GHANA METEOROLOGICAL AGENCY

(GMet)

2024 ANNUAL PERFORMANCE REPORT

TABLE OF CONTENTS

LIST OF ACRONYMS

GMET	Ghana Meteorological Agency
DMI	Danish Meteorological Institute
RMO	Regional Meteorological Officer
DMO	District Meteorological Officer
TMT	Tailor-Made Training
GHA	Ghana Hydrological Authority
VBA	Volta Basin Authority
WMO	World Meteorological Organization
UNDP	United Nations Development Programme
MOCD	Ministry of Communications & Digitalization
GEE	Google Earth Engine
UFFFS	Urban Flash Flood Forecasting System
EW4ALL	Early Warning for All
GDAP	Ghana Digital Acceleration Project
SSC	Strategic Sector Cooperation
AUC	African Union Commission.

EXECUTIVE SUMMARY

The Ghana Meteorological Agency (GMet) is a state institution with the mandate to provide accurate and reliable weather and climate services for the socio-economic development of Ghana. The Agency was established by Act 682 of 2004 and amended by Act 1002 of September 2019. The objective of the Agency is to provide meteorological services and ensure the operation and maintenance of international standards and practices in meteorology in the country. In the year 2024, the GMet focused on furthering its strategic objectives including disaster prevention and mitigation, develop human resource capacity, enhance infrastructure, improve service delivery, improve revenue generation, promote research and advocacy.

Under the capacity building objective, Regional, District, Sectional Heads and Chief Meteorological Technicians received compliance training which introduced them to the activities of the Agency and the increased need for them to step up efforts in their work delivery. Aeronautical training was also organized for staff of the Kotoka International Airport and other forecasters as part of the Quality Management Certification. Engineering staff also received training in calibration services with several other staff undergoing various training to improve their technical abilities.

As part of efforts to strengthen income generation and enforce the GMet amended Act, the Board and Management of the organization called on the Parliamentary select committees on Communication and Transport to present the matter of GCAA's non-compliance to the lawmakers. The Agency also successfully expanded its network of weather stations to twenty (20) communities with support from the World Bank under the Food Security and Resilience and Project (FSRP)

To improve service delivery, GMet extended a hand of cooperation to the Danish Meteorological Institute which culminated into the signing of the strategic sector cooperation agreement. The Agency also deepened ties with the Ivorian Meteorological Services through the signing of a Memorandum of Understanding and furthering discussions with the Ghana Ports and Harbours Authority in same regard.

The main challenges that have faced the Agency in the period under review have been threats to the Agency's lands and bungalows in some parts of the country including Kumasi and Tamale some of which cases have resulted in legal action. The noncompliance and refusal of GCAA to pay GMet for services rendered have also significantly impacted operations.

A detailed financial performance is included in this report.

2.0 PART ONE: PROFILE OF GHANA METEOROLOGICAL AGENCY

The Ghana Meteorological Agency (GMet) is a state institution with the mandate to provide accurate and reliable weather and climate services for the socio-economic development of Ghana. The Agency was established by Act 682 of 2004 and amended by Act 1002 of September 2019. The objective of the Agency is to provide meteorological services and ensure the operation and maintenance of international standards and practices in meteorology in the country.

2.1 Vision

To become the best Meteorological service provider in the Sub-Region.

2.2 Mission

To provide efficient weather and climate services for Socio-Economic Development in Ghana.

2.3 Functions

- Issue weather forecasts for the safe operation of aircrafts, ocean going vessels, oil rigs and other socio-economic activities
- Provide meteorological information, advice, and warnings for the benefit of agriculture, civil and military aviation, surface and marine transport, operational hydrology and management of energy and water resources to mitigate the effects of natural disasters such as floods, storms and droughts on socio-economic development and projects
- Promote the services of meteorology in agriculture, prevention of drought and desertification activities
- Collect, process, and disseminate meteorological information nationally and internationally in accordance with rules, practices and procedures established under international conventions.
- Ensure uniform standards of observation of meteorological phenomena in the country.
- Train, conduct and undertake research particularly in the field of tropical, agricultural, hydrological and other aspects of meteorology.
- Store meteorological data and information for the purposes of planning and implementation of infrastructural projects.
- Participate in local and international training and research in meteorology and climatology and in other related fields in co-operation with other relevant institutions and authorities concerned with applied meteorological research.
- Collaborate with the relevant foreign and international organisations that the Board considers necessary for the purposes of this Act.

- Be the sole authority to approve the establishment of meteorological stations for meteorological observations.
- Provide consultancy services in meteorology to the public.
- Participate in the global exchange of meteorological and related activities for the welfare of humankind.
- Conduct investigations into meteorological issues and advise the Minister accordingly.

2.4 Organizational Structure

The Ghana Meteorological Agency is under the Ministry of Communications and Digitalisation and headed by a Director-General with two Deputy Director-Generals for Operations and Support Services respectfully. The Organizational Structure (organogram) of the Agency is attached as **Appendix 1.**

2.5 Head of Agency

Description	**Head**
Director-General	Dr. Eric Asuman

2.6 Heads of Department

s/n	**Name of Department**	**Name of Head of Department**	**Substantive Grade**
1	Administration	Mr. Charles Badoo	Director
2	Finance	Diana Yakubu	Chief Accountant
3	Synoptic Meteorology & Forecasting	Mr. Joseph Teye Portuphy	Deputy Director
4	Research & Applied Meteorology	Mrs. Francisca Martey	Deputy Director
5	Basic Network & Data Processing	Mad. Elikem Setseoafia	Deputy Director
6	Engineering	James Dusu	Principal Meteorologist
7	Human Resource	Gifty Samor-Dua	Principal HR Officer

3.0 PART TWO: KEY ACHIEVEMENTS – PERFORMANCE REVIEW

3.1 Key Achievements

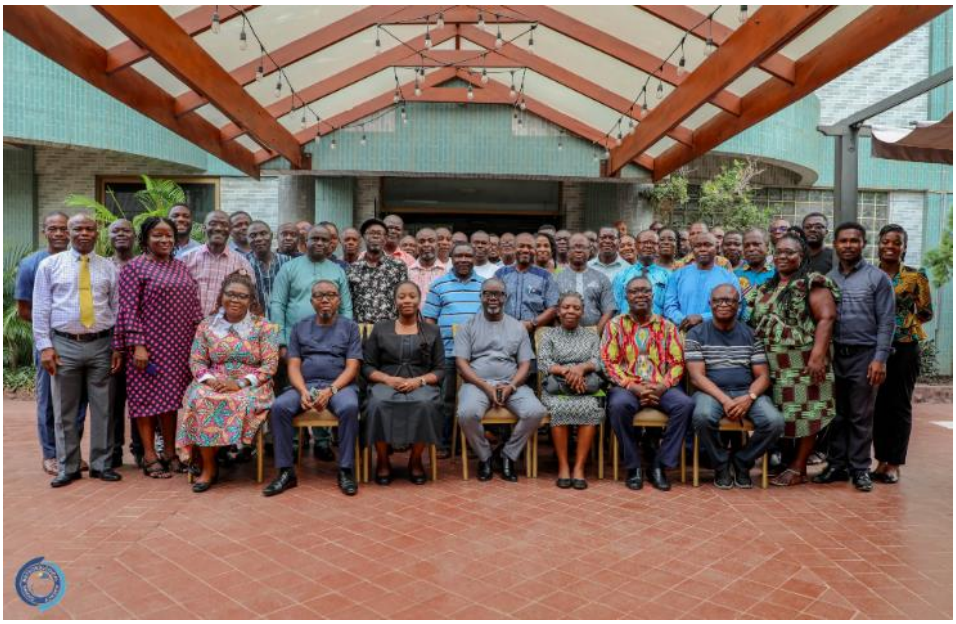
GMet in the period under review implemented the following activities in line with its broad objectives for the year 2024. The key achievements have been categorized under the five (5) thematic objectives of the Agency: Promote Effective Disaster Prevention & Mitigation, Improve the infrastructure and logistics, Enhance the human resources capacity, Strengthen the internal income generating capacity and Improve service delivery to stakeholders.

3.1.1 ENHANCING HUMAN RESOURCE CAPACITY

The following activities were undertaken to enhance the human resource capacity of staff of the Ghana Meteorological Agency

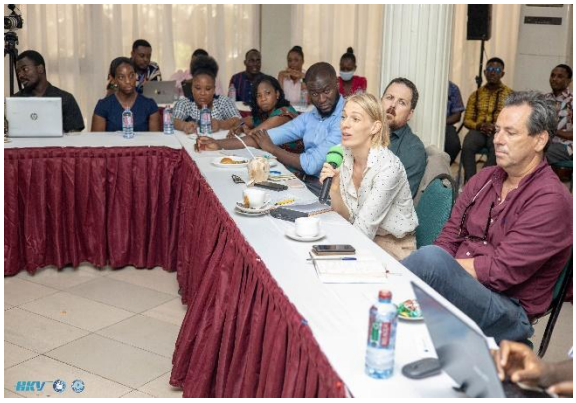
a. Compliance training for RMOs, DMOs and HEADS OF GMET

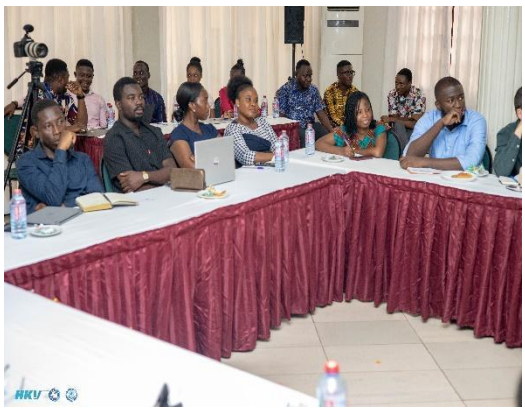
The Ghana Meteorological Agency (GMet) organized a three-day Compliance Training for Regional, District and Unit Heads of the Agency across the country. The training was held from the 25th to the 27th of January 2024 at the Ange Hill Hotel in East Legon. The primary objective of the training was to equip the officers with the necessary tools for innovation, accountability, and transparency. The compliance training covered areas including the introduction to the Public Financial Management Act, the Human Resource Management policy framework, and the manual for the Ghana Public Service, financial reporting, performance management, management of records, and procurement procedures. Overall, it is expected that the knowledge gained by the participants will undoubtedly help towards achieving the Agency's goals of transparency and accountability.



b. GMet and HYDRO innovative satellite training for sustainable agriculture in Northern Ghana

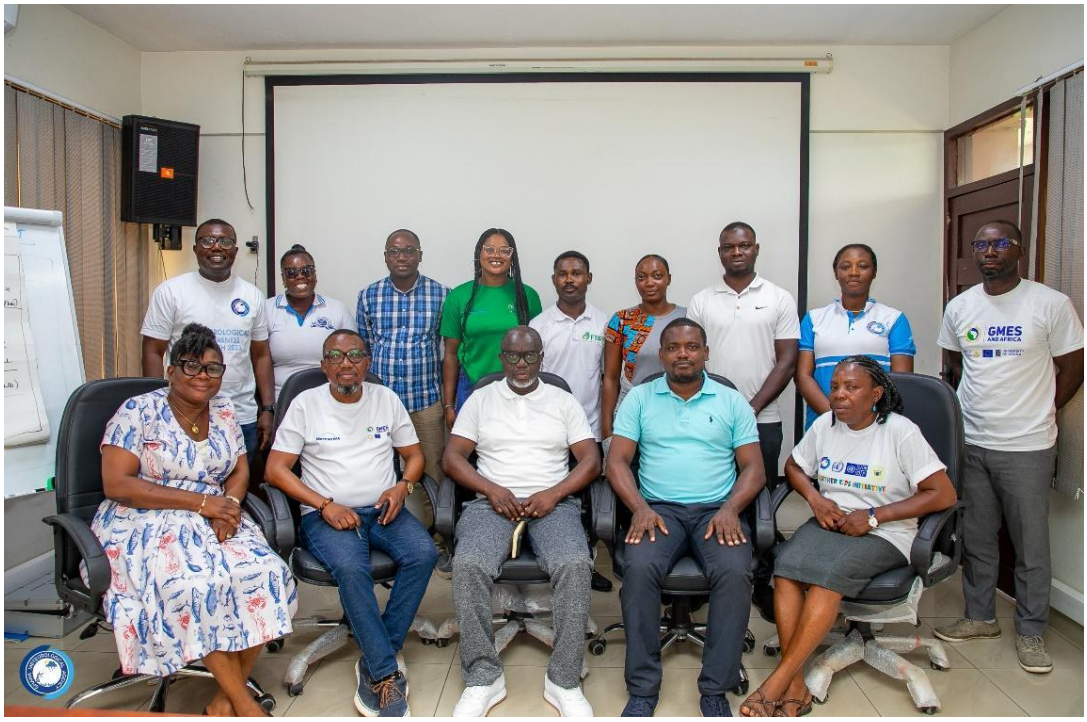
The Ghana Meteorological Agency (GMet) and the Ghana Hydrological Authority (HYDRO) launched an initiative dubbed the Tailor-Made Training (TMT) to revolutionize flood management and meteorological analysis. The TMT, facilitated by experts from HKV, took place from 7th to 12th March, 2024 at Gmet and HYDRO Offices. The training focused on utilizing advanced satellite-based information, specifically through Google Earth Engine (GEE), to enhance the capabilities of staff from GMet and HYDRO in supporting farmers in the region. The 5-day training program is to build capacity of participants with sessions on understanding satellite-based information and practical exercises in generating maps depicting flood frequencies, wet season onset, and theoretical crop growing periods. The initiative will culminate in a crucial dissemination seminar, connecting authorities, research institutes, and farmer groups to amplify the impact of this program on sustainable development in flood-prone areas. A total of eleven staff from the Ghana Meteorological Agency (GMet) participated in the training.

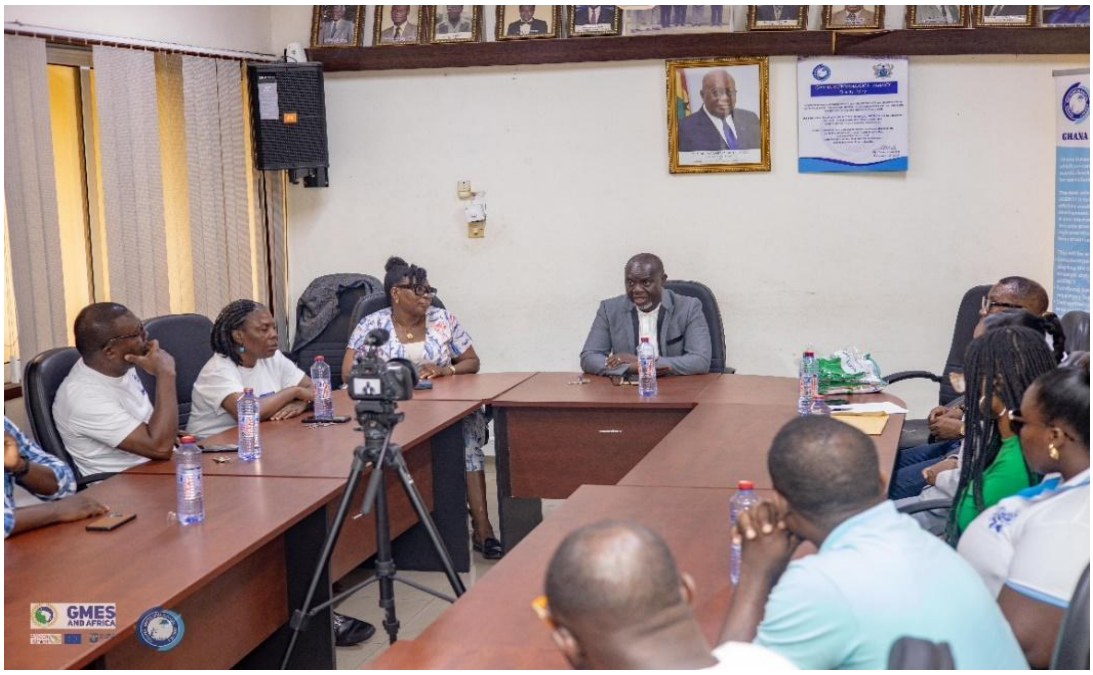




c. Training for Togo Meteorological and Maritime Authority

The Agency, under the GMES & Africa project, conducted an online training program in Marine Weather and Ocean State Forecasting for the Togo Meteorological Agency, Togo Maritime Authority, and internship students from the University of Ghana. The training program aimed to build the capacity of participants in understanding marine weather phenomena, interpreting oceanographic data, and utilizing forecasting tools for maritime safety and planning. The online training received positive feedback from participants, who expressed appreciation for the valuable knowledge gained during the sessions.





d. Tailor-Made Training by HKV

During the period under review, a tailor-made training session conducted by HKV focused on floods in northern Ghana. This training was designed to equip staff with the requisite knowledge on using satellite-based information through Google Earth Engine to address climate-related issues, particularly flood forecasting. The training successfully achieved its goal by enhancing staff capabilities in predicting the possibility of floods, thereby improving the unit's ability to manage and respond to flood risks effectively.

e. Training on RA-I Basic Satellite Imagery Interpretation Course

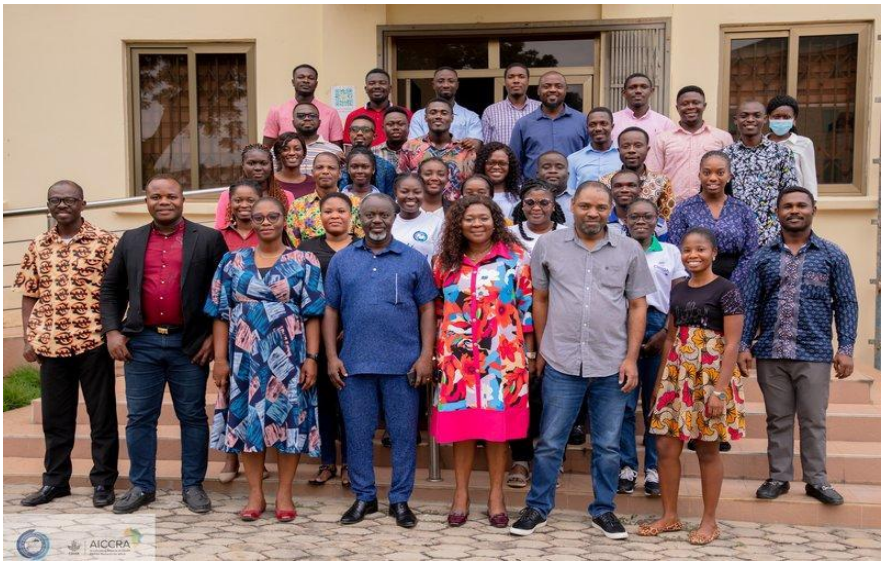
In May 2024, the Agency enrolled staff of the Departments of Synoptics Meteorology and Forecasting and Research and Applied Meteorology in an online training program on RA-I Basic Satellite Imagery Interpretation Course was conducted. This training focused on educating participants about interpreting satellite images for weather forecasting. The course aimed to enhance skills in analysing satellite data, which is crucial for accurate weather predictions and improving overall forecasting capabilities.

f. Refresher Course organized for for KIAMO Staff in Accra.

The one-week Aeronautical Meteorological Compliance Refresher Training for staff of the Kotoka International Airport Meteorological Office (KIAMO) successfully concluded on Saturday, July 13, 2024, at the Hill View Hotel in Accra. The training, which commenced on Monday, July 8, 2024, aimed to enhance the skills of officers in Quality Control Systems, Aeronautical Meteorology, and Human Resources Management. A total of 40 Staff were trained and awarded certificates of participation, symbolizing their successful completion of the training.

g. Ghana Meteorological Agency Boosts Climate Data Analysis Capabilities with Specialized Training

The Ghana Meteorological Agency (GMet) has successfully concluded a comprehensive training program designed to enhance the climate data analysis skills of its staff. The program, held at the National Banking College in Accra from August 6-15, 2024, focused on equipping participants with advanced skills in data preparation, quality control, data visualization, and data set merging. The training significantly improved GMet's capacity to analyze and interpret climate data, leading to more accurate weather forecasting and climate change adaptation strategies. This training marks a significant milestone in GMet's ongoing efforts to enhance climate data analysis capabilities. By investing in the skills and knowledge of its staff, GMet is poised to provide more effective climate services, supporting national development and climate resilience in Ghana.

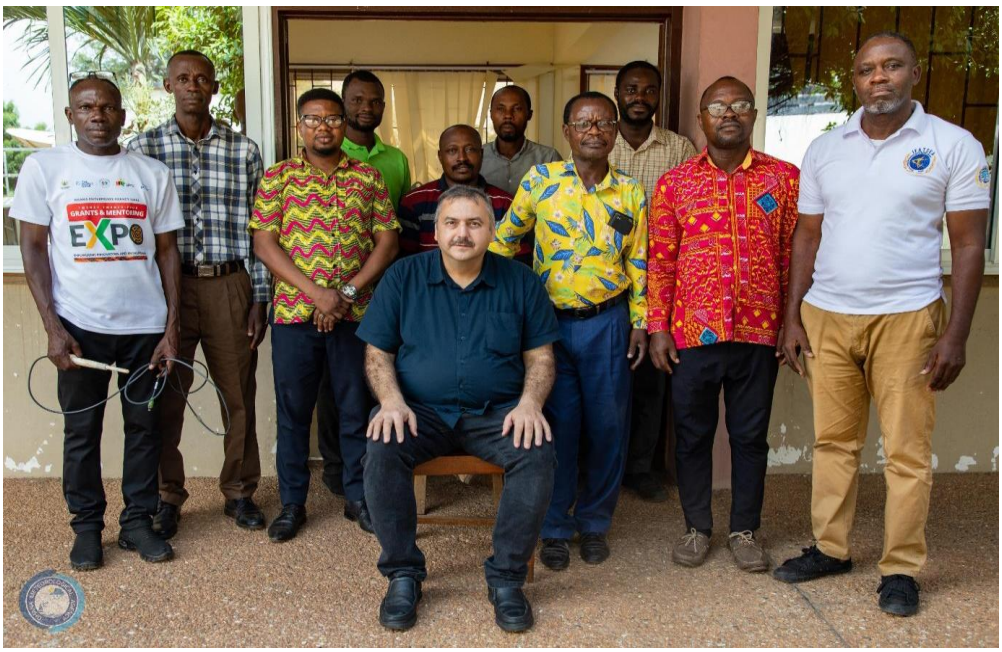


h. 3-Day Refresher and Compliance Training for Meteorological Technicians Concludes Successfully

The 3-day Refresher and Compliance Training for selected Chief and Principal Meteorological Technicians has ended, with participants being awarded certificates. The training, which aimed to enhance the skills and knowledge of the technicians, covered critical topics such as Human Resource Management Practices, Meteorological Observation and Coding, and Quality Management Systems. Speaking at the closing ceremony, the Acting Director-General of the Ghana Meteorological Agency (GMet), Dr. Eric Asuman, commended the participants for their dedication and commitment to their work. He also urged them to apply the knowledge and skills acquired during the training to make a positive impact in their work. The participants expressed their gratitude to Management for the opportunity to upgrade their skills and knowledge. The Participants pledged to apply the learnings from the training to improve their performance and contribute to the agency's mission. The training was attended by seventeen (17) Chief and Principal Meteorological Technicians from across the country. The certificates awarded to the participants serve as a testament to their hard work and commitment to excellence.

i. **Enhancing Calibration Excellence: GMet Engineers receive advanced training from METEK GmbH, Germany.**

From December 2 to December 6, 2024, engineers and technicians at the Ghana Meteorological Agency (GMet) participated in a five-day, hands-on training session led by Eng. Mustafa Arman of Metek Meteorologische Messtechnik GMbH, Germany. The program, conducted at GMet's Instruments Lab, aimed to upgrade the skills and knowledge of the Engineering and Electronics Department staff to match the latest global trends in equipment maintenance, calibration, and software updates. The training covered the operation of critical instruments such as the wind tunnel, pressure chamber, radiation test equipment, temperature test cabinet, and the COMBILOG software. Eng. Mustafa, who last visited GMet five years ago, expressed his excitement about returning to share his expertise. “It’s always a pleasure to work with such a dedicated team. Their enthusiasm and eagerness to learn, despite the language barrier, were remarkable,” he noted. Mustafa emphasized the importance of staying current with technological advancements to maintain the highest international standards in calibrations.



3.1.2 STRENGTHEN INCOME GENERATING CAPACITY

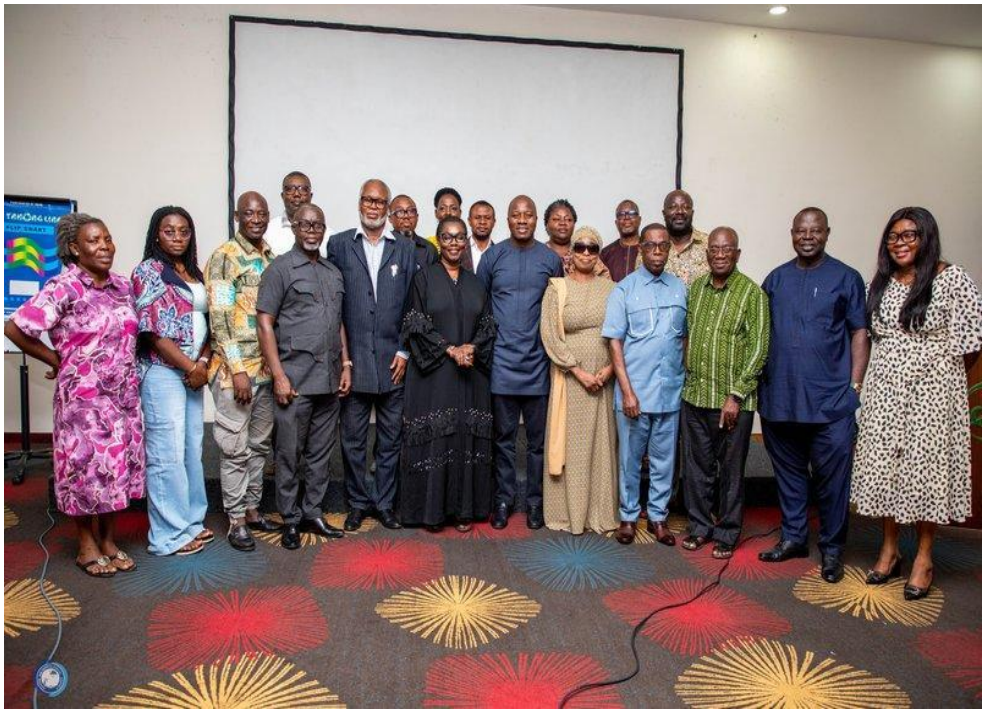
The following are some activities undertaken by the Ghana Meteorological Agency to strengthen and expand its revenue generating sources

a. GMet, MOCD engage Parliamentary Committees on Ghana Civil Aviation Authority non-compliance

On Saturday, 14th September 2024, the GMet engaged the Parliamentary Select Committee on Information and Communications, along with the leadership of the Roads and Transportation Committee. The engagement was necessitated by the urgent need for all stakeholders, especially the Ghana Civil Aviation Authority, to comply with the GMet Act. sectors like agriculture. The purpose of the meeting, held at the Alisa Hotel in Accra, was to address the Ghana Civil Aviation Authority's (GCAA) non-compliance with the Amended GMet Act 1002, 2019. However, the discussions extended beyond this issue, focusing on the agency's role in national development.

The Minister of Communication and Digitalization, Hon. Ursula Owusu-Ekuful, stressed the importance of collaboration with the Ghana Meteorological Agency (GMet) to mitigate the impact of climate change on agriculture and other sectors. Speaking during an engagement between, she highlighted the recent drought in northern Ghana and how the challenges could have been averted if GMet's forecasts were heeded in time.

Acting Director-General of GMet, Dr. Eric Asuman, used the platform to shed light on the vital services GMet provides across various sectors of the economy. He outlined the agency's ongoing challenges, including outdated infrastructure, limited financial resources, and insufficient weather and climate services. To address these, Dr. Asuman mentioned initiatives like professional development, academic training, and internal refresher courses. He also called on the GCAA and the Ghana Airport Company Limited (GACL) to fulfill their financial obligations to GMet, while advocating for amendments to the GMet Act to secure more diverse revenue sources, such as offshore oil and marine activities.



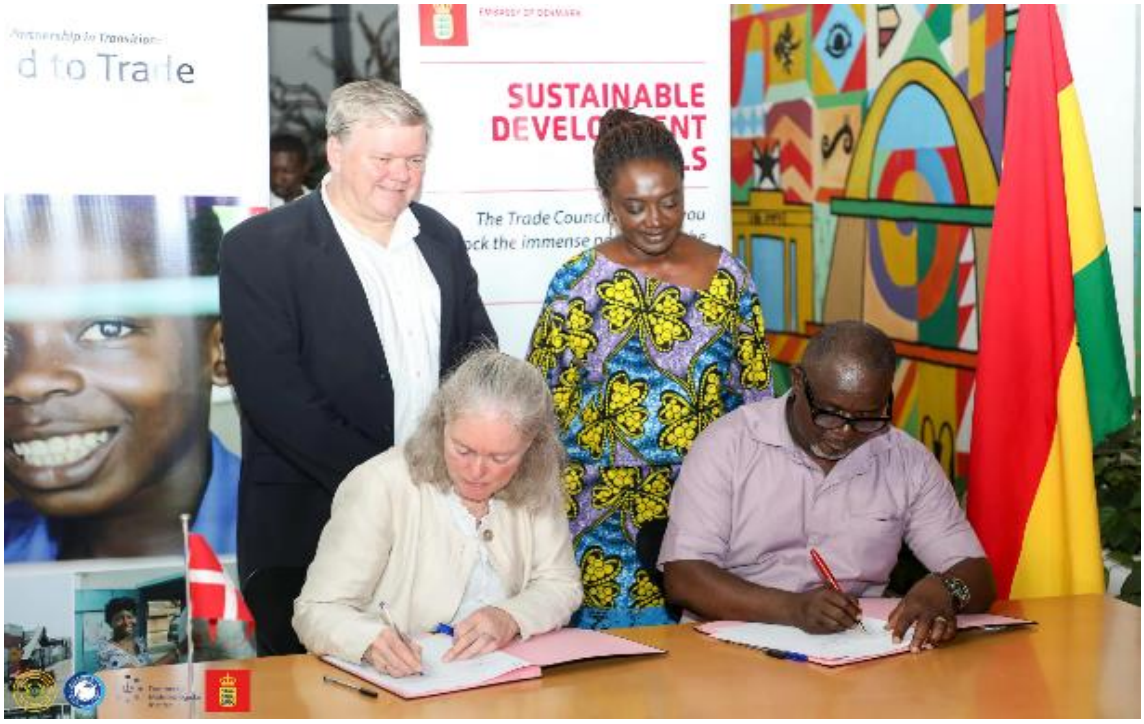
3.1.3 IMPROVE SERVICE DELIVERY

The following are activities undertaken by the Ghana Meteorological Agency to improve and strengthen the processes of service delivery to stakeholders and public

a. GMET, DMI launch of STRATEGIC SECTOR COOPERATION (SSC)

On January 30th, 2024, the Royal Danish Embassy in Accra, the Ghana Meteorological Agency (GMet), the Danish Meteorological Institute (DMI), launched the Strategic Sector Cooperation agreement on Meteorology and Climate at a brief Ceremony organized at the residence of the Danish Ambassador to Ghana.

Present at the Launch were Hon. Ama Pomaa Boateng, the Deputy Minister of Communications and Digitalization, who represented the Minister, Mr. Eric Asuman, the Ag. Director-General of GMet, H.E. Tom Norring, the Danish Ambassador, and Marianne Vendel Thyrring, the Director-General of DMI. This collaboration is a testament to the power of international cooperation in addressing shared challenges and fostering sustainable development. Denmark's expertise in water management, maritime development, and statistics is already empowering Ghana to improve infrastructure, efficiency, and governance. As Ghana and Denmark join forces, this collaboration not only builds resilience but also opens doors to economic growth and investment and strengthens diplomatic relations. The key priority areas for this collaboration include, Climate Atlas Development, Regional Climate Modeling, Economic Impact Assessment of GMet, Forecasting Training, NWP (WRF) and Data Assimilation, Data Management and Gap filling, Instrumentation, Data Processing, Information Technology and Communication.

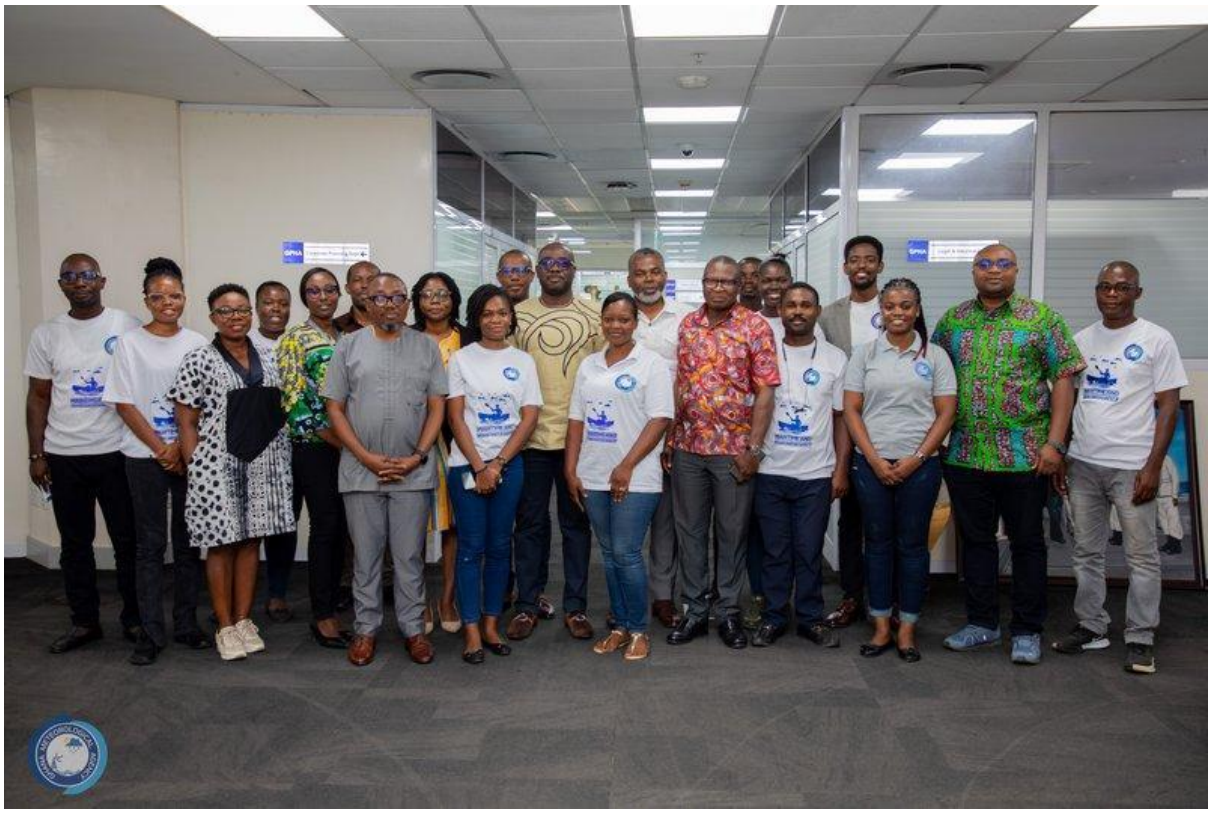


b. **GMet Strengthens Collaboration with GPHA to Enhance Maritime Safety**

In a bid to boost maritime safety and improve the dissemination of early warning information on weather-related hazards affecting Ghana's marine environment, the Ghana Meteorological Agency (GMet) through the GMES & Africa Project has taken significant steps to strengthen its relationship with the Ghana Ports and Harbors Authority (GPHA) on Friday, 6th September, 2024. The Agency, in a recent visit to the GPHA, sought to establish a more coordinated approach to delivering climate services and ensuring seamless communication between the two institutions. The principal focus of the visit was to foster closer collaboration aimed at enhancing the accuracy, timeliness, and dissemination of early warnings related to weather conditions that could potentially affect maritime activities.

At the meeting, GMet highlighted the importance of continuous engagement between key stakeholders in the maritime industry. She also gave an overview of GMet's Climate Services, designed specifically to provide early warnings on weather-related threats, thereby allowing maritime operators to take preventive measures. The discussions also revolved around establishing a feedback mechanism that would enable the agency to fine-tune its early warning system based on real-time input from maritime stakeholders. This would ensure that the services provided by GMet are tailored to the practical needs of the maritime community.

Mr. James Benjamin Gaisie, General Manager of Estate and Environment at GPHA, expressed his enthusiasm for the growing partnership between the two organizations. He emphasized the need for continuous collaboration to ensure the efficient delivery of services that directly affect the maritime sector. He also expressed hope for more frequent interactions, which he believes will enhance the operational efficiency of both organizations in safeguarding Ghana’s marine ecosystem.

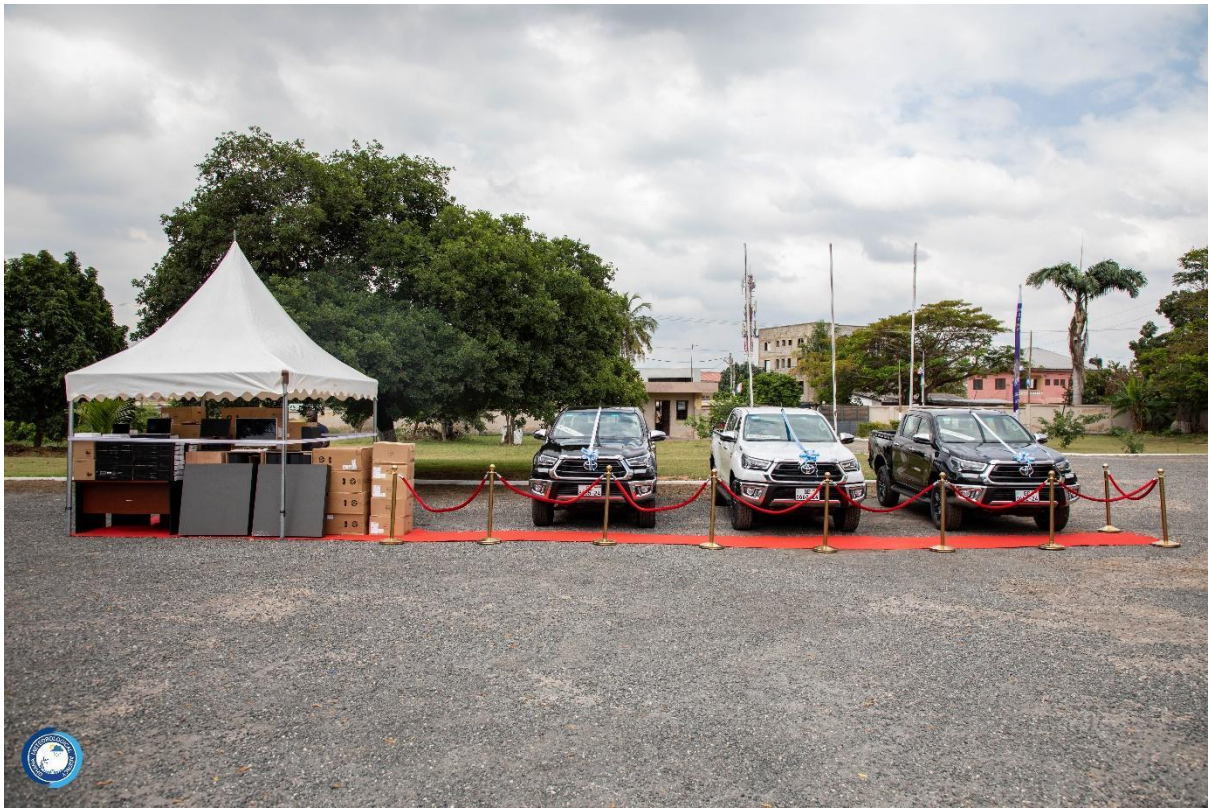


c. GMet Enhances Digital Capabilities with Advanced Meteorological Equipment

In a significant move toward climate resilience, the Ghana Meteorological Agency (GMet) received advanced equipment under the Ghana Digital Acceleration Project (GDAP) Wednesday, 9th October 2024. Spearheaded by the Ministry of Communications and Digitalisation, this $5.5 million investment, including vehicles, laptops, servers, and specialized tools, will improve GMet's ability to provide faster, more accurate weather forecasts and early warnings.

The investment, which builds on previous digital upgrades, will see over 100 new automatic weather stations installed. It reflects Ghana's commitment to enhancing weather services, contributing to national and regional climate adaptation efforts.

Hon. Ursula Owusu-Ekuful, Minister of Communications and Digitalisation, reiterated, "Our goal is to forecast and protect our citizens and economy from the impacts of climate change."



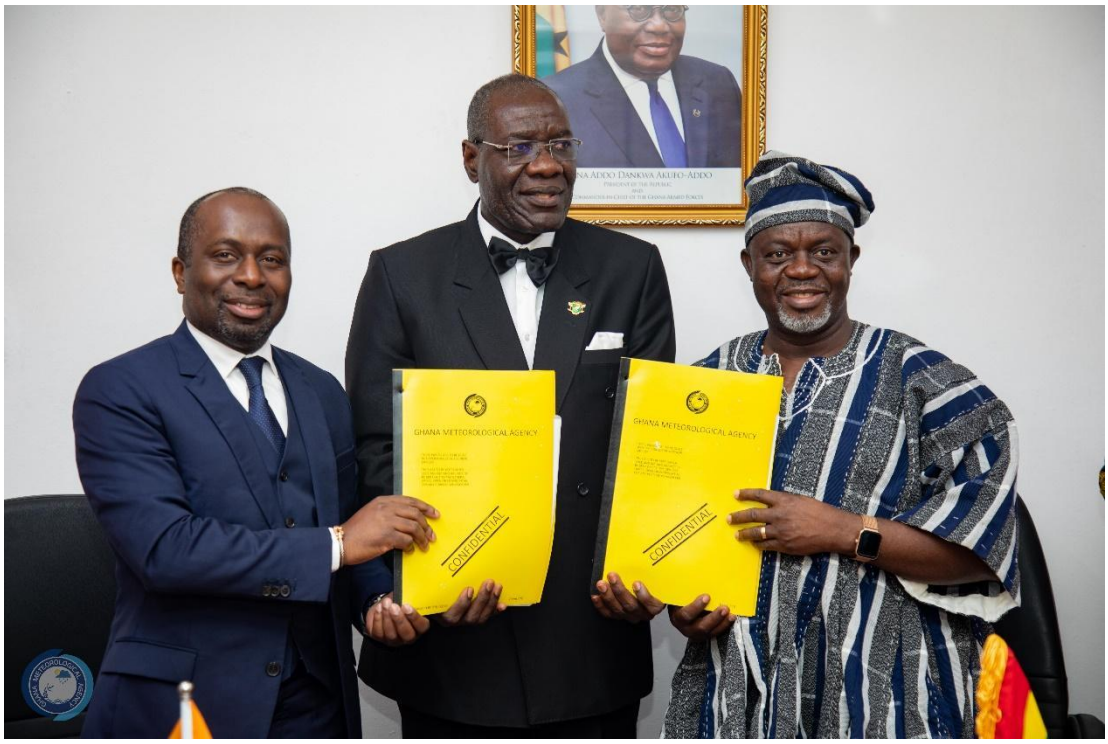
d. Ghana and Côte d'Ivoire Forge Stronger Ties in Meteorology

On Friday, 19th November 2024, the management of the Ghana Meteorological Agency (GMet) received a high-powered delegation from the Ivorian Embassy, led by His Excellency Assielou Félix Tanon, the Ivorian Ambassador to Ghana, and Mr. Jean-Louis Moulot, CEO of SODEXAM. The meeting, held at GMet's headquarters, concluded successfully with the signing of a Memorandum of Understanding (MOU) to foster bilateral cooperation between the two meteorological institutions.

The primary objective of the visit was to strengthen collaboration between Ghana and Côte d'Ivoire in meteorology, particularly in the areas of data sharing and training. This partnership aims to enhance the capacity of both agencies, equipping them to address present and future

challenges more effectively. In his welcome address, Dr. Eric Asuman, Director General of GMet, expressed his delight at hosting the Ivorian delegation. He emphasized the importance of South-South cooperation among neighboring countries in West Africa, not only to boost trade and commerce but also to work collectively toward securing the sub-region's future, particularly in combating climate change and global warming.

His Excellency Assielou Félix Tanon, the Ivorian Ambassador, echoed these sentiments in his opening remarks. He highlighted the significance of deepening collaboration between the two nations, applauding the proactive efforts of their meteorological institutions. He noted that this initiative aligns with the Strategic Partnership Agreement signed by Ghana and Côte d'Ivoire on 17th October 2017, marking a pivotal step toward strengthening and diversifying the relations between the two countries.



3.1.4 PROMOTING EFFECTIVE DISASTER PREVENTION AND MITIGATION

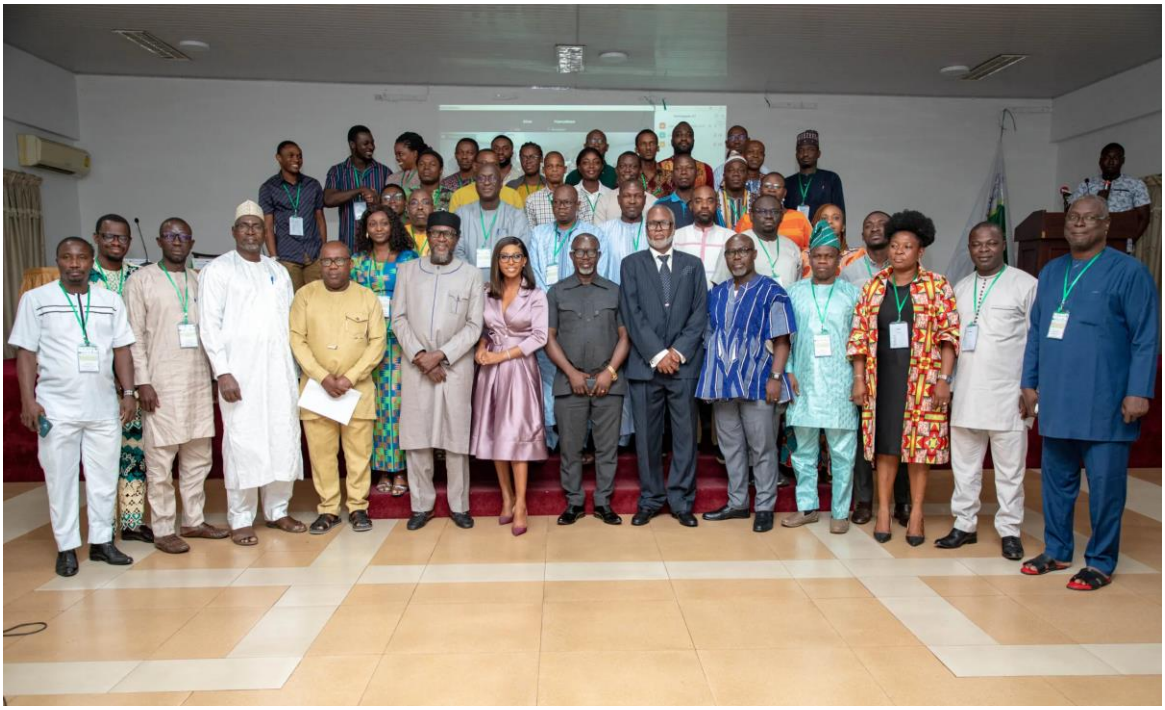
The following are efforts undertaken in the year under review to promote effective disaster prevention and mitigation

a. PRESENTATION OF SEASONAL FORECAST (PRESSAG)

The Ghana Meteorological Agency has hosted experts from National Meteorological and Hydrological Services of Benin, Ivory Coast, Nigeria and Togo to discuss the Climate Outlook for the main rainfall season in the Gulf of Guinean Region. The forum which started on 26th February, 2024 and ended on 1st March, 2024 also had participants from river basin organizations, disaster risk Agencies and climate centres from various parts of the country.

Discussions at the pre-forum mainly focused on analysis of weather data to co-produce and strengthen the capacity of participants on the technics of analysis and characterization of Agro-hydro-climatic risks related to the main rainy season for the Gulf of Guinea countries. At the main Forum on 1st March, 2024 experts presented the results and forecast for the region to stakeholders and the general public.

The forecasts mainly captured the onset, intensity and cessation of the main rainfall season for the region. Some recommendations were also offered to institutions and stakeholders that depend on the weather and rains for their primary activities.



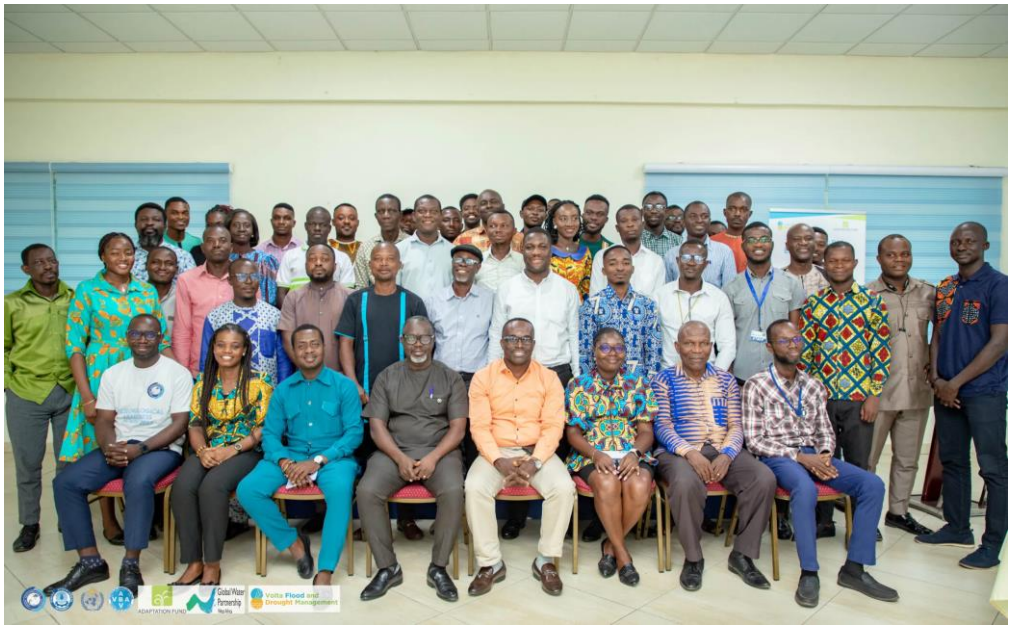
b. NATIONAL VOLTALARM MEDIA TRAINING AND STAKEHOLDER ENGAGEMENT WORKSHOP

The National VOLTALARM Media Training and Stakeholder Engagement Workshop was held first in Tamale, second in Ho and lastly in Accra. The training workshop, which forms part of the Volta Flood and Drought Management Project, was organised by the Volta Basin Authority (VBA), World Meteorological Organization (WMO), and Global Water Partnership with funding from the Adaptation Fund.

The National partner institutions included the Water Resources Commission (WRC-Country Rep for VBA), Ghana Hydrological Authority (Hydro), National Disaster Management Organization (NADMO) and Ghana Meteorological Agency (GMet). Participants included media personnel, farmers, traders, agriculture extension officers, and disaster managers from all regions across the nation.

The three key partner institutions, WRC, HYDRO, and GMet, took turns detailing their involvement in the project and how useful the training is within their respective and engaged

participants on VOLTALARM products, such as the Risk profile of the Volta Basin and the Interpretation of Meteorological and Hydrological Bulletins. Other presentations included an introduction to GMet Marine and Inland Waters Forecasts products, the Climate Atlas and the 2024 Seasonal Forecast for Ghana. Participants got the opportunity to try hands-on exercises on drafting multi-hazard bulletins and public weather forecast products.

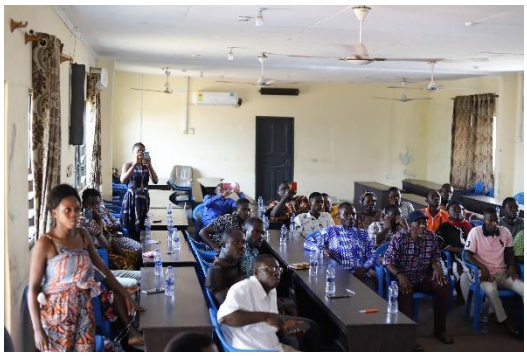


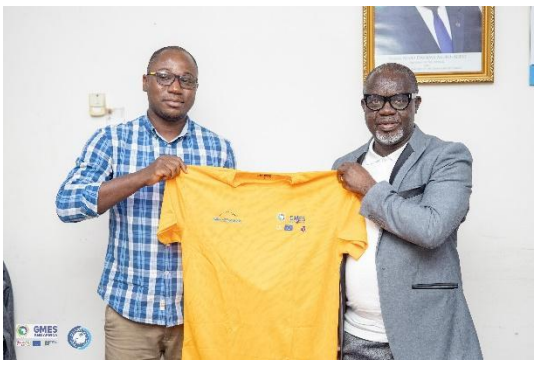
c. MARINE WEATHER DISSEMINATION WORKSHOP FOR COASTAL COMMUNITY CENTRE OPERATORS

On December 28, 2023, the Agency organized a training workshop for community information centre operators on the dissemination of marine weather and ocean state information along the Eastern Coast of Ghana (Volta, Ada, Tema, Nungua, Chokor and James-Town). The workshop aimed to enhance the capacity of information centre operators in effectively communicating marine weather forecasts and ocean state information to coastal communities.

Following the success of the workshop on the Eastern Coast, a similar training workshop was conducted on January 19, 2024, for community information Center operators along the Central and Western Coast of Ghana (Elubo, Axim, Sekondi-Takoradi, Winneba, Shama and Saltpond. The objective remained the same to improve the dissemination of marine weather and ocean state information in these regions.





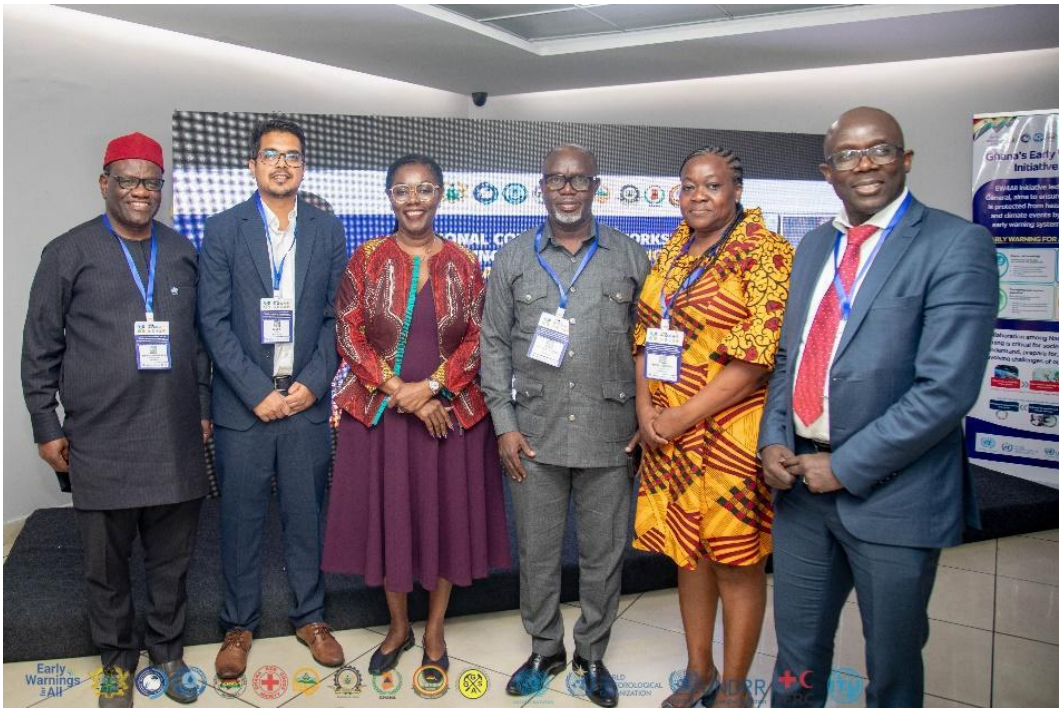



c. Ghana Launches Early Warning for All Initiative to Enhance Climate Resilience

In a significant stride toward enhancing climate resilience, the Early Warning for All (EW4All) initiative was launched on October 29, 2024, in Accra, hosted by the Ghana Meteorological Agency and its partners. Supported by international collaborators, including the UN, WMO, UNDRR, IFRC, and ITU, this initiative aims to strengthen Ghana's preparedness for climate-related hazards. Built on four key pillars—Disaster Risk Knowledge, Observations and Forecasting, Dissemination and Communication, and Preparedness to Respond—EW4All seeks to ensure that all communities receive timely and actionable information for effective disaster response.

Hon. Ursula Owusu-Ekuful, Minister for Communications and Digitalization, emphasized the critical role of Multi-hazard Early Warning Systems (EWS) in reducing vulnerability and increasing community resilience. She stated that an effective multi-hazard early warning system must be accessible and inclusive for all segments of society, ensuring that no one is left behind. The launch of the EW4All initiative represents a milestone for Ghana in reinforcing Multi-hazard Early Warning Systems through anticipatory action and resilience. Hon. Ursula Owusu-Ekuful reaffirmed the country's commitment to building a resilient nation, urging collective efforts to ensure that every Ghanaian is protected by early warning systems.

Dr. Eric Asuman, Director-General of the Ghana Meteorological Agency (GMet), highlighted the importance of accessibility and inclusivity in EWS. He noted that strengthening early warning systems is vital for protecting lives and livelihoods, reducing economic losses, and supporting the sustainability of development goals. Mira Togobo, representing the UN Resident Coordinator, emphasized the need for collaboration among various stakeholders, urging everyone to avoid working in silos and build synergies with ongoing initiatives to prevent duplication of efforts. She articulated that early warnings are not merely messages; they serve as essential tools for preserving life, protecting livelihoods, and sustaining development.

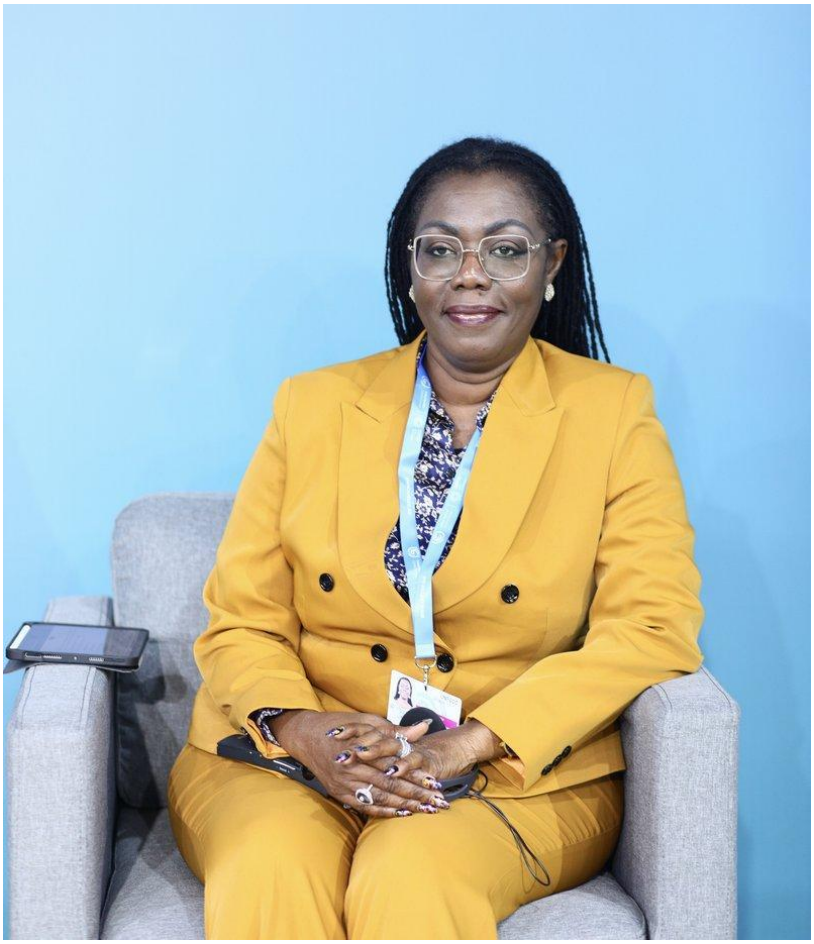


e. COP 29: Ghana Urges Global Cooperation to Enhance Climate Resilience in Africa.

At a COP29 side event hosted by the Ghana Meteorological Agency (GMet) in collaboration with the African Union Commission (AUC) and the African Ministerial Conference on Meteorology (AMCOMET), Ghana emphasized its commitment to strengthening early warning systems for climate-related hazards across Africa. The event, held on November 12, 2024, at the AUC pavilion in Baku, Azerbaijan, marked the launch of the implementation and resource mobilization plan of the African Integrated Strategy on Meteorology, a crucial step towards enhancing meteorological services across the continent.

Hon. Ursula Owusu-Ekuful, Ghana's Minister of Communications and Digitalization, who also serves as the 2nd Vice Chair of AMCOMET, delivered a compelling address on the urgent need for enhanced support for National Meteorological and Hydrological Services (NMHSs) in Africa. She stressed the importance of improving weather, water, and climate-related early warning systems to protect lives and livelihoods across the continent. The event was graced by the presence of several key figures, including Prof. Celeste Saulo, Secretary-General of the World Meteorological Organization (WMO), H.E. Josefa Sacko, African Union

Commissioner, and Hon. Mike Elton Mposha, Minister of Green Economy and Environment of Zambia and AMCOMET 1st Vice Chair.

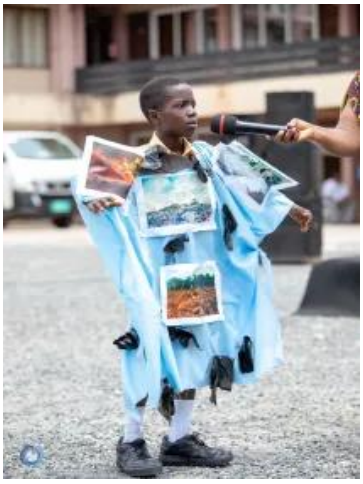


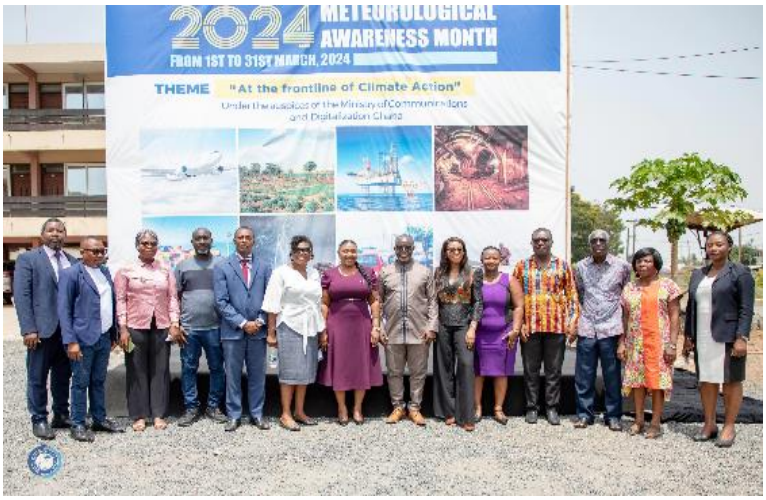
3.1.5 ADVOCACY

The following are activities undertaken to enhance the Agency's engagement with the public to highlight and educate them on the essential role of meteorology and impact of climate change.

a. Weather Kids Initiative

On Thursday, 21st March, 2024 the Ghana Meteorological Agency joined the rest of the world to mark the 2024 World Meteorological Day – with a special focus on the Weather Kids Global Campaign. The Weather Kids initiative is a global campaign introduced by the World Meteorological Organization and the UNDP to give a voice to young people who are most vulnerable to climate change. At the main forum organized at the Headquarters of the GMet, students from Pentecost Preparatory School, Grace Preparatory School, PRESEC Staff Basic School, Seventh Day Adventist School and Evangelical Presbyterian School demonstrated their knowledge and understanding of climate change through poetry, drama, drum appellations, and choreography. Prior to the main forum selected students presented the morning weather forecast on National Media houses including Ghana Broadcasting Corporation, 3FM, Homebase TV, Kantanka TV and Radio Universe.





b. National Framework for Climate Services

The Ghana Meteorological Agency with support from the USAID Policy LINK Feed-the-Future initiative held a National Dialogue on Ghana's National Framework for Climate Services (NFCS) on Wednesday, 27th March 2024 at the Alisa Hotel in Accra.

The event drew participants from Industry, state institutions, Academia, Non-Governmental Organizations and the Media who were engaged in a group discussion on how stakeholders could collectively work to mainstream the Framework into the operations of ministries, departments and agencies (MDAs) and other private sector organizations.

The National Framework for Climate Services in its implementation will serve the following purposes.

- As an Institutional platform, it will coordinate, collaborate and co-produce across line ministries at national and sub-national levels.

- As a Legal Framework: it will collaborate to generate and share user-oriented Climate Services for relevant social and economic sectors.

- As a tool for bridging gap between available climate services and user needs, continuously identifying user needs for climate services.

- For Scientific Coordination, it will synthesize state of the climate at national level, and distil climate knowledge outputs for policymaker actions.

- Operational Bridge, between climate research, National Meteorological and Hydrological Services and other relevant national institutions.

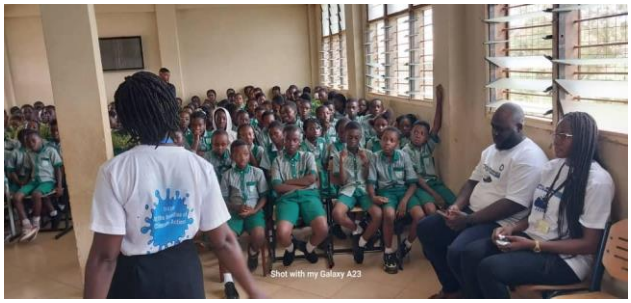
- Lastly it will link to climate action and maximize the application of climate information and products.

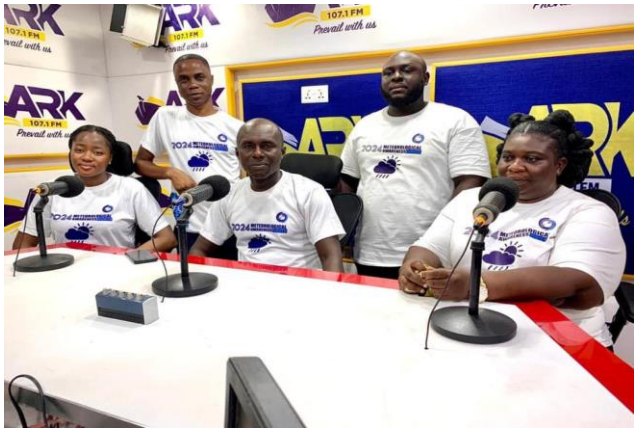
c. Regional And District Engagements

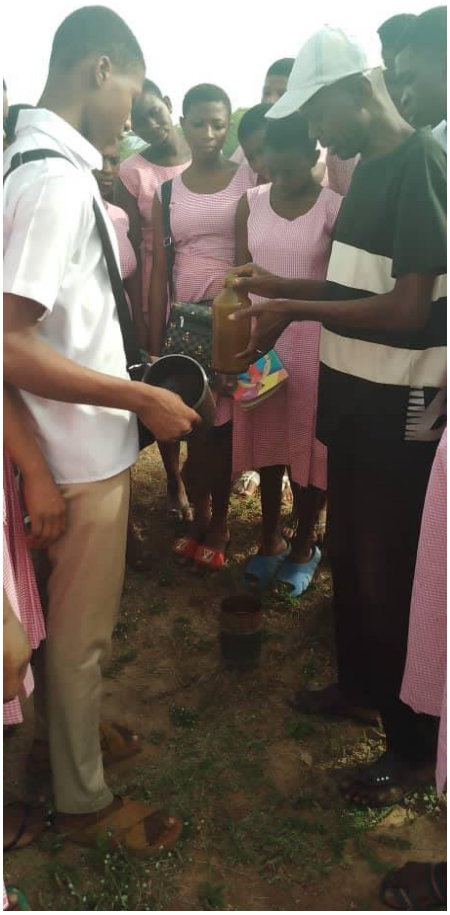
Staff of both the Regional and District offices embarked on an educational outreach in their respective regions and districts as part of efforts to commemorating World Meteorological Day.

Pupils of Primary and secondary education were allowed into GMET's enclosures to introduce the activities of the Agency to them and also had an interactive session on the importance of Meteorology.

The students were taken through the processes of weather observation, coding, forecast analysis and dissemination. They also took turns to ask questions and receive clarifications on what they had studied in class.







d. Stakeholder Engagement

As part of the stakeholder engagement strategy, the agency engaged with the farming community through a series of activities aimed at improving understanding and communication in April 2024. This included engaging agricultural extension officers, media representatives, and farmer groups. The focus was on sharing valuable information and insights related to climate forecasts and their implications for farming practices, fostering better preparedness and decision-making among stakeholders in the agricultural sector.

e. Volta Basin Flood and Drought Management (VFDM) Project

The Volta Basin Flood and Drought Management (VFDM) Project, which concluded in June 2024, was a collaborative effort involving the Ghana Meteorological Agency, Ghana Hydrological Authority, Water Resource Commission, WMO, Volta Basin Authority (VBA), and Global Water Partnership in West Africa (GWP-WA). Funded by the Adaptation Fund, the project aimed to integrate flood and drought management with early warning systems to adapt to climate change in the Volta Basin. It focused on improving national responses to these hazards through enhanced coordination among hydrometeorological services, disaster risk management authorities, and other stakeholders at both national and sub-regional levels. Key accomplishments included organizing three stakeholder workshops in southern Ghana to build capacity on climate services, creating 16 regional WhatsApp groups for disseminating flood and drought information, and training 500 stakeholders, including media personnel. The project also co-developed a bulletin template, issuing 22 flood bulletins and monthly drought bulletins since May 2024 via the VOLTALARM platform. Additionally, it hosted a workshop on Urban Flash Flood Forecasting System (UFFFS) and developed a tutorial video. By addressing gaps in flood and drought information and engaging diverse stakeholders, the VFDM project aimed to enhance disaster risk management and mitigate the impacts of hydrometeorological hazards in the region.

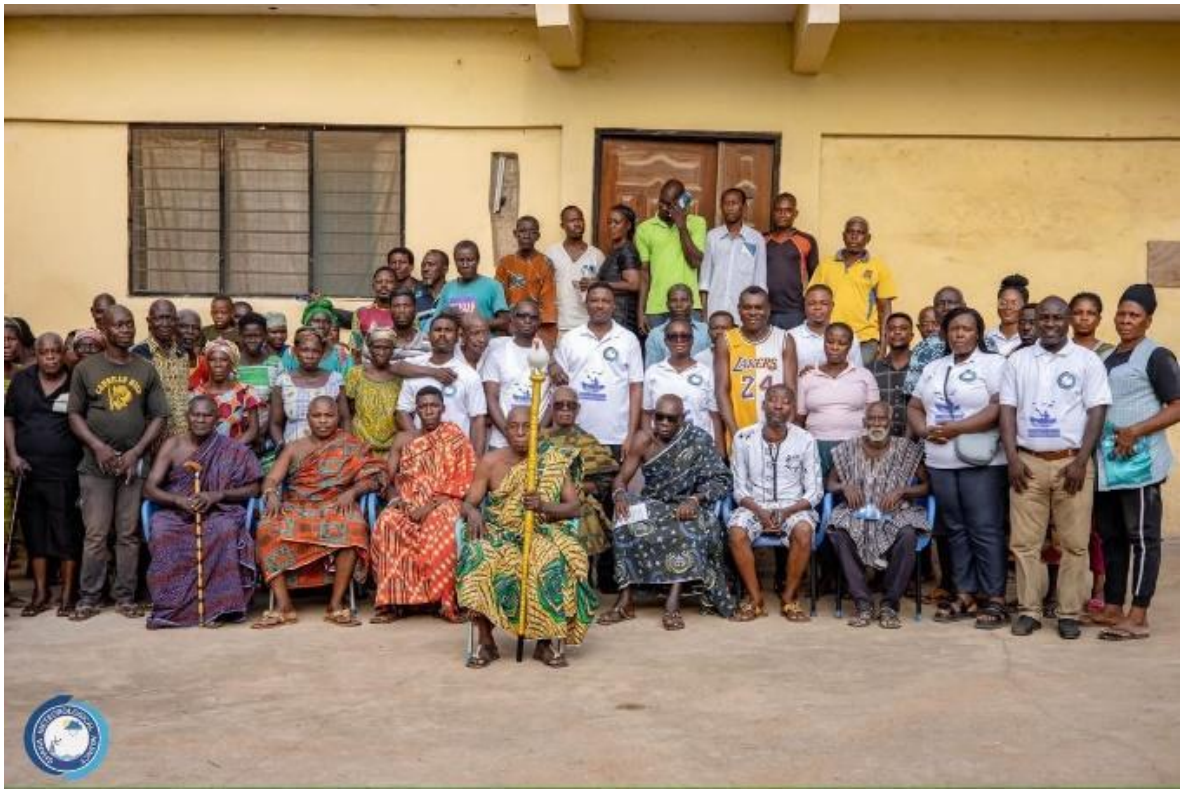
Figure 11: Pictures of participants at the Volta Basin Flood and Drought Management (VFDM) Project

Ghana Meteorological Agency Launches Maritime and Inland Water Safety Education across the country.

On Tuesday, 16th July, 2024 the Ghana Meteorological Agency (GMet) began a five-day community engagement tour to educate fisherfolk in Mepe and Ada on maritime and inland water safety. Led by Mr. Joseph Tetteh Portuphy, Deputy Director of Synoptic Meteorology and Forecasting, the GMet team conducted interactive sessions, demonstrations, and practical training on essential safety measures. Fisherfolk from both communities actively participated in sessions covering: Weather forecasting and warning signs, Safe navigation and emergency procedures and Forecast verification The fisherfolk expressed gratitude for the timely intervention, recognizing the importance of safety awareness in their daily lives, and requested more indigenous methods of forecast dissemination. The GMet team committed to continuous support and monitoring to ensure the communities' newfound knowledge translates into lasting change. This initiative by the Ghana Meteorological Agency highlights its commitment to promoting maritime and inland water safety, reducing accidents, and fostering a culture of safety along Ghana's waterways.

On Thursday, 18th July, 2024, continued its community outreach tour, educating fisherfolk in Abotoase on Maritime and Inland Water Safety. The team provided interactive sessions and practical training on Weather forecasting and warning signs, Safe navigation and emergency procedures and Forecast Verification Approved Dissemination Channels The GMet team paid a courtesy visit to the Paramount Chief of Tapa-Abotoase, Okofrobour Baffour Kwame Asante II, paying homage to his leadership and wisdom. The Chief expressed his appreciation for the agency's efforts in promoting maritime safety and pledged his support for the initiative. The Abotoase community welcomed the initiative, actively participating in the sessions and demonstrating a strong commitment to adopting safety best practices and adhering to the Forecast.

The Dzemeni community commended the GMet team, for their dedication and expertise in promoting maritime safety. The team's interactive approach and practical demonstrations made a lasting impact on the participants. The team admonished the fisherfolk to be on the lookout for the validity, the forecast area, weather summary, it’s impact and livelihood as and when they receive the forecast. The agency's commitment to maritime safety aligns with its mission to protect lives and properties



Summary of Achievements

S/N	Policy Objective	2024 Target/Achievement	Start Date	Baseline As of Dec. 2023	Implementation As Of 2024	Outcome
1	Expansion of infrastructure & logistics	Install 20 Automatic Weather Stations	October. 2024	17 installed	Completed	Improved data collection and forecasting
2	Improve revenue generation	Engage Parliamentary group to enforce GCAA's compliance to GMet Act	September, 2024	None	Completed	Assurance of action by the Parliamentary Select Committees.
3	Enhancing Human Resource Capacity	Organize compliance training for 65 staff – CMT, RMOs, DMOs, Sectional Heads	January, 2024	None	Completed	Knowledge of operational activities improved.
		Organize training for 200 staff to improve their forecasting techniques	February, 2024	101 trained	Completed	New forecasting techniques introduced.
		Organized training for 40 staff to improve aeronautical forecasting	September, 2024	3 trained	Completed	Forecasting techniques improved
		Organize training for 10 engineering staff in calibration services	December, 2024	2 trained	Completed	Improved ability to offer calibration services

s/n	Policy objective	2024 Target/achievement	Start date	Baseline as of Dec. 2023	Implementation as of 2024	Outcome
4	Improving Service Delivery	Strengthen partnership with Danish Meteorological Institute through a Strategic Sector Cooperation agreement	January, 2024	None	Completed	Created opportunities for capacity-building and knowledge transfer
		Strengthen collaboration with Ghana Ports and Harbours Authority to improve Marine Meteorological Service Delivery	September, 2024	None	Completed	Increased understanding of organizational roles and areas of collaboration
		Digitalize GMet operations through retooling for service delivery	October, 2024	None	Completed	Improved workflow and working environment
		Partner Ivorian Meteorological Services in critical operational areas	November, 2024	None	Completed	Improved collaboration and knowledge sharing
5	Promoting effective disaster prevention and mitigation	Host PRESSAG to present the seasonal climate outlook for the main rainfall season in the Gulf Guinean Region	February, 2024	None	Completed	Seasonal forecast presented
		Organize stakeholder engagement and training on VOLTALARM	June, 2024	None	Completed	Stakeholders trained for early action
		Organize workshop for coastal communities on marine weather services	January, 2024	None	Completed	Improved understanding of marine forecast
		Launch Early Warning for all initiative in Ghana to enhance climate resilience	October, 2024	None	Completed	Blueprint developed for early action in Ghana.

s/n	Policy objective	2024 Target/achievement	Start date	Baseline as of Dec. 2023	Implementation as of 2024	Outcome
6	Advocacy	Introduce Weather Kids Initiative	March, 2024	None	Completed	Climate and weather information introduced to young children for early action.
		Launch National Framework for Climate Services	March, 2024	Consultative workshops organized	Completed	Blueprint developed to harmonize climate and weather services delivery
		Organize farmer group engagement across the country	April, 2024	Engagements organized	Completed	Climate and weather information offered to improved planting and food security
		Organize inland water and marine safety education	July 2024	None	Completed	Marine education offered to reduce marine disasters