Participatory Scenario Planning (PSP) Training and Implementation for Kiboga district, Uganda for SOND 2023 Rainfall season

4th -7th September 2023

Kiboga resort

1.0 INTRODUCTION

The Intra-ACP Climate Services and Related Applications programme (ClimSA) aims at fostering sustainable development in the IGAD region by addressing the existing gaps in climate services value chain and mainstreaming climate services into policy processes at regional, national, and sub-national levels. As part of project efforts to address the current limited linkages between ICPAC/UNMA and beneficiary communities at local levels, a climate demonstration pilot was proposed by the project to support structured interaction between users, researchers and climate service providers in Uganda. Kiboga district was selected based on a set of jointly agreed criteria.

It is against this backdrop that IGAD Climate Prediction and Application Centre (ICPAC) and Uganda National Meteorological Agency (UNMA) in collaboration with local district stakeholders in Kiboga district held a Participatory Scenario Planning (PSP) for SOND 2023 rainfall season. The PSP training and demonstration was supported by the Intra-ACP Climate Services and Related Applications programme (ClimSA). The objective of the workshop was to develop and implement adaptation strategies and measures that will strengthen the resilience of vulnerable sectors, particularly in agriculture, food security, water and energy sectors to climate variability and change. This was achieved by strengthening the capacity of stakeholders in enabling access to, collective interpretation and understanding of seasonal climate forecasts and associated uncertainty into locally relevant information that is useful for sectoral and livelihood decision making. The methodology used was a one-day training of trainers with stakeholders from Kiboga district, UNMA, national focal points for water and agriculture, district water, livestock, environment, and agriculture officers, local media, and farmers. The one-day training was followed by a three-day workshop implementation which involved the release of the district downscaled seasonal forecast, coproduction of sectoral advisories, and finally media engagements on communication and dissemination strategies. The theme for the workshop was "**Climate Services for Scenario Planning and Resilience Building"** in line with the 65th Greater Horn of Africa Climate Outlook forum.

2.0 WORKSHOP OUTPUTS

i. Kiboga district September to December (SOND) 2023 rainfall seasonal forecast press release by Deputy Chief Administrative Officer (DCAO), done on 14th march 2023

- The Uganda National Meteorological Authority (UNMA) with support from Climate Services and Related Applications (ClimSA) project has organized Participatory Scenario Planning (PSP) for SOND rainfall Season 2023 for Kiboga District, from 05th – 06th September, 2023 for an interactive platform where advisories based on the given district specific downscaled forecast were generated.
- This PSP has brought together stakeholders which include Technical Officials from ICPAC, UNMA and District Local Government (DLGs) as well as Farmer Groups representatives.
- During SOND 2023 season, there is a high likelihood of Above Normal (enhanced) rainfall over most parts of Kiboga.
- The Wet conditions are expected to set in during September reaching the peak around late September to early October. The cessation of rains is expected around Late November to early December 2023.
- The Above-Average rainfall forecast for the September to December 2023 season for Kiboga which has been developed is expected to have potential negative impacts such as flash floods, waterlogging, water level rise, hailstorms, strong winds, Post-harvest losses (qualitative and quantitative), Increased costs of production due to frequent application of pesticides and labor hiring and Disease outbreaks in poultry e.g. coccidiosis, Newcastle and gumboro in areas of kyetume, lwamata, bukomero and in animals Tick borne diseases, worms especially flukes, lumpy skin disease, colostrial disease and biting flies.
- The expected potential positive impacts include anticipated increase in crop production and productivity, Abundant pasture in cattle corridor sub counties of Ddwaniro, Lwamata and Bukomero and kayera.
- Among the developed advisories, the farming communities are advised to ensure timely planting and Integrated Pests Management Practices (IPMP) like crop rotation, use of fungicides and pesticides, proper spacing; timely weeding using chemicals and mechanical techniques and also Proper postharvest handing techniques. For animal keepers, Pasture establishment by planting super Napier, maize, and Chloris gayana for silage making is encouraged and also prepare for vaccination of cattle in cattle corridor sub counties against lumpy skin disease in areas like Ddwaniro, Lwamata and kayera by veterinary doctors and as well control of ticks by regular spraying using available acaricides from registered drug shops by NDA.
- For more details on the expected impacts and advisories for SOND 2023 rainfall season in Kiboga I refer you to the attached detailed document.

➢ It is my great honor to officially release the September-October-November-December(SOND) 2023 seasonal rainfall forecast for Kiboga district whose details are in the attached forecast document.

Mr. Vincent Kyaligonza
Deputy Chief Administrative Officer (DCAO)
Kiboga District

ii. Detailed climate outlook and sectoral advisories

a) General Forecast

- Overall, during SOND 2023 season, there is a high likelihood of near normal (average) with a tendency to above normal (enhanced) rainfall over Kiboga district.
- Most parts of the region are currently experiencing occasional isolated thunderstorms signifying the onset of SOND season.
- Wet conditions are expected to set in during September reaching the **peak** around **late September to early October**.
- The **cessation** of rains is expected around **Late November to early December 2023**.

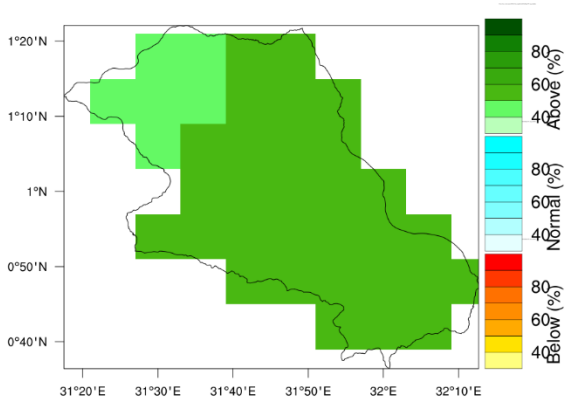

Figure 1: Probabilistic rainfall forecast for Kiboga district

b) Sectoral impacts and advisories

- **Crops**

Positive impacts	Advisories
• Anticipated Increase in crop production and productivity. • We have room to grow different crop types and varieties since we expect enough rains. • Increased crop vigour • Increased water for production • Soil fertility enhancement	• Buy some harvesting tools and equipment's that shall help us in harvesting like Tarpaulins. • Save some area in the compound where we shall sun dry our expected bumper harvests. • Save some area where we are to build some storage facilities like granaries. • You need to save some money to hire some labor to help in post harvest handling of produce. • Practice good agronomic practices like intercropping early. For example beans and maize, Banana with Beans, Ground nuts and maize. • Plant hybrids which recquire more rains and high yielding like Bazooka, Longe 10H maize Varieties, Blue Dynasty cabbage, Climbing Bean varieties. • We can make a rotation plan where we plant Nakati and onions with in the same season. • Proper management practices like proper spacing of beans, maize, pruning in plantations and orchads. • Man-made water harvesting techniques (valley dams, ponds, water tanks). • Soil and water conservation structures like trenches, ditches, mulching, contour bands and contour planting, Plant N2 fixing plants like legumes, agroforestry

Negative impacts	Advisories
• Decline in crop productivity due to soil erosion • Spread of fungal disease like late/early blight in tomatoes, anthracnose in beans, Powderly mildew in mangoes. • Leaching of nutrients into deeper soil layers. • Soil capping • Post harvest losses (qualitative and quantitative). • Flooding • Infrastructural damage :roads, • Weeds • Increased costs of production due to frequent application of pesticides,labor hiring	• Soil and water conservation structures, mixed cropping. • Timely planting and IPPM like crop rotation, use of fungicides and pesticides, proper spacing • Application of manure/fertilizers, crop rotation. • Deep ploughing. • Timely farm operations (harvesting and storage) • Value addition of crops like maize,coffee,mangoes) • Drainage channels, rainwater harvesting.,water tapping, • Chairman Local council one (LC1) needs to Mobilise bulungi bwansi to work on our roads to improve road network • Proper weed management • Timely weeding using chemicals and mechanical techniques. • Prepare enough organic manure and save some money to buy some inorganic fertilizers where applicable. • Proper postharvest handing techniques. • Food reserves/stocks. • Adopt alternative livelihoods. • Plan for small scale irrigation in case of prolonged dryspells within the season

- **Livestock**

Positive impacts	Advisories
• Abundant water for livestock in cattle corridor sub counties • Abundant pasture in cattle corridor sub counties of Ddwaniro, Lwamata and Bukomero • High milk production. • Increased beef production.	• Water harvesting by construction of valley tanks and desilting • Pasture conservation inform of hay, and standing hay by paddocking some ungrazed area.

• Increased animal growth. • There will be high reproduction of animals.	• Pasture establishment by planting super Napier, maize, and Chloris gayana for silage making. • Value addition on milk by making ghee, yogurt.

Negative impacts	**Advisories**
• Water logging especially in lowlands leading to decreased grazing areas and diseases like foot rot. Areas like Kayera, Kyamukweya, Ddwaniro, Rwankonge, Areas around River Mayanja and areas around Kizingu. • Diseases e.g.; Tick borne diseases, worms especially flukes, lumpy skin disease, colostrial disease and biting flies. • Disease outbreaks in poultry e.g. coccidiosis, Newcastle and gumboro in areas of kyetume, lwamata, bukomero and Kiboga town council. • Thunderstorms create a stampede in poultry resulting into reduced egg production and death • Reduced water intake due to coldness and hence low egg production. • Disease outbreaks especially in the Piggery enterprise.	• Construction of drainage channels and diversions By making trenches that drain water from the low lands to the rivers and swamps. • Vaccination of cattle in cattle corridor sub counties against lumpy skin disease in areas like Ddwaniro, Lwamata and kayera by veterinary doctors. • Farmers are advised to control ticks by regular spraying using available acaricides from registered drug shops by NDA • Vaccination of calves below 4 months against colostrial infection(kooto) by veterinary personnel. • Vaccination of poultry following program from the breeders • Proper spacing of bird following recommendations from vets. • Temporary sheds for calves and small ruminants like goats and sheep. • Farmers are advised to carry out routine deworming. • Increase biosecurity in piggery units.

- **Water**

Positive impacts	Advisories
• Availability of water for domestic and livestock production in sub-counties of kapeke, kayera, Ddwaniro, lwamata. • Recharge of groundwater for bore holes, springs. • Reduced conflicts for water by livestock farmers especially in the cattle corridor.	• Farmers should plant crops (e.g.; maize, bananas, coffee, and hybrid plants especially in areas like kibiga, lwamata, Muwanga) • Farmers (in Kapeke,/livestock keepers) should harvest water for future use •

- **Environment and forestry**

Positive impacts	Advisories
• increased Cloud cover hence reduced solar heat • Increased survival rate for tree seedlings and farmer managed regenerations. • Increased accumulation of soil moisture. • Biodiversity regeneration i.e. wetlands, forests • Reduced occurrence of wildfires i.e. forest	• Farmers are advised to plant trees within the season. •
Negative impacts	**Advisories**

• Increased flood occurrence i.e. in Kiboga, Bukomero, Lwamata Town Councils (T.C) • Likelihood of Waste management challenges at town councils. • Low school attendance i.e. to provide labour planting in farms e.g weeding • Gender related issues e.g. at planting and harvesting violence • Likely accidents in energy and mineral sites e.g. quarry sites • Increased soil erosions and its impacts • Mudslide occurrence i.e. Kajjere and Kalengera villages in Kibiga sub county • Damaged roads leading to increased transportation costs i.e. Kibiga, Kapeke and Kayera	• Communities and farmers are advised to avoid flood prone areas and encouraged to undertake proper drainage channelling • Adoption of 3Rs (recycle, reuse, and) and proper landfill management by T.C • Mosquito net usage, improved personal hygiene, and application of termicides on tree seedlings and saplings. • Train pole and timber dealers on different seasoning techniques for drying timber • Gender awareness campaigns among different farmers/households • Farmers urged to undertake ecosystem conservation i.e tree planting, soil conservation, and wetland restoration • Provision of sustainable alternative source of livelihoods • Training workers on safety issues i.e. usage of () PPEs • Farmers are advised to adapt sustainable soil erosion control measures e.g. garden treching, tree planting along their farms • Farmers are advised to adopt agroforestry • Communities should adapt rain harvesting techinques.i.e tanks ,valley dams among others. • Capacity building among different stakeholders concerning environmental and climate change related issues.

3.0 WORKSHOP OUTCOME:

1. Enriched understanding on the importance of PSP process in supporting community climate change adaptation and contingency planning processes
2. Increased capacity for preparation and facilitation of the PSP process at the sub-national level by national actors
3. Training of trainers
4. Improved understand in the role and importance of meteorological services in CCA, and dissemination of climate information to end users
5. Informed, anticipatory, precautionary and flexible decisions to manage climate uncertainty, risks and opportunities made
6. Integration and implementation of effective climate risk management in all livelihood, sectoral and development planning processes in the district
7. Documentation of community understanding of climate information services

4.0 PARTICIPANTS

Participants included the following:

1. Producers of climate information: ICPAC and UNMA
2. End users of climate information: Farmers, pastoralists, farmer associations, district decision makers and planners, sustainable development practitioners, and sub-national leaders
3. Intermediary users of climate information: District Departments of Agriculture, Livestock and Fisheries; and Water and Irrigation; among others
4. Boundary organizations: FAO, NGOs, CBOs, Youth Groups, Radio stations, Women's Organizations among others.