	36.00	36.00	36.00	36.00	144.00	This involves the costs of farmer training, buying seed and construction of hay and silage storage units, @USD 12,000 per year per country for three years
Activity 3.1.4.5 Support formation/facilitate existing livestock associations/groups/cooperatives at the community level	35.01	35.01	35.01	35.01	140.04	This involves meetings and workshops @USD 11,670 per country per year for three years
Output 3.1.5: Enabling environment for smallholder farmers and pastoralists adaptive activities created	156.40	156.40	156.40	156.40	**625.60**	
Activity 3.1.5.1 Introduce and promote Index-based weather insurance in partnership with insurance companies	30.00	30.00	30.00	30.00	120.00	This involves seed money for insurance premiums and operations @USD 10,000 per country per year for three years
Activity 3.1.5.2 Conduct drought risk assessments on the agriculture value chain	30.00	30.00	30.00	30.00	120.00	Studies assessed @60 man days @ USD 300/day and associated costs of USD 12,000 per country
Activity 3.1.5.3 Facilitate farmer and pastoralists' associations/cooperatives to generate analyze and share market information.	56.40	56.40	56.40	56.40	225.60	This involves meetings and workshops @USD 18,800 per country for three years
Activity 3.1.5.4 Create linkages between farmer and pastoralists associations/cooperatives at regional, national and sub-national levels to enable sharing of market information	40.00	40.00	40.00	40.00	160.00	This involves costs for meetings and workshops at different levels @USD

						20,000 per country for two years
Output 3.1.6: Environmental friendly IGAs ([e.g., Pottery, Beekeeping, Energy saving stoves, Briquettes making, and interlocking bricks) promoted	365.07	365.07	365.07	365.07	**1,460.28**	
Activity 3.1.6.1 Support women and youth groups with inputs for IGAs including (e.g. growing of sisal and *Aloe vera* to support rope production and art crafts; beekeeping; briquette making; keeping of local poultry (e.g. Kroilers) and community tourism	120.00	120.00	120.00	120.00	480.00	This involves the cost of inputs for the selected enterprises, meetings and workshops all estimated @USD 40,000 per year per country for three years
Activity 3.1.6.2 Provide competitive small grants targeting smallholder farmers and pastoralist associations to undertake innovative IGAs or drought adaptation actions	120.00	120.00	120.00	120.00	480.00	This involves a fund set aside for farmer and pastoralist groups with innovative drought adaptation actions to compete for and be supported by the project. It is estimated @USD 60,000 per year per country for two years.
Activity 3.1.6.3 Provide inputs for value addition crop and livestock products	125.07	125.07	125.07	125.07	500.28	This involves costs for buying equipment and materials for value addition for the respective crop and livestock enterprises estimated @USD 41,690 per country per year for three years
COMPONENT 4: Knowledge management and awareness creation	298.00	298.00	298.00	298.00	**1,192.00**	
Outcome 4.1: Knowledge and awareness on drought risk management Increased	298.00	298.00	298.00	298.00	**1,192.00**	
Output 4.1.1 Good practices and lessons on drought management, EWS, and Climate Change impacts documented and disseminated	226.00	226.00	226.00	226.00	**904.00**	
Activity 4.1.1.1 Document lessons and best practices from project interventions	90.00	90.00	90.00	90.00	360.00	These are costs for 60 consultancy man days @USD 300 and associated costs of USD 12,000 per year for three years per country

Activity 4.1.1.2 Generate and package information dissemination materials on EW, CC and drought adaptation actions in forms for easy uptake(e.g. policy briefs, brochures) adapted to the various stakeholders	56.00	56.00	56.00	56.00	224.00	Cost of developing at 30 man days @USD 300, printing the materials estimated @USD 5,000 per country per year for four years.
Activity 4.1.1.3 Disseminate/share knowledge and information through the use of existing and popular platforms e.g. electronic and print media, telecom that is easily accessible to the stakeholders.	80.00	80.00	80.00	80.00	320.00	Costs of using various communication platforms and channels estimated @USD 20,000 per year per country for four years
Output 4.1.2 Drought information management strengthened	72.00	72.00	72.00	72.00	**288.00**	
Activity 4.1.2.1 Support existing channels/networks for information generation and dissemination at the regional level (e.g. GHACOF for EW and IDDRISI for drought management platform and national platforms)	14.00	14.00	14.00	14.00	56.00	Costs of meetings, workshops, and coordination estimated @USD 3,500 per year per country for four years
Activity 4.1.2.2 Engage policymakers in the dissemination of drought management information and best practices	14.00	14.00	14.00	14.00	56.00	Costs of meetings, workshops, and travel estimated @USD 3,500 per year per country for four years
Activity 4.1.2.3 Support drought management working groups to share and disseminate the information	14.00	14.00	14.00	14.00	56.00	Costs of meetings, workshops, and travel estimated @USD 3,500 per year per country for four years
Activity 4.1.2.4 Develop gender responsive and scale-up strategies for drought, CC and early warning technologies among women, and other vulnerable groups	30.00	30.00	30.00	30.00	120.00	Studies assessed @60 man days @ USD 300/day and associated costs of USD 12,000 per country
Monitoring and evaluation	71.78	71.78	71.78	71.78	**287.10**	Costs for mid-term monitoring and end of project monitoring @USD 71,775 per country
Project activities Total Budget (component 1, 2, 3, 4 & M&E)	2674.8	2759.8	2849.76	2724.76	**11,009.02**	
Project Co-ordination and Management						
Execution costs (Regional Implementing Entity-GWPEA)					**1,045.86**	

Implementation costs (Implementing Entity -OSS)					**1,024.66**	
Grand total					**13,079.54**	

H. Disbursement schedule with time-bound milestones

This section will be developed during the drafting of the project document (full proposal)

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY TH E IMPLEMENTING ENTITY

- **Record of endorsement on behalf of the government[29]:**

Djibouti **Mr. Dini Abdallah Omar** General Secretary, Ministry of Habitat and Environment	**February 15, 2018**
Kenya **Mr. Charles T. Sunkuli CBS** Principal Secretary, Ministry of Environment and Natural Resources	**April 5, 2018**
Sudan **Dr. Noureldin Ahmed Abdalla Secretary** General Secretary Higher Council for Environment and Natural Resources (HCENR)	**February 22, 2018**
Uganda **Mr. Keith Muhakanizi** Permanent Secretary/Secretary to the Treasury, Ministry of Finance, Planning and Economic Development	**April 18, 2018**

[29] EachPartyshalldesignate and communicate tothe secretariattheauthoritythatwillendorse on behalfofthe nationalgovernment the projects and programmesproposed bythe implementingentities

- **Implementing Entity certification**

I certify that this proposal has been prepared in accordance with the guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans (Country programming papers (CPPs), **Djibouti'**s Public Investment Plan and the National Plan for Climate Change Adaptation; **Kenya**'s National Disaster Management Policy and National Climate Change response Strategy, **Sudan**'s regulatory policy frameworks related to drought and **Uganda**'s National Policy for Disaster Preparedness and management) and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and to the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project.
Mr. Khatim Kherraz– Executive Secretary of the Sahara and Sahel Observatory (OSS) as the Implementing Entity Coordinator
Date: April 16, 2018  Tel.: (+216) 71 206 633 Email: boc@oss.org.tn
Project Contact Person: **Nabil Ben Khatra**
Tel. and Email: (+216) 71 206 633; nabil.benkhatra@oss.org.tn

Endorsement letters

REPUBLIQUE DE DJIBOUTI
UNITE – ÉGALITE – PAIX

MINISTERE DE L'HABITAT,
DE L'URBANISME ET DE
L'ENVIRONNEMENT

LE SECRÉTAIRE GÉNÉRAL

N° 069/SG/2018
Djibouti, le 15 FEV 2018

MHUE

جـمـهـورية جيبوتي
الوحدة - المساواة - السلام

وزارة الإسكان والتعمير والبيئة

الأمين العام

رقم
جيبوتي في

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for a project "***Strengthening Drought Resilience for small holder farmers and pastoralists in the IGAD region***"

In my capacity, as designated authority for the Adaptation Fund in Djibouti, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Djibouti and the IGAD region.

Accordingly, I am pleased to endorse the above project proposal with support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by the Ministry of Agriculture, Water, Fisheries and Livestock of Djibouti in partnership with the Global Water Partnership Eastern Africa (GWP-EA).

Sincerely,

Dini Abdallah Omar
Secretary General of the Ministry of Environment

+253 35-85-22 +253 35-16-18 BP 11 dini.omar12@gmail.com

MINISTRY OF ENVIRONMENT AND FORESTRY

Office of the Principal Secretary

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Website : www.environment.go.ke

N.H.I.F. BUILDING
RAGATI ROAD
P.O. BOX 30126
NAIROBI

Ref No: DENR/EMC/6 VOL. III

5th April 2018

To: The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email : Secretariat@Adaptation-Fund.org
Fax : 202 522 3240/5

ENDORSEMENT FOR A PROJECT "*STRENGTHENING DROUGHT RESILIENCE FOR SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION*"

In my capacity, as designated authority for the Adaptation Fund in **Republic of Kenya**, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Kenya and the IGAD region.

Accordingly, I am pleased to endorse the above project concept note with support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by the Climate Change Directorate, Ministry of Environment and Natural Resources of Kenya in partnership with the Global Water Partnership Eastern Africa (GWP-EA).

Charles T. Sunkuli, CBS
PRINCIPAL SECRETARY

Republic of the Sudan
Ministry of Environment, Natural Resources & Physical Development
Higher Council for Environment & Natural Resources (HCENR)
General Secretariat

HCENR

جمهورية السودان
وزارة البيئة والموارد الطبيعية والتنمية العمرانية
المجلس الأعلى للبيئة والموارد الطبيعية
الأمانـــة العامـــة

Date : 22/2/2018

To: **The Adaptation Fund Board**
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for a project "Strengthening Drought Resilience for small holder farmers and pastoralists in the IGAD region"

In my capacity, as designated authority for the Adaptation Fund in **Republic of Sudan**, I confirm that the above regional project proposal is in accordance with the government's national and regional priorities in implementing adaptation activities to reduce adverse impacts of, and risks, posed by climate change in Sudan and the IGAD region.

Accordingly, I am pleased to endorse the above project concept note with support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by Ministry of Water Resources and Electricity of Sudan in partnership with the Global Water Partnership Eastern Africa (GWP-EA).

Sincerely,

Dr. Noureldin Ahmed Abdalla
Secretary General (HCENR)
and National Adaptation Fund Focal Point

هاتف : ٧٨٤٢٧٩ ١٨٣ ٢٤٩+ - فاكس: ٧٨٧٦١٧ ١٨٣٢٤٩ ٢٤٩+ - ص.ب: ١٠٤٨٨ الخرطوم
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: 256 41 4343 023
: 256 41 4341 286
Email : finance@finance.go.ug
Website : www.finance.go.ug

In any correspondence on
this subject please quote No. EDP 79/251/02

THE REPUBLIC OF UGANDA

Ministry of Finance, Planning &
Economic Development
Plot 2-12, Apollo Kaggwa Road
P.O. Box 8147
Kampala
Uganda

18th April 2018

The Adaptation Fund Board
C/o Adaptation Fund Board Secretariat
Email: secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

ENDORSEMENT FOR A REGIONAL PROJECT: STRENGTHENING DROUGHT RESILIENCE FOR SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION.

I have the honor to refer to the above mentioned subject.

In my capacity as the Designated Authority for the Adaptation Fund in Uganda, I confirm that the above regional project proposal is in accordance with the government's National and Regional priorities in implementing Adaptation activities to reduce adverse impacts of climate change in Uganda and the IGAD region.

Accordingly, I am pleased to endorse the above project concept note for support from the Adaptation Fund. If approved, the project will be implemented by the Sahara and Sahel Observatory (OSS) and executed by Ministry of Water and Environment of Uganda in partnership with the Global Water Partnership Eastern Africa (GWP-EA).

Keith Muhakanizi
PERMANENT SECRETARY/ SECRETARY TO THE TREASURY/ NATIONAL DESIGNATED AUTHORITY FOCAL POINT FOR CLIMATE CHANGE

Copies to: The Permanent Secretary, Ministry of Water and Environment.
Kampala, Uganda.

The Regional Coordinator, Global Water Partnership, Eastern Africa
Entebbe, Uganda.

The Executive Secretary, Sahara and Sahel Observatory
Tunis, Tunisia.

Annex: Workshop report

OBSERVATOIRE DU SAHARA ET DU SAHEL
SAHARA AND SAHEL OBSERVATORY

Global Water Partnership

DRESS-EA PROJECT
"STRENGTHENING DROUGHT RESILIENCE OF SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION"

REPORT ON REGIONAL CONCERTATION WORKSHOP

15th – I6th MARCH 2018, ENTEBBE (UGANDA)

1. BACKGROUND AND CONTEXT

The Intergovernmental Authority on Development (IGAD) region stretches over an area of 5.2 million km^2 and has a population of about 200 million people. The region comprises of eight countries including Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda. A large part (about 70%) of the region's land area is Arid and Semi-Arid Lands (ASALs) and receive less than 600 mm of annual rainfall (IGAD 2013). The area is a majorly water scarce area with minimal perennial river flows, making groundwater be the main source of water for the majority of the people in the horn of Africa. It is estimated that more than 80% of the inhabitants' communities live in rural areas, with less than 20% having access to improved water supplies. This situation demands address and is further complicated significantly by illicit activities such as deforestation and poor agricultural practices that lead to reduced water retention capacities, surface runoffs and soil cover losses. The dominant livelihood of the people in the region is agriculture, mainly dominated by smallholder farmers and pastoralists or semi pastoralist production systems. The rural communities, who are mainly small-scale farmers and pastoralists are highly vulnerable to droughts. The causes for vulnerability in the region include low adaptive capacity by communities to droughts, inadequate innovative adaptation actions to droughts, poor early warning systems and inadequate knowledge and skills in drought management. The impacts of droughts in the region have been manifested in the form of acute water constraints, significantly reduced precipitation levels and drying up of rivers. The effects of droughts have had destructive impacts on the region's economy, ecosystems and community livelihoods. Smallholder farmers and pastoralists in Djibouti, Kenya, Sudan and Uganda have been most affected due to their limited managing mechanisms. GWPEA is collaborating with IGAD and governments of these countries through the Integrated Drought Management Programme (IDMP) and the Water, Climate and Development Programme (WACDEP) to enhance drought resilience in the region.

The proposed project entitled "Strengthening drought resilience for small holder farmers and pastoralists in the IGAD region - DRESS-EA" will build on the existing initiatives and establish new mechanisms to address drought related challenges in the region through facilitating investments in early warning systems, building the capacity of targeted stakeholders, supporting innovative adaptation actions and enhancing knowledge management and skills.

The overall objective of the project is to increase the resilience of smallholder farmers and pastoralists to climate change risks, mainly those related to drought, through the establishment of appropriate early warning systems and the implementation of drought adaptation actions. More specifically, this project is intended to, promote investments in drought Early Warning Systems (EWS) and improve the existing ones, strengthen and improve the capacity of key stakeholders in drought risks management at regional, national and local levels. Support communities to undertake innovative adaptation actions that reinforce their resilience to drought and enhance knowledge management and information sharing on drought resilience at the considered levels.

To address the drought challenges, the DRESS-EA project, has been developed by partners in the IGAD region. The Sahara and Sahel Observatory (OSS), as an accredited Regional Implementing Entity for the Adaptation Fund, will implement the project. Project execution will be done by the Global Water partnership Eastern Africa (GWPEA) as the Regional Executing Entity in partnership with as well as the focal countries executing countries that include of Djibouti, Uganda, Sudan, Kenya, Sudan and Uganda. The four countries have fully endorsed the project due to current challenges in their countries and have expressed support to undertake the proposed interventions. The project is currently at concept stage after having been endorsed at pre-concept stage by the adaptation fund which include investments in early warning systems, building the capacity, undertaking innovative adaptation actions and knowledge management.

2. CONTENT

The two days' regional workshop was organized by GWPEA and OSS at the Lake Victoria Hotel Entebbe, Uganda from 15 to 16 March 2018. The aim of the regional consultative workshop was to gather input from key stakeholders on the appropriate interventions that are most critical in the targeted countries. In addition, the meeting generated strategic adaptation actions and mitigations measures that can be incorporated into the project for future execution.

The workshop was carried out in an interactive manner, which included plenary discussions and group work based on focal countries as well as presentations of workshop objectives, project overview, Project objectives, proposed actions and implementation arrangements by the officials from GWPEA and Consultants followed by discussions. Various aspects were discussed especially regarding the DRESS-EA project, mainly arising from the pre-concept ideas and input s from the country focal representatives. The impacts of drought felt by the countries, mitigation measures and potential adaptation mechanisms were discussed. Valuable information on potential activities and institutional arrangements from the project sites of the focal countries were discussed.

Participants were drawn from the focal countries that include Djibouti, Kenya, Sudan and Uganda. The participants included:

- Representatives of national partner institutions for the executing countries
- Representatives of GWPEA
- Representatives of the OSS Executive Secretariat
- Members from the Uganda Water Partnership
- One representative from NGO- engaging communities in drought actions
- Representative from IUCN (working on drought project)
- Local representatives from drought prone areas- from Uganda

3. WORKFLOW

3.1. DAY ONE

The Lead Consultant – Dr. Lawrence Orikiriza, facilitated the opening speech. He welcomed the participants to the consultative workshop and requested them to review the program and make amendments if necessary. The agenda was adopted without amendments. The Facilitator requested them to register for the workshop. He thereafter invited the GWPEA Regional coordinator as the Host, to give his opening remarks.

Welcome Remarks –GWPEA – Dr. Ahmed Khalid

Dr. Ahmed Khalid welcomed participants from – Tunisia-OSS, countries, Djibouti, Kenya, Sudan and Uganda as well as the Consultants. He stressed that the Workshop was organized for the purpose of developing the Project concept by helping to fill the gaps identified by the consultants. After wished members, successful and deeper discussions so as to be able to fill the existing gaps in the Concept Dr. Ahmed Khalid invited Mr. Nabil Ben Khatra as the OSS Representative to give his opening remarks.

Welcome Remarks by OSS –Mr. Nabil Ben Khatra

The OSS representative welcomed participants to the workshop and encouraged them to work together as a family to prepare the project concept. He stressed the importance of the workshop which was basically organized to enrich the project pre-concept to a level that is acceptable to the AF. The

importance of bringing together representation from the four focal countries participating in the project formulation was highlighted.

He concluded by pledging OSS's continued support of providing oversight to the concept development and submission process in order to ensure that the concept meets AF standards.

3.1.1. Presentation of the project overview

Mr. Gerald Kairu from GWPEA presented an overview of the proposed project. He said that GWPEA has been implementing a project on integrated drought management in the Horn of Africa since 2014. It was through assessments done by this project that GWPEA discovered that pastoralists and small holder farmers are the most vulnerable to the impacts of drought. This revelation subsequently informed the development of the Pre-concept of Project that is currently being developed into a full concept after approval by the Adaptation Fund.

The key issues that led to the development of the project included

- Severe water constraints and prolonged droughts in the IGAD member states
- Inadequate rainfall in most of the region -60-70% of the region receive less than 600mm of rainfall annually
- Illicit activities e.g. deforestation and poor agricultural practices
- Dominant livelihood of the people in the region is agriculture, mainly by smallholder farmers and pastoralists or semi pastoralist production systems highly vulnerable to drought impacts
- low adaptive capacity by communities,
- Inadequate innovative adaptation actions to droughts,
- Poor early warning systems and
- Inadequate knowledge and skills in drought management

Mr. Kairu informed the participants that the Pre-concept for the proposed project was already endorsed by the Adaptation Fund and only needed to be developed into a full concept.

He also emphasized the need for the focal Country representatives that attended the workshop to beginning pursue endorsement letters with urgency as there is limited time let to submit the documents.

3.1.2. Presentation of Project Draft Concept

Dr. Lawrence Orikiriza presented the concept. He emphasized that the main purpose of the workshop was to gather information from the focal country teams such that concrete and detailed information regarding the proposed project sites and appropriate, innovative drought adaptation actions can be availed for improving the draft concept. He highlighted the problem being addressed by the project, objectives, components, outcomes and outputs of the project as well as guidelines for selecting the project sites.

The Consultant also highlighted some of the key factors/issues that should be considered in selecting the project focal areas.

3.1.3. Group work and Country level presentations

The participants were divided into groups based on the focal countries they represented. He invited all the participants to think more deeply about the proposed project areas especially in respect of the mode of support available. He emphasized the need to select small areas where the proposed project can have the desired impacts that could later on be up-scaled.

The participants were tasked with coming up with activities including concrete adaptation actions under each output and outcomes, Identifying the stakeholders responsible for executing these activities, the intended beneficiaries, specific areas of implementation (Regional or National),indicators as well as budgets for the proposed activities. The detailed activities for the project presented by the respective countries are indicated in Annexes III, IV, V and VI.

The time allocated could not enable the groups to come up with the budgets for the proposed activities. Also some countries asked for more time to consult on the issue of project focal areas.

3.2. SECOND DAY

The second day started with the recap of the previous day activities presented by the rapporteur. A plenary was the constituted to provide answers to the key review questions raised by the AF review committee that reviewed the pre-concept. However the answers provided were not exhaustive of the review questions. It was agreed that every team makes a detailed write up and submit it to the consultants by 20th Mach 2018 covering the gaps in the review questions as well as the presentations made the previous day to enable the consultants finalize the concept.

3.2.1. Key Review Questions Answered

The key review questions answered during the plenary on day two are presented in the table below.

No	Key review questions	Responses/Action points/questions to be answered
1	What are the most drought prone areas? Why? (Give specific reasons)	***Sudan*** -National government has 18 states. The project will be in South of the White Nile state. An area in contact with south Sudan ***Uganda***- The Ugandan team preliminarily proposed the Northern part of Karamoja, Moroto District specifically sub-counties within the already existing micro-catchment as per the existing catchment management plans – other issues will include migratory, sister clans, clusters Conflict areas, Markets for cattle as well as areas hosting dams ***Kenya-*** *The Kenyan team suggested* ***two areas -*** ✓ Samburu, Kitui- for smaller holder farmers as well as pastoralists (mixed). It also borders other areas that are severely affected by drought ✓ Turkana for pastoralists and cross border area bordering Karamoja in Uganda ✓ Proposing to have 2 sites in different locations ✓ More consultations to be undertaken to determine the exact lower units to host the project. ***Djibouti - Sites*** with pastoralists and small holder farmers to be selected i.e. - Agro- pastoralists. The team said that there are many areas to select from and requested for more time up to Sunday 18th March 2018 to provide a write up on the possible specific sites for project interventions. ✓ It was unanimously agreed that by Tuesday 20th March 2018 all teams should provide – information on areas up to the smallest units, map, list of pastoral organisations, list of farmers and any other additional information perceived vital for developing the regional concept. ✓ Each country was asked to come up with a write up for each of the selected areas ✓ Participants were requested to select areas where some catalytic actions can be undertaken given the available resource envelope and later on up-scaled. ✓ Select the areas most affected by drought
2	How much of the projectcatalytic actions can be undertaken given the available resource envelope and lat	✓ To depend on the specific sites ✓ Need to provide information on the population of pastoralists and farmers

		✓ Is it possible to have two sites but keeping in mind the resource envelope ✓ Need to keep in mind the interaction between pastoralists and farmers ✓ Some countries have more pastoralists than farmers and vice versa ✓ The percentage will depend on the composition in the specific countries and sites. ✓ Djibouti- Need to make water points for the pastoralists to stop them from going to other countries ✓ This to be elaborated at activity and budget making stages depending on the main focus of each country
3	How will the local institutions and extension agents be targeted and included in project implementation?	✓ Extension agents should be able to rely information to the target communities- farmers and pastoralists ✓ Build their capacity in undertaking project activities ✓ Monitoring ✓ Training in crop and livestock production ✓ Identification of sites, soils, animals, crops as subject matter specialists ✓ Need to know whether we have the local institutions in our respective countries ✓ What do we have to do to strengthen the current extension systems ✓ Identification of key stakeholders/mapping ✓ Learn from the previous projects ✓ What value is the project adding ✓ What are the possible linkages with the existing structures/institutions
4	How will availability of water resources and especially water points for livestock, which are mainly groundwater based be addressed in the project?	✓ Check the Suggestions from the Country presentations ✓ Problem on the numbers ✓ Came in the pre-concept ✓ An assessment of the ground water potential at country level to determine the availability of the ground water resources in each country ✓ Interested in numbers ✓ Describe the water resources in the area ✓ Provide information on water resources ✓ Ground water mapping done for Uganda ✓ No ground water in some places but it can be discussed from the point of surface water ✓ Countries need to state clearly whether ground water applies or not
5	How will agreements on stock routes be modified or made more flexible in case of	✓ Protected areas applies to where the project area interface with protected areas

	drought and provision be made to prevent pastoralists from getting into conflicts with sedentary farmers or encroaching on protected areas?	✓ There are already existing mechanisms for handling these issues that need to be strengthened like the elders council in Karamoja in Uganda ✓ Collaborative resource use agreements in accessing resources ✓ Look at rivers and lake shores as protected areas also ✓ Look at Cultural protected areas as well or those designated by other Authorities other than government ✓ Management of pasture land – rotational grazing –regulated by government ✓ No conflict-need to enhance the measures ✓ Need to look at the existing agreements to establish whether they are formal or informal at look at ways of making them formal
6	How will gender dimension and the differentiated rights of sedentary versus pastoralist groups be considered in project areas?	✓ It will depend on the statistics ✓ Need more information on pastoralists and farmers in terms of women, men, youth groups and numbers ✓ Project need to ensure gender in the meetings ✓ The majority of the farmers are women so there is need to ensure there representation ✓ The question is linked to the lists of farmers and pastoralists ✓ Can women influence decision making ✓ Are there women in leadership positions
7	Explain how the project will engage, involve and benefit women and other marginalized groups.	✓ Involve more women in the Project activities
8	How shall you practically ensure sustainability of the project outcomes?	✓ Ownership of the project activities by the target communities ✓ Put in place Environmental, social and economic frameworks ✓ Promote local ownership of own EWS ✓ Linking the initiatives to the IGAD IDDRIS strategy ✓ Interventions should feed into existing frameworks ✓ Linkages need to explored ✓ Let everyone share his or her experiences ✓ Academia linkages need to be explored and strengthened ✓ Existing government and other programmes by other development partners ✓ Linkage to SDGs and other international frameworks

3.2.2. Why Early Warning Systems

During the course of deliberations, the facilitator raised a question on why the project was focusing on early warning systems in the focal countries. Below is a summary of the responses from the participants.

- Limited access to early warning systems
- Limited capacity
- Need upgrading
- Monitoring of our early warning systems
- Inefficient and at times non-functional early warning systems
- Inadequate capacity of the ministry and Local governments
- Poor linkage between the warning systems and the end users of the information
- In some cases the information given is not accurate /un reliability
- Need for upgrading the systems
- Coverage
- Directorate has few functioning gauges/stations
- Low Accessibility-who accesses information from ECPAC
- Problem –information flow-access and packaging

3.2.3. Presentation of the Project Institutional Framework

The proposed Project implementation institutional Framework is summarized below:

Level	***Entity/Entities***	***Responsibilities***
Regional Level	Sahara And Sahel Observatory-OSS	Implementing Entity
	Global Water Partnership East Africa (GWPEA)	Executing Agency (Lead Executing Entity at the regional level, programme management and reporting, Financial management)
	IGAD/ICPAC: IGAD	Political support amongst member states, Dissemination of project outcomes and lessons learnt at regional level; ICPAC: Technical support- development of early warning systems and innovative adaptation actions, Support in establishing of regional drought risk information sharing platforms
	Inter Country Regional Coordinating Mechanism	Ensure there is a regional approach to project execution
Country Level	**Djibouti**: Ministry of Agriculture Water Fisheries and Livestock,	Executing Entity

	Kenya: Ministry of Environment and Forests,	Executing Entity
	Sudan: Ministry of Water Resources and Electricity and Irrigation	Executing Entity
	Uganda: Ministry of Water and Environment	Executing Entity
Sub-National	To be determined on Country by Country basis depending on the administrative structures and level of focal areas selected	Execution/implementing at Sub-national level
Community Level	Small farmers and pastoralists, cooperatives, women and youth groups and Individual farmers	Execution/implementing at Sub-national level

The meeting agreed that the structure of project implementation especially at Sub- National and community levels will vary from Country to Country as this would depend on the administrative set of each country and the level and size of the selected sites.

3.3. Workshop closure

On behalf of GWPEA who were the main organizers of the workshop Dr. Ahmed Khalid invited Country Representatives to make their remarks before he could conclude the workshop.

Sudan Representative

He thanked the organizers of the workshop and opportunity to interact and know the participants from the focal countries. He said the project will be good for their country and wished OSS and GWPEA success in the development of the project.

Kenya Representative

He thanked the organizers of the workshop and said that as a team the workshop had been an opportunity to learn and share a lot about the project. He looked forward to further collaboration in developing the project and promised to share all the required information till submission of the concept.

Djibouti Representative

The Djibouti Representative thanked Uganda for hosting the meeting as well as OSS and GWPEA for developing the Project pre-concept. He hoped that the proposed project would be successful. He also hoped that the project would benefit the respective country governments.

Uganda Representative

In his closing remarks Mr. Mugisha thanked OSS and GWPEA for the efforts they were putting in developing Uganda, noting that the proposed project would be the second project for Uganda with the first one already under implementation. He thanked the organizers for selecting Uganda as the host and welcomed everyone for coming to the workshop. He thanked consultants for the work done in developing the concept. He said that the Ugandan team was looking forward with a lot of expectations from the project and was ready for its successful delivery.

OSS Representative

In his closing Mr. Nabil the OSS representative thanked the organizers and the participants for their commitment during the two days spent and achieving the objectives of the workshop. He pointed out that a lot of information had been collected from the country teams although more was still needed. He urged the country teams to do their best to avail the remaining information and endorsement letters.

He assured the participants and GWPEA that OSS is at their disposal to offer all the necessary support to ensure the success of this concept and the full proposal development process for the proposed Project.

GWPEA Regional Coordinator

Lastly Dr. Ahmed Khalid thanked everyone for the good deliberations, information shared and consultants for leading the process. He was optimistic that the consultants would be able to collect useful and good information for the concept.

He urged the participants to provide as much information as possible because the more information provided the better for the consultants to be able to finalize the concept. He informed the participants that OSS was already implementing another project in Uganda and thanked OSS for loving Uganda. He said he was looking for more partnership between OSS and GWPEA in developing this specific concept and other initiatives so as to improve the livelihoods and environment for the people of Uganda and the region in general.

Annexes

Annex 1: List of participants

Global Water Partnership
Eastern Africa

STRENGTHENING DROUGHT RESILIENCE FOR SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION CONSULTATIVE MEETING.

DATE : 15. 03. 2018.

Participants' Registration Form

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Global Water Partnership
Eastern Africa

STRENGTHENING DROUGHT RESILIENCE FOR SMALL HOLDER FARMERS AND PASTORALISTS IN THE IGAD REGION CONSULTATIVE MEETING.

DATE : 15.03.2018

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10					

Annex II: Agenda for the Regional Concentration Workshop

Day 1

Time	Activities	Speakers
8.30 – 9.00 a.m.	**Welcome address** • Welcome Remarks • Introduction of workshop participants • Participants' expectation(s) • Workshop objectives	GWPEA - OSS
9.00 – 9.30	**Project presentation** • Brief of the DRESS-EA project (Background, project cycle, and status) • Clarifications	GWPEA
9.30 – 10.30	**Presentation of the Concept Note** • Objectives • Project components • Potential outcomes and outputs **Deliberation on potential project sites** • Selection criteria-Sites – At Country level **Discussions/reactions** **Group assignment**	Consultant
10.30 – 11.00	***Coffee-break***	
11.00 – 13.00	**Identifying project activities** • Group work by country	Consultant
13.00 – 14.00	***Lunch***	
14.00 – 16.00	**Group/Country Presentations** **Clarifications**	All
16.00 – 16.30	***Coffee-break***	
16.30 – 17.30	**Restitution/Summary of day one** **Reflecting on day two objectives**	Consultant/Rapporteurs

Day 2

Time	Activities	Speakers
8.30 – 10.30	• Regional Early warning systems (challenges, costs, operational issues, channels? Etc.) • Answering the key review questions	All
10.30 – 11.00	***Coffee-break***	
11.00- 12.00	**Institutional arrangements** • Proposed arrangements • National inputs (Identify key national institutions)	GWPEA/OSS
12.00 – 13.00	**Summary and closing** • Restitution of the results of the workshop • Preparation of the road map Closing	GWPEA

Annex IV: Group work - Project Concept Note development – Uganda

Proposed intervention area: Karamoja region, Lokere catchment

Members

1. Angella Zakari (Moroto DLG)
2. Odeng Emmanuel (Nakapiripirit DLG)
3. Katto Andrew (MAAIF)
4. Mugisha Louis (MWE-DWRM)
5. Egaru Moses (IUCN)
6. Wantaate Fred (YIFODA)

Key Questions and Answers

No	Key Questions	Answers
1	***Do you have an Early Warning System at National Level?***	✓ Yes, we do which is managed by Office of the Prime Minister and Uganda National meteorological Authority
2	**Do you link to the Regional system?**	✓ Links with regional systems (Need to get details)
3	**If Yes, about what it is? flood ; drought ; food ; etc :**	✓ Drought (DEWS-Karamoja)
4	**Where is it hosted? (Institution)**	✓ Server located in MAAIF to coordinate Karamoja region
5	**How it communicates with stakeholders and beneficiaries**?	✓ ODK phones and satellites with focal people at community level relaying data to the focal persons at the district who analyze, interprets and produce drought bulletins
6	**How can we improve it ?**	✓ Involve stakeholders to understand operations of the database ✓ Disseminate widely information coming from the data base (bulletins)

Proposed interventions /activities, executants and beneficiaries

Components/Outcomes /Outputs/Activities	Proposed Executants	Beneficiaries
Component 1: Promote investments in early warning systems and improve the existing ones		
Outcome 1.1 Increased use of cost effective Early warning systems by stakeholders		
Output 1.1.1 Efficient and effective EWS in place.		
Activities : ✓ Equipping of all weather stations/data collection centers ✓ Capacity building of information data collectors ✓ Incorporating community/traditional EWS	Uganda National Meteorological Authority(UNMA) Ministry of Agriculture Animal Industry and Fisheries (MAAIF) Ministry of Water and Environment (MWE)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 1.1.2 Institutional linkages for EW information established		
Activities : ✓ Undertake a needs assessment to identify gaps in institutional forums ✓ Revive national, regional and local Early Warning Forums ✓ Hold inter ministry meetings for data sharing between MAAIF/MWE/UNMA/OPM ✓ Incorporating EW into planning and budgeting (DLg)	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 1.1.3 Feedback mechanism for early warning information developed.		
Activities ✓ Produce monthly EW information bulletins	UNMA/MAAIF/MWE/OPM/Academia	Stakeholders at Regional, National, District and

✓ Disseminate monthly EW information through Elders councils, LC structure, religious gatherings and media		community levels mainly small scale farmers and Pastoralists
Output 1.1.4 Drought management plans developed		
Activities : ✓ Update existing Contingency and disaster management plans ✓ Pilot Early action initiatives in hotspot areas	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Component 2: Strengthening capacities of key stakeholders at regional, national and local levels		
Outcome 2.1: Adaptive capacity of key stakeholders at regional, national and local levels in drought resilience Strengthened		
Output 2.1.1: Capacity gaps, needs and priorities in drought management assessment undertaken		
Activities : ✓ Undertake a drought management capacity assessment and mapping ✓ Develop the priorities in drought management	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 2.1.2 : Capacity building tools for drought management at national, regional and local level developed		
Activities ✓ Develop training manuals etc, ✓ Procure and install drought monitoring tools and equipment ✓ Training on the installed equipment and software	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 2.1.3 : Capacity of institutions, farmers and pastoralists in drought risk management enhanced		

Activities ✓ Mapping and categorizing of key stakeholders ✓ Training in various aspects of drought risk management ✓ Equip stakeholders with the necessary tools	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 2.1.4: Integration of drought risk management interventions into development plans at all levels supported		
Activities ✓ Update district development and catchment management plans to include drought risk management	UNMA/MAAIF/MWE/ Academia Office of the Prime Minister (OPM)	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Component 3 : Supporting innovative drought adaptation actions		
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions		
Output 3.1.1: Innovative water harvesting and storage structures constructed		
Activities : ✓ Construction of micro-irrigation system ✓ Construction of underground water storage tanks ✓ Construct roof top water harvesting structures at community level ✓ Construct a gravity flow scheme ✓ Construct check dams to reduce water run-off and erosion ✓ Construct valley tanks for livestock	MAAIF/MWE-Directorate of Water Resources Management, OPM District, Agriculture Forestry and Water Officers.	Stakeholders at National, District and community levels mainly small scale farmers and Pastoralists

✓ Construct soil and water conservation structures to trap water for domestic use and livestock watering ✓ Construct sand dams along rivers		
Output 3.1.2: Improved livestock production		
Activities : ✓ Construct cattle dips ✓ Undertake integrated pest and disease management measures ✓ develop rangeland management plans ✓ Undertake pasture management activities e.g hay production ✓ Undertake regular livestock market surveys ✓ Procure a milk cooler to support milk value chain ✓ Support formation of livestock associations/groups/cooperatives at community level ✓ Undertake learning visits on rangeland management	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at National, District and community levels mainly small scale farmers and Pastoralists
Output 3.1.3: Improved crop production		
Activities : ✓ Undertake climate smart agriculture technologies (drop diversification, crop rotation, planting drought resistant and early maturing varieties) ✓ Support simple on farm irrigation measures (e.g drip irrigation)	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at National, District and community levels mainly small scale farmers and Pastoralists

✓ Undertake an assessment of seed systems in the area ✓ Establish a village level seed stock mechanism ✓ Implement integrated pest and disease management measures ✓ Undertake post-harvest management trainings for key selected crops ✓ Undertake soil fertility improvement initiatives		
Output 3.1.4: Ground water sources established/ improved		
Activities : ✓ Undertake assessment of group water potential/availability ✓ Construct deep and shallow wells	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at National, District and community levels mainly small scale farmers and Pastoralists
Output 3.1.6: Environmental friendly IGAs [e.g., pottery, bee keeping, Energy saving stoves, Briquettes making, interlocking bricks] promoted		
Activities : ✓ Promote bee keeping ✓ Promote planning of sisal and aloe vera to support rope production and artifacts ✓ Establish woodlots ✓ Promote establishment of fruit orchards ✓ Promote briquette making ✓ Support keeping of local poultry	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at National, District and community levels mainly small scale farmers and Pastoralists
Component 4 : Knowledge management and information sharing		

Outcome 4.1: Increased awareness on drought risk management		
Output 4.1.1: Partnerships for drought management at regional, national and local levels strengthened		
Activities ✓ Support CMOs ✓ Support district disaster management committees	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 4.1.2: Knowledge materials developed and disseminated.		
Activities ✓ Develop, produce knowledge products and disseminate	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists
Output 4.1.3: Stakeholder capacity to generate, package and disseminate EW information		
Activities • Train stakeholders in generating information • Translate EW information in local languages	MAAIF/MWE-Directorate of Water Resources Management, OPM, District, Agriculture Forestry and Water Officers.	Stakeholders at Regional, National, District and community levels mainly small scale farmers and Pastoralists

Annex IV: Group work- Project Concept Note development – Kenya

Proposed intervention area:

Members

1. David D Adegu –Assistant Director –Ministry of Environment and Forests
2. Steve Muhangi – Senior Adaptation Officer - Ministry of Environment and Forests

Key Questions and Answers

No	Key Questions	Answers
1	***Do you have an Early Warning System at National Level?***	✓ Kenya Meteorological Department- early warning on rainfall and droughts and is complimented by the National Drought Management Authority (NDMA) which provides ealry warning bulletins towards the drought prone counties ✓ FEWS NET collaborates with the above institutions in providing early warning and analysis on food insecurity
3	**If Yes, about what it is? flood ; drought ; food ; etc :**	✓ FEWS NET collaborates with the above institutions in providing early warning and analysis on food insecurity
4	**Where is it hosted? (Institution)**	✓ Kenya Met Department (KMD) ✓ NDMA
5	**How it communicates with stakeholders and beneficiaries**?	✓ Mainstream media- newspapers, radio and TV ✓ Social media – Facebook, twitter, WhatsApp, and other social platforms ✓ Face to face and media briefings and bulletins
6	**How can we improve it ?**	✓ Infrastructure improvement ✓ Human resource development (capacity building) ✓ Technical support through learn and doing initiatives

Proposed interventions /activities, executants and beneficiaries

Components/Outcomes /Outputs/Activities	Proposed Executants	Beneficiaries
Component 1: Promote investments in early warning systems and improve the existing ones		
Outcome 1.1 Increased use of cost effective Early warning systems by stakeholders		
Output 1.1.1 Efficient and effective EWS in place.		
Activities : ✓ Upscaling infrastructure ✓ Capacity build a core team for effective production of EW products	✓ KMD ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 1.1.2 Institutional linkages for EW information established		
Activities : ✓ Establish/ strengthen a coordination Unit ✓ Develop and adopt a monitoring and reporting tool ✓ Develop/enhance a communication and information sharing platform for all stakeholder with clear roles and responsibilities e.g. ALIN KENYA	✓ KMD ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 1.1.3 Feedback mechanism for early warning information developed.		
Activities ✓ Embed a feedback portal that takes advantage of all platforms (social platforms, sms, internet based applications	✓ KMD ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 1.1.4 Drought management plans developed		
Activities : ✓ Develop and implement contingency plans ✓ Establish/ strengthen a response unit e.g. National Disaster Operation Centre (NDOC Kenya)	✓ KMD ✓ NDMA	Implementing institutions, Technical staff and Communities

Component 1: Strengthening capacities of key stakeholders at regional, national and local levels		
Outcome 2.1: Adaptive capacity of key stakeholders at regional, national and local levels in drought resilience Strengthened		
Output 2.1.1: Capacity gaps, needs and priorities in drought management assessment undertaken		
Activities : ✓ Development of training and awareness materials ✓ Develop and undertake training workshops for stakeholders for adaptive capacity ✓ Develop a mutli-sectoral approach plan in the region ✓ Undertake a capacity needs assessment	✓ KMD ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 2.1.2 : Capacity building tools for drought management at national, regional and local level developed		
Activities ✓ Develop training and awareness materials ✓ Develop and adopt a training curriculum/ information tool	✓ Ministry of Environment and Forestry ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 2.1.3 : Capacity of institutions, farmers and pastoralists in drought risk management enhanced		
Activities ✓ Facilitate capacity building workshops on drought risk management with local farmers and pastoralists and key institutions ✓ Setting up centers of excellence/ demonstration sites	✓ Ministry of Environment and Forestry ✓ NDMA	Implementing institutions, Technical staff and Communities
Output 2.1.4: Integration of drought risk management interventions into development plans at all levels supported		

Activities ✓ Develop and share climate change/ adaptation mainstreaming guidelines ✓ Facilitate consultative workshops with key planning and budgeting officers at county level on mainstreaming of climate change in planning	✓ Ministry of Environment and Forestry ✓ NDMA	Implementing institutions, Technical staff and Communities
Outcome 2.2 Linkages between national and regional stakeholders strengthened		
Activities ✓ Engage the ICT to develop a crosss sectional platform that integrates the basic communication such as short messaging services (sms)		
Component 3 : Supporting innovative drought adaptation actions		
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions		
Output 3.1.1: Innovative water harvesting and storage structures constructed		
Activities : ✓ Identify, promote and adopt water harvesting technologies ✓ Identify suitable pilot sites ✓ Construct water harvesting structures ✓ Enhance capacity of institutions and bodies responsible for water harvesting on climate change impacts and the water sector. ✓ Promote awareness on climate change impacts and the water sector including promoting public awareness on water conservation (recycling, waste water management) and efficient water use. ✓ Promote the use of efficient irrigation systems. ✓ Promote and adopt innovative drought adaptation action like water harvesting ✓ Develop a business case for the uptake of technologies	✓ Ministry of Environment and Forestry ✓ NDMA ✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	Implementing institutions, Technical staff and Communities
Output 3.1.2: Improved livestock and crop production		
Activities : ✓ Increase awareness on climate change impacts on the livestock and agriculture value chain addition.	✓ Ministry of Environment and Forestry	Implementing institutions, Technical staff and Communities

✓ Conduct climate risk and vulnerability assessments of the agriculture value chain. ✓ Coordinate and mainstream climate change adaptation into agricultural extension. ✓ Promote livelihood diversification – i.e. Integrated agriculture .eg agroforestry, mixed cropping , animal husbandry ✓ Establish, maintain and promote the uptake of climate change related information on agriculture. ✓ Develop and up-scale specific adaptation actions - promotion and bulking of drought tolerant traditional high value crops; water harvesting for crop production; index-based weather insurance; conservation agriculture; agro-forestry; and Integrated soil fertility management. ✓ Promote and implement climate smart agriculture practices in Kenya.	✓ NDMA ✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	
Output 3.1.4: Ground water sources established/ improved		
Activities : ✓ Restoration of forests ✓ Gazetting, protection and conservation of catchment areas ✓ Engaging water resources management authorities to monitor, license and establish the optimal number of bore holes ✓ Promotion of agroforestry ✓ Establishment of woodlots and plantations ✓ Restoration of natural forests where applicable ✓ Promotion of silviculture projects and community nurseries	✓ Ministry of Environment and Forestry ✓ NDMA ✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	Implementing institutions, Technical staff and Communities
Output 3.1.6: Environmental friendly IGAs [e.g., pottery, bee keeping, Energy saving stoves, Briquettes making, interlocking bricks] promoted	✓ Ministry of Environment and Forestry ✓ NDMA	

	✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	
Activities : ✓ Capacity build to enhance knowledge to new climate smart technologies ✓ Establish pilot centres of excellence as a demonstration centres for livelihood diversification	.	Implementing institutions, Technical staff and Communities
Component 4 : Knowledge management and information sharing		
Outcome 4.1: Increased awareness on drought risk management		
Output 4.1.1: Partnerships for drought management at regional, national and local levels strengthened		
Activities ✓ Link information management system to other EW related systems ✓ Setup an information and management system that is interlinked to counties and other stakeholders	✓ Ministry of Environment and Forestry ✓ NDMA ✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	Implementing institutions, Technical staff and Communities
Output 4.1.2: Knowledge materials developed and disseminated.		
Activities ✓ Develop materials for training ✓ Package identified and relevant information including translation into local languages across board ✓ Dissemination of information including using locally appropriate methods	✓ Ministry of Environment and Forestry ✓ NDMA ✓ MoEF ✓ KFS	Implementing institutions, Technical staff and Communities

	✓ NEMA ✓ WRMA	
Output 4.1.3: Stakeholder capacity to generate, package and disseminate EW information		
Activities ✓ Capacity build stakeholders on collection, analysis and generation of information on EW	✓ Ministry of Environment and Forestry ✓ NDMA ✓ MoEF ✓ KFS ✓ NEMA ✓ WRMA	Implementing institutions, Technical staff and Communities

Annex V: Group Work - Project Concept Note development – Sudan

Proposed intervention area: - South White Nile State

Members

1. Abu Obuda B. Associate Prof. HRC

Proposed interventions /activities, executants and beneficiaries

Components/Outcomes /Outputs/Activities	Proposed Executants	Beneficiaries
Component 1: Promote investments in early warning systems and improve the existing ones		
Outcome 1.1 Increased use of cost effective Early warning systems by stakeholders		
Output 1.1.1 Efficient and effective EWS in place.		
Activities : ✓ upgrade climate outlook down-scaling system ✓ Upgrade ICT – now it is applied for irrigated scheme what is needed is to be applied in rain-fed areas.	✓ Sudan Meteorological Authority (SMA) ✓ The Hydraulics Research Center (HRC) of the Ministry of Water Resources, Irrigation & Electricity (MWRIE).	✓ agriculture ✓ livestock ✓ environment ✓ water resources ✓ media Farmers ✓ Pastoralists
Output 1.1.2 Institutional linkages for EW information established		
Activities : ✓ Establish local & communal nodes (groups of farmers, pastoralists, decision-makers …) – committees ✓ Database establishment	✓ HRC of MWRIE	✓ Farmers ✓ Pastoralists ✓ Decision-makers
Output 1.1.3 Feedback mechanism for early warning information developed.		
Activities ✓ Updating operational systems	✓ HRC and SMA	Farmers, pastrolists, technical staff and decision makers

Output 1.1.4 Drought management plans developed		
Activities : ✓ Develop DMPs	✓ HRC of MWRIE	Farmers, pastrolists, technical staff and decision makers
Component 2 : Strengthening capacities of key stakeholders at regional, national and local levels		
Outcome 2.1: Adaptive capacity of key stakeholders at regional, national and local levels in drought resilience Strengthened		
Output 2.1.1: Capacity gaps, needs and priorities in drought management assessment undertaken		
Activities : ✓ National report on capacity gaps, needs and priorities in DM ✓ Regional report on capacity gaps, needs and priorities in DM	✓ Regional and National Consultants	Farmers ,pastrolists, technical staff and decision makers
Output 2.1.2 : Capacity building tools for drought management at national, regional and local level developed		
Activities ✓ Tools need to be developed ✓ Dissemination	✓ MWRIE	Farmers, pastrolists, technical staff and decision makers
Output 2.1.3 : Capacity of institutions, farmers and pastoralists in drought risk management enhanced		
Activities ✓ ToT ✓ Identify interventions ✓ Synergy scenarios need to be developed	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Output 2.1.4: Integration of drought risk management interventions into development plans at all levels supported		
Outcome 2.2- Linkages between national and regional stakeholders strengthened		
Activities	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers

✓ MOU, protocols and agreement need to be established.		
Component 3 : Supporting innovative drought adaptation actions		
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions		
Output 3.1.1: Innovative water harvesting and storage structures constructed		
Activities : ✓ Piloting projects ✓ Awareness about DAA	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Output 3.1.2: Improved livestock and crop production		
Activities : ✓ Encourage breeding to improve productivity ✓ Improve traditional means of protection. ✓ Encourage breeding to improve productivity ✓ Introduce crops tolerant to CC.	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Output 3.1.4: Ground water sources established/ improved		
Activities : ✓ Activities ✓ assessment ✓ Introduce water storage facilities ✓ Increase recharge rate ✓ Management of GW abstraction (licensing, monitoring …)	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Output 3.1.5: Restoration of degraded areas		
Activities ✓ Establishing Water spreading systems ✓ Seeds spreading to improve ground cover and availing of fodder	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers

Output 3.1.6: Environmental friendly IGAs [e.g., pottery, bee keeping, Energy saving stoves, Briquettes making, interlocking bricks] promoted		
Activities : ✓ Encourage agroforestry activities ✓ Ecosystem services	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Component 4 : Knowledge management and information sharing		
Outcome 4.1: Increased awareness on drought risk management		
Output 4.1.1: Partnerships for drought management at regional, national and local levels strengthened		
Activities ✓ Establish Net work	✓ MWRIE	Farmers,pastrolists, technical staff and decision makers
Output 4.1.2: Knowledge materials developed and disseminated.		
Output 4.1.3: Stakeholder capacity to generate, package and disseminate EW information		

Annex VI: Group Work - Project Concept Note development – Djibouti

Proposed intervention area: - Yet to be determined

Members

1. **Ismael Elmi Habaneh - Technical Advisor Ministry of Agriculture**
2. **Abddhafiz – Project Manager**

Proposed interventions /activities, executants and beneficiaries

Components/Outcomes /Outputs/Activities	Proposed Executants	Beneficiaries
Component 1: Promote investments in early warning systems and improve the existing ones		
Outcome 1.1 Increased use of cost effective Early warning systems by stakeholders		
Output 1.1.1 Efficient and effective EWS in place.		
Activities : ✓ Reseau de surveillance (to develop infrastr. For monitoring ✓ Renforcement de capacité de l'equipe pour produire les produits : Capacity building	✓ C.N.M ✓ D.H.R : Department of water	✓ agriculture ✓ livestock ✓ environment ✓ water resources ✓ media ✓ Farmers ✓ Pastoralists
Output 1.1.2 Institutional linkages for EW information established		
Activities : ✓ Etablir une unité de coordination : establish coordination unit	✓ C.N.M	✓ Fermiers ✓ Pastoralists

✓ Developer des outils d'evaluation et ✓ Developer un platforme d'échange d'information et communication ✓ Mise en d' une banque des données….	✓ D.H.R : Department of water	✓ Communauté ✓ Institution
Output 1.1.3 Feedback mechanism for early warning information developed.	✓ C.N.M ✓ D.H.R : Department of water	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Activities ✓ Mettre en place un portail : platforme ,sms ,Internet	✓ C.N.M ✓ D.H.R : Department of water	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 1.1.4 Drought management plans developed		
Activities : ✓ Developer et mettre a jour le plan de contingence. ✓ Etablir des unités de reponse	✓ C.N.M ✓ D.H.R : Department of water	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Component 2 : Strengthening capacities of key stakeholders at regional, national and local levels		
Outcome 2.1: Adaptive capacity of key stakeholders at regional, national and local levels in drought resilience Strengthened		
Output 2.1.1: Capacity gaps, needs and priorities in drought management assessment undertaken		

Activities : ✓ Undertake a capacity needs assessment	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 2.1.2 : Capacity building tools for drought management at national, regional and local level developed		
Activities ✓ Developer les materiels de formation ✓ Developer les outils de l'information	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 2.1.3 : Capacity of institutions, farmers and pastoralists in drought risk management enhanced		
Activities ✓ Facilité la participation des fermiers, des Pastoralistes et les institutions clé aux ateliers de formation a la gestion des risques de catastrophe pour renforcer lleur capacité. ✓ Creation des centres d'excellence et des sites de démonstrations	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 2.1.4: Integration of drought risk management interventions into development plans at all levels supported		
Activities ✓ **1**. Développer ✓ 2. Organiser des ateliers de consultation	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution

Outcome 2.2- Linkages between national and regional stakeholders strengthened		
Activities ✓ Mettre en place un platforme d'information basique sms messagerie	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Component 3 : Supporting innovative drought adaptation actions		
Outcome 3.1: Increased uptake and usage of concrete and innovative drought adaptation actions		
Output 3.1.1: Innovative water harvesting and storage structures constructed		
Activities : ✓ Identifier, promouvoir les technologies de mobilisation de l'eau de surface ✓ Identifier des sites pilote ✓ Renforcer la capacité des institutions, resonsabiliser pour mobiliser l'eau ✓ Promouvoir et adopter des actions innoventes de obilisation d'eau qui contriburai l'adaptation des secheresses	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 3.1.2: Improved livestock and crop production		
Activities : ✓ Encourage breeding to improve productivity ✓ Improve traditional means of protection ✓ Promouvoir la diversification des betails. Associer l'agriculture a l'élevage agro-pastoralisme.	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 3.1.4: Ground water sources established/ improved		

Activities : ✓ Prospection des eaux souterraine ✓ Favoriser la recharge des nappes ✓ ✓ Gestion rigoureuse des eaux souteraine ✓ Reglementation a l'utilisation de l'eau souterraine : permis etc… ✓ DHR	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 3.1.5: Restoration of degraded areas		
Activities ✓ Conservation des eaux et des sols CES ✓ Plantation des arbres ✓ Creation des pepinières communautaire	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 3.1.6: Environmental friendly IGAs [e.g., pottery, bee keeping, Energy saving stoves, Briquettes making, interlocking bricks] promoted		
Activities : ✓ Etablir des centres d'excellence pilote et centre de demonstration pour la diversification des betails	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Component 4 : Knowledge management and information sharing		
Outcome 4.1: Increased awareness on drought risk management		

Output 4.1.1: Partnerships for drought management at regional, national and local levels strengthened		✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Activities ✓ **Establish Net work**	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 4.1.2: Knowledge materials developed and disseminated.		
Activities: ✓ Developer des materiels pour la formation ✓ 2.Identifier des outils relevant l'information ✓ 3.Dissemination of information including using locally appropriate methods	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution
Output 4.1.3: Stakeholder capacity to generate, package and disseminate EW information		
Activities ✓ Capacity build stakeholders on collection, analysis and génération of information om EW	✓ MAEPE-RH ✓ Min. de l' env.	✓ Fermiers ✓ Pastoralists ✓ Communauté ✓ Institution