



ADAPTATION FUND

**VFDM Project: “Integrating Flood and Drought
Management and Early Warning for Climate Change
Adaptation in the Volta Basin”**

POST-MONSOON REPORT IN KINTAMPO
**From Awareness to Action, Stakeholders Insight into
Ghana’s Monsoon Season**

APRIL, 16TH 2024.

Project Executing partners



Background

The Ghana Meteorological Agency, Ghana Hydrological Authority, and the Water Resource Commission, in partnership with the World Meteorological Organization (WMO), the Volta Basin Authority (VBA), and the Global Water Partnership in West Africa (GWP-WA), are implementing the project titled “Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin (VFDM).” This project, funded by the Adaptation Fund, is set to conclude in June 2024.

The VFDM project aims to improve the national response to flood and drought risk information and warnings through enhanced coordination between national hydrometeorological services, disaster risk management authorities, and other relevant entities at both national and sub-regional levels. This initiative facilitates the communication and dissemination of warnings based on hydrometeorological impacts to vulnerable communities, enabling early action measures.

As part of the project, the Ghana Meteorological Agency (GMet) has signed a memorandum of understanding (MoU) with the World Meteorological Organization (WMO) to organize regional training workshops. These workshops aim to train participants and raise awareness about the new flood and drought bulletin and other project initiatives. One key activity under the project involved engaging stakeholders on Ghana’s monsoon, a critical seasonal weather pattern that significantly influences agriculture, water resources, and public health in the country. Accurate seasonal forecasts are essential for planning and mitigating potential risks associated with fluctuations in monsoon activity.

GMet's climate services include generating seasonal forecasts to support stakeholders' decision-making during the monsoon season. These forecasts are issued three times a year: once for the monsoon season in the north and twice for the major and minor seasons in southern Ghana respectively. Agricultural Extension Agents (AEAs) and small-scale farmers were engaged to understand how the season will perform, aiding their farming activities.

As part of the VFDM stakeholder engagement activities, GMet organized a post-monsoon workshop for farmers and AEAs in Yakam Hotel Kintampo, Bono region, focusing on the 2024 seasonal forecast for the southern sector. The workshop, attended by about 50 participants, included practical sessions on how farmers can use and interpret forecasts, empowering them to utilize these products effectively.

Workshop Objective

The objective of the workshop is to enhance stakeholders’ understanding of Ghana’s monsoon season and to provide valuable insights into GMet's weather and climate services and their relevance to agricultural planning and adaptation practices.

Workshop Activities: Part 1

The workshop commenced with an opening ceremony, where Mrs. Francisca Martey, Deputy Director and Head of the Research and Applied Meteorology Department of GMet, delivered the welcome address. She highlighted the significance of the monsoon season and the importance of

the seasonal forecast, especially for small-scale farmers who are vulnerable to the impacts of climate change, such as floods, droughts, heavy rainfall, and strong winds. She reassured the farmers that GMet will continue to provide its services to support decision-making, emphasizing that agriculture plays a critical role in Ghana's economy.



Figure 1: Group picture during the workshop

GMet plays a crucial role in monitoring and forecasting weather patterns before and even after the monsoon season. Accurate and timely weather forecasts are essential for farmers, disaster management agencies, and the general public to make informed decisions.

The Head of the AEAs expressed appreciation to GMet for their support and affirmed their readiness for continued collaboration to support farmers. He encouraged farmers and his colleagues to take advantage of the workshop to understand the forecast interpretation for better farming planning.

Participants introduced themselves and shared their expectations, with most expressing a desire to understand the seasonal forecast and how to interpret it for decision-making. They also mentioned that the new flood and drought bulletin coverage be expanded to cover other areas of the Bono region and other parts of Ghana.

Workshop Activities: Part 2

The workshop included a presentation on GMet Weather and Climate Services, which provided an overview of GMet and the various climate services it offers. Mrs. Martey highlighted new products

developed by the agency, including flood and drought bulletins. GMet's services include warnings, daily weather updates, seasonal forecasts, marine and inland water forecasts, and aeronautic forecasts. This was followed by interactive discussions on how to access these products. Participants expressed satisfaction with the presentation, noting it helped them better understand GMet's climate services.

In a second presentation, Mrs. Martey focused on the 2024 MAM (March-April-May) and AMJ (April-May-June) major seasonal forecasts for southern Ghana, with a specific emphasis on the transitional area where the Bono East region is located. She explained the forecast, which indicated a late onset and early cessation of the seasons, longer first and second dry spells, but normal to above-average cumulative rainfall expectations. Mrs. Martey provided advisory information based on the forecast to guide agricultural practices.

Dr. Joshua Adomako from the Crop Research Institute led a discussion on the implications of seasonal forecasts. This was carried out through group discussion. Participants were divided into five groups to deliberate on the implications of this year's seasonal forecast for crop farmers, climate-smart adaptation practices, and the development of a seasonal crop calendar for farming communities in the region. Dr. Adomako advised farmers to consider planting disease-tolerant crops, early-maturing varieties, and practicing mulching, among other recommendations.

After the workshop has ended at 3:00pm, the entire team visited one of the suburb communities namely Bompare and had discussions with them explaining seasonal forecast as seen in figure 2 and 3. Farmers were informed to expect a late onset, early cessation, a shorter season length, longer dry spells and normal rainfall amount. The presentation was very interactive with farmers asking questions they had in relation to the forecast. The farmers were also quick to point out that the onset of the rains was indeed late as indicated by the forecast. Advisories were also presented and discussed among the farmers in order to ensure they obtain the maximum possible yields. The farmers suggested that an audio recording of the forecast was made to be played at the community information center to ensure that everyone is well informed of the forecast and also to serve as a constant reminder for them in the farming decisions.



Figure 2: Group photo with the chief and farmers of Bompore community



Figure 3: Farmers in Bompore listening to climate information from GMet

Recommendation

- It was recommended that seasonal forecasts be generated at the regional level to better account for micro-seasonal variability.

- The summary of the performance of previous seasonal forecasts be included in future reports.
- To incorporate temperature and soil moisture forecasts into the seasonal forecasts.

Conclusion

The workshop highlighted the critical role of GMet in providing essential weather and climate services, particularly for small-scale farmers who are vulnerable to the impacts of climate change. The importance of the monsoon season and the agency's commitment to supporting decision-making in agriculture through accurate and timely forecasts was emphasized. Participants were introduced to new products developed by GMet, including flood and drought bulletins, and received detailed presentations on the 2024 MAM (March-April-May) and AMJ (April-May-June) major seasonal forecasts for southern Ghana. These forecasts indicated a late onset and early cessation of the seasons, longer first and second dry spells, and normal to above-average cumulative rainfall expectations. Advisory information was provided to guide agricultural practices in response to these forecasts, with an emphasis on adopting climate-smart adaptation practices such as planting disease-tolerant crops, early-maturing varieties, and practicing mulching.

The AEAs recommended generating seasonal forecasts at the regional level to better account for micro-seasonal variability. They also suggested including a summary of the performance of previous seasonal forecasts and incorporating temperature and soil moisture forecasts in future reports. Additionally, they mentioned expanding the coverage of the new flood and drought bulletins to include other areas of the Bono region and other parts of Ghana.

The workshop successfully enhanced stakeholders' understanding of Ghana's monsoon season and the available climate services that support agricultural practices and food security. It provided valuable insights into GMet's weather and climate services and their relevance to agricultural planning and adaptation practices, ultimately empowering participants to make informed decisions for the benefit of their communities.

Post-Seasonal Forecast Workshop in Kintampo

Date: 16th April 2024

Venue: Yakam Hotel, Kintampo

Day 1		
Activities	Facilitator	Time
Registration	<i>Secretariat</i>	8:30 – 9:00am
Part 1		
Opening Session		
Opening Prayer	<i>Volunteer</i>	
Welcome Address	<i>Mrs. Francisca Martey (Head of Research & Applied Meteorology)</i>	9:00 – 9:10 am
Introduction of participants & Expectations	<i>Participants</i>	9:25 – 9:55 am
Overview of weather and climate services	<i>Mr. Eric Asuman (DG)</i>	10:00 – 11:00am
Group Photo	<i>ALL participants</i>	11:00 – 11:05 am
Snack Break		15 mins
Part 2		
Introduction to Seasonal forecast	<i>Mrs. Francisca Martey</i>	11:25 – 12:00 pm
Practical Demonstration of Seasonal Forecast for 2024		12:00 – 1:00 pm
Lunch break		1 hr
Group discussions on seasonal forecast	GMet	2:45 – 4:00 pm
Sample Participant Remarks	<i>Participants</i>	4:00 – 4:15 pm
Closing Remarks	<i>GMet and HYDRO</i>	4:15 – 4:30 pm
Part 3		
Field Visit	Bompare community	3:00 - 5:00pm