Policy Brief
2021

PRESERVING THE HORN OF AFRICA

Strengthening Drought Resilience for Small Holder Farmers and Pastoralists in the IGAD Region (DRESS EA)

Global Water Partnership Eastern Africa

Observatoire du Sahara et du Sahel
Sahara and Sahel Observatory

ADAPTATION FUND

Key Messages

- IGAD member states face significant water stresses and prolonged drought. Between 60- 70 percent of the land area in the IGAD region consists of Arid and Semi-Arid Lands (ASALs) which receive less than 600 mm of rainfall per year.
- The IGAD region supports one of the world's leading pastoralists. However, it is one of the regions most vulnerable to climate-related risk. ; Apart from the ongoing conflict and political violence (partly caused by competition for resources), the climate-related risk is a significant driver of risk in the region, especially in poor communities whose livelihoods depend on rain-fed agricultural systems.
- The causes of the drought risk that led to climate change leading to severe climate change in the region include low levels of social change, especially smallholder and pastoralists, and inadequate information-sharing programs in those communities to better plan for drought relief interventions. How social changes can cause drought risk? Rephrase this statement
- Community groups at high risk in drought-affected
- Water pollution, food insecurity, water conflict, food, and grazing, drying of rivers, streams, and rivers, and global degradation (vegetation and land degradation) are significant impacts of drought caused by climate change
- IGAD region faces uncontrolled activities such as deforestation and inappropriate agricultural practices that lead to reduced water storage capacity, water flow, and soil loss.
- Decreased rainfall levels have led to food shortages, civil strife over water, food, and grazing, drying of rivers, streams, and loss of plant-based water to smallholder farmers and pastoralists.
- Crops and pastures suffer from low water and low yields, and declining of forage and hay.
- Drought and its effects; environmental degradation continue primarily unchecked due to climate change, population growth, institutional inefficiency, civil wars, and high poverty levels in the region. Rephrase this statement

The project entitled'' *Strengthening Drought Resilience for Small Holder Farmers and Pastoralists in the IGAD Region " (DRESS-EA)''*, is a four year project funded by Adaptation Fund. Sahara and Sahel Observatory (OSS) is the regional implementing entity while Global Water Partnership Eastern Africa (GWPEA) is the regional executing entity. In addition, the four riparian countries (Djibouti, Kenya,Uganda and Sudan) are the National Executing Entitites of DRESS-EA Project. DRESS-EA was launched online in 2020 with the main aim to increasing 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 online launch attracted more than a hundred participants worldwide and regionally, including high-profile dignitaries such as the Honorable Professor Dr. Hana Hamadalla

Mohamed (Chairperson, UNFCCC Developing Expert Team); Mr. Khatim Kherraz (Former Executive Secretary, Sahara, and Sahel Observatory); Mr. Peter Repinski (Interim Chief Executive Officer, GWP); and Mr. Alfred Okot Okidi (Permanent Secretary, Department of Water and Environment, Uganda), among others.

Justification for Using the Regional Approach to implement the project

The merits of implementing this project using the regional approach vis-a-vis country specific approach include:

(i) Cooperation/coordination:

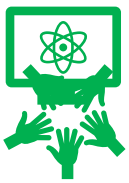
Drought is regional phenomena and as such, the data and information generated by each country will feed into the regional EWS and make it more efficient. In addition, the project will strengthen the regional capacity; build cohesion and provide platforms at regional level.

(ii) Knowledge, technology and expertise:

A wider platform at 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).

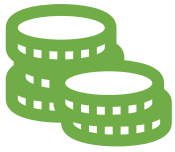
Overall, regionally led implementation is less expensive and faster. It helps build a pool of regional and national experts. The innovations generated are adopted more easily by the member countries and moreover it promotes sustainability. It provides platform and means for the countries to share experiences, practices, lessons, knowledge, and resources.

Promoting new and innovative solutions

The project employs a regional Participatory Learning and Action approach. New and already existing innovative solutions to drought risk management through

participatory processes. Small competitive grants is provided to organized farmers' groups with innovative ideas. Monitoring and evaluation will then be used to track and update the innovations.

Cost-effectiveness of the proposed project



The project covers a wider area in a short time (4 countries in 4 years) hence, contributing to rapid diffusion of the innovative drought adaptation actions. In fact, the project will ensure the development of a certain level of generic scope tools and processes for future application beyond the target sites and countries. For instance, integrated early warning tools adapted to local specificities will be adopted to inform populations on potential risks.

Alignment of interventions to the Global, Continental, Regional and National Frameworks

The project contributes to the achievement of some of the SDGs of the targeted countries. Specifically, SDG1- End poverty in all its forms everywhere; SDG6- Ensure availability and sustainable management of water and sanitation for all; SDG13- Take urgent action to combat climate change and its impacts; SDG17- Strengthen the means of implementation and revitalize the global partnership for sustainable development among others. ***At continental (Africa) level***, the project contributes to the Windhoek Declaration aiming to Enhancing Resilience to Drought in Africa (ADC, 2016). From the ***regional*** (IGAD) perspective, the project contributes to the achievement of the IDDRSI framework that aims at addressing the effects of drought and related shocks; specifically, the Regional Programming Paper (RPP) and Country Programming Papers (CPPs) of the targeted countries.

These documents contain priorities on drought resilience in the region and countries. While at ***national level,*** the project will contribute to: **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, focusing on saving lives, livelihoods and the country's resources. These country initiatives will

be linked to regional existing programmes, for example the IGAD Climate Prediction and Application Centre.

Knowledge management and dissemination approach

The information, lessons learnt, best practices and innovative technologies will be documented and shared for the use by various stakeholders.

Critical Project Steps To date

INTRODUCTION

IGAD (Inter-Governmental Authority on Development) (also called the Horn of Africa) comprises Ethiopia, Eritrea, Somalia, Djibouti, Sudan, Kenya, and Uganda. The section is a large area of approximately 5.2 million km^2, with an estimated 230 million people growing at 2.6% (Babikir et al., 2015). This region is a multicultural painting of the region and the country, and it is said to be home to some 340 languages. Many regional races are also divided into several countries by national boundaries. This Horn of Africa region supports one of the largest pastoralist areas anywhere in the world. Aside from the long-running conflicts and political violence, it is one of the regions most vulnerable to climate-related risks

(resulting in resource competition). Climate-related risks constitute a significant threat to the region, especially in poor communities whose livelihoods depend on rain-fed agricultural systems. Eastern Africa and the Greater Horn of Africa are experiencing frequent climate change as evidenced by declining water levels in reservoirs (lakes, rivers, wetlands, among others,) unexpected rainfall patterns, prolonged drought, frequent floods, soil erosion, and erosion of temperatures. Increasing rainfall deficit has negatively affected the local populations whose livelihoods rely mainly on agriculture, livestock, forest resources, water, wetlands, etc. All stakeholders must be involved in drought resilience actions.

Drought is one of the significant natural hazards affecting people's livelihoods and socio-economic development. In the IGAD region, the farmers (mainly small-scale holders) and pastoralists are subjected to the adverse effects of drought since their livelihoods are dependent on natural resources.

Economic Sustainability.

The DRESS-EA project is designed to create and promote activities that make lasting benefits in various areas features. To do this, the project's sustainability will be achieved through community participation built on the foundation for the empowerment and empowerment of different stakeholders. All parts of the project are closely related to each other everything else will be explicitly dedicated to training local staff at various levels. In addition, planned interventions are continually designed to provide the conditions necessary for validation OSS-DRESS-EA Project Full Document V.4: (September 3, 2019)

Sustainability by 51 for all beneficiaries at all levels during the project implementation period is due to the current nature of involvement and commitment, and it is imperative to protect all stakeholders' commitment, distribution, and quality of project outcomes.

In selected countries, water is an essential cross-border issue that requires active involvement in decision-making and responsibilities delegated to governments through departments and offices ... etc. This regional project will ensure that the drought issue's cross-cutting aspect is addressed through a concerted effort between the various countries to manage water resources properly - future ownership and increase project efforts.

Financially, project closures are to be driven by allocating advanced economic means such as loans and subsidies. Trained and rehabilitated communities will keep the success of the project lasting. National institutions heavily involved in the project will ensure that jobs are maintained to benefit local communities. It will be a matter for decision-makers where over-the-counter benefits are considered. The project will eventually involve drought and water management committees at local, national, and regional levels whose role will manage and coordinate. The project will allow for its planned activities, creating a Ministerial platform that will provide political support to water issues in the region after and after the length of the project.

The project will support women's and youth groups on income-generating activities, support improved crops. Also, livestock production, improved crop tolerance, and animal husbandry organize farmers and pastoralists to cooperate and link their products to market. In addition, the project will support farmers and pastoralists on the importance of their animal and agricultural products to fetch higher prices in the market and extend the shelf life. All of this will help farmers and herders to increase their income, improve their livelihoods and ensure economic stability.

However, to ensure that the infrastructure created by this project is economically / financially maintained and maintained by the many proposed programs. First, in the background project closure, low-level infrastructure (e.g., climate monitoring stations, small irrigation systems, sand dams, solar irrigation systems, irrigation systems, lumps, water harvesting and storage areas, etc.) will be maintained by farmer/clergy group committees. These committees will have a Memorandum of Understanding with local government (including District Leaders, Wards, or local councils depending on the country) so that local people can support the financial resources agreed upon by the parties to maintain those infrastructures regularly.

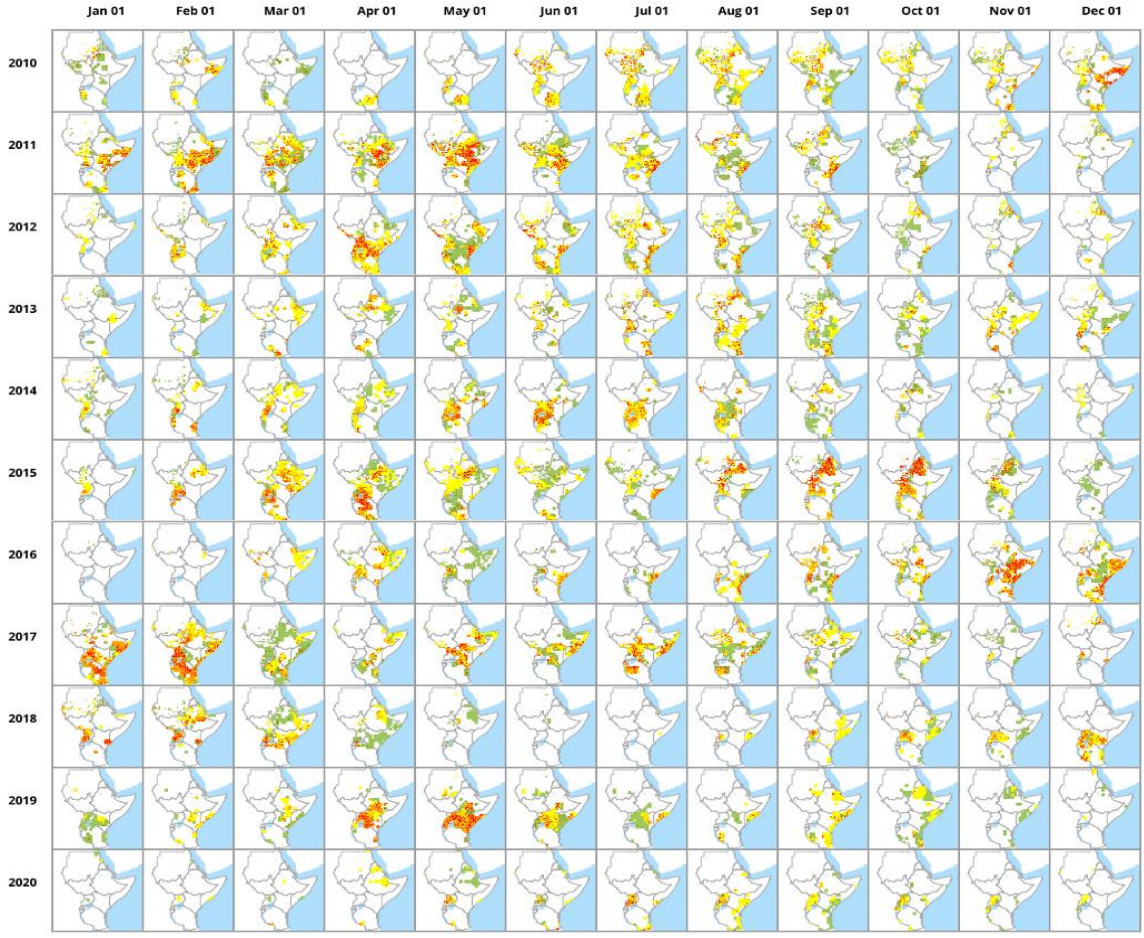
Second, the project will train artisans among community members and equip them with repair and maintenance knowledge. The professionals to be taught will be carefully selected by the project in collaboration and community leaders of the target areas. Professional

training to be done on a technical basis (e.g., existing infrastructure). It will enable the community to have a pool of professionals and thus, reduce their shortage of specific technologies. In addition, trained professionals are linked to existing local government activities providers in targeted areas (Agutu, 2017).

Early Warning Systems

East Africa Drought Watch is the first cross-border community program that uses real-time Earth Observation and Weather Information to monitor drought conditions in the African region. The program contains coded drought risk information in the country. Allows users to generate reports containing a series of visual information (e.g., risk of drought, rainfall, vegetation, soil moisture). The program includes tools that allow users to assess drought status and the risk of current health conditions. Provides easy-to-use generation of graphs, maps, timelines and will soon allow users to sign up to receive email reports.

Drought has always been a well-known and recurring problem in East Africa. The region has more than 60% of the arid and semi-arid land (ASALs) and is prone to chronic and severe droughts. The population is considered to be the most endangered population in Africa. In the past, drought led to some of the worst humanitarian crises in the 20th century, such as the famine that affected Ethiopia and Sudan in the '80s (Rulinda et al., 2012).



Drought readiness strategies;

Land transformation of agricultural systems:

- With the expected increase in drought in some areas (e.g., the Mediterranean region), changes may occur in agricultural systems. Those areas that currently occur within a particular humidity phase will tend to replace the agricultural and natural environment of those in the humid region and will be replaced by more arid climate systems.

Rainfall-based programs:

- These systems are the ones that can have the most significant impact on climate change. These systems will need to be inspired by established principles for the effective management of dryland vegetation, including maintaining a soil moisture profile by reducing evaporation, drought-tolerant plants and varieties with a rainfall pattern (to avoid drought), and conservation agriculture.

Enhancing irrigation systems:

- Irrigation will require more production with less water. There are many technical opportunities to make irrigation systems work better:

  Extending the role of intermediate rainwater irrigation schemes: These schemes have shown their significant success in many areas where increasing the combined or alternate use of rainwater and irrigation water can be done by harvesting water, both small water storage facilities; additional irrigation; and lack of irrigation

The drought policy recommendations for Eastern Africa are as follows:

1. Provide and support a practical coordination framework to alleviate drought emergencies in focus on region not one NEE through the establishment of a National Drought Fund to ensure timely response to drought.
2. Promoting the protection of vulnerable families during the drought, including timely mortality and weather information to facilitate and cooperate with various stakeholders.
3. Marketing and managing emergency dryland areas and promoting the construction of greenhouses and production facilities and redevelopment as part of event planning.
4. Prioritize weather forecasting and climate adaptation planning at all levels.
5. Exploring opportunities and creating appropriate ways in which communities can benefit from bio-carbon, wind, and solar energy systems.
6. Supporting institutional structures for drought disaster management and safety programs targeting the poorest and most

Sustainability of project outcomes

Socio-economic sustainability: This project is 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. Also, the communities will be supported in the identification of priority actions and their implementation.

Environmental sustainability: The project ensures environmental sustainability through undertaking Social and Environmental Impact Assessments and supporting sustainable environmental interventions. Periodic monitoring and evaluation to track any changes that could have adversely impacts environment and their timely mitigation measures will be considered.

Technological sustainability: DRESS-EAproject encourages, scales up innovative adaptation actions with high acceptability among the target communities, and utilizes locally available materials, human and logistical resources. The project also popularizes the available tools aimed at enhancing sustainability of appropriate technologies in the long-term.

Financial sustainability: DRESS-EA project collaborates with various partners in the region to mobilize resources, streamline project interventions into national and sub-national workplans and lobby the government (national and local) to allocate financial resources towards drought risk management. Enterprise development and in-kind contributions will be supported.

Institutional sustainability: This is promoted through capacity building of staff at all levels. This will contribute to better ownership of the project interventions.

Project benefits for the vulnerable and Compliance with Environment and Social Policies. The project undertakes consultations to identify vulnerable groups including women-headed households, children, disabled persons and the elderly and deliberate efforts is taken to ensure that these groups benefit from project interventions.

Economic benefits: Early warning systems enable smallholder farmers and pastoralists to have access to information on drought risks to better plan their agricultural activities to minimise economic losses. Emphasis is directed towards vulnerable groups to ensure

that they easily access information by using easily accessible media channels. In addition, deliberate efforts is made to allocate at least 20% of the competitive grants for innovative adaptation actions to the vulnerable groups to enable them increase their economic benefits.

Social Benefits: The project enhances cohesion among communities through working together to implement different project components and reducing socio-conflicts amongst communities. Specifically, the project supports the vulnerable groups to form organised groups hence, increasing the cohesion amongst these groups.

Environmental Benefits: The project supports environmentally friendly interventions aimed at enhancing ecosystem services. Specifically, the vulnerable groups are being prioritized during the selection of beneficiaries for interventions to reduce their susceptibility to droughts' effects.

Gender considerations: The project supports the development of equity. IGAD and GWP -EA have gender strategies, which are key in supporting gender activities.

Conclusion

Therefore, GWP Eastern Africa views the writing and implementation of climate change measures as part of solutions to build safer and more secure food communities in the Greater Horn region and East Africa. To date, decision-makers from the eight countries where GWP in East Africa is actively working understand the relationship between climate change, water security, food security, and energy security. Thus, there is a continuous, direct movement to the right hell, evidenced by the increase in land ownership and efforts to engage with ways to meet current urgent needs (food, water, energy) without compromising the needs of future generations. However, we recognize that water security and sustainable sustainability will be determined not only by climate adaptation processes and rising awareness levels but by several concerted efforts from policymakers, planners, end-users, and multi-sectoral interventions.

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Links to the relevant sites

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