Bennet Atsu- Foli
Marine Scientist, GMES and Africa, University of Ghana
GMES and Africa Marine Weather Early-warning Services in West Africa in Support of Africa’s Blue Economy Agenda

Mr. Bennet Atsu Foli
(EO Officer, UG-GMES)
Introduction

- Marine artisanal fishing is a major contributor to GDP in West Africa
  - Mainly rely on traditional knowledge to
    - Navigate
    - Locate fish
    - Detect the weather at sea
    - No communication equipment at sea
Introduction

• Inability to access accurate and timely information on ocean condition prior to their fishing expeditions.
  • Weather highly variable in recent days (climate change)
  • Need scientific and reliable source of information (timely)
  • The need for early warning
Provision of Ocean State Early-Warning Information to Artisanal Fishers

- Ocean state early-warning services introduced under MESA programme in 2014
  - 14 coastal West African countries
- Service consolidated into GMES phase-1
  - 12 coastal West African countries
- Migrated to GMES phase-2
  - 18 coastal countries in West and North Africa
- Early-warning alerts generated from data obtained from the Copernicus Marine Environment Monitoring Service (CMEMS)
Objectives

- **Support the safety of fishermen** and other marine operators at sea by providing accurate and timely information on ocean conditions.

Regional priorities

- Maritime Security and Safety at Sea
  - Article 4, section b and Article 29 of the LOMÉ CHARTER (AFRICAN CHARTER on Maritime Security and Safety and Development in Africa)
  - UN SDGs
  - African Integrated Maritime Strategy (AIMS)
  - ECOWAS Integrated Maritime Strategy (EIMS)
  - The Abidjan Convention
  - Sendai Framework
  - UNCLOS
  - International convention for the safety of life at sea (SOLAS)
Regional Coverage

Marine & Coastal Areas Management in North and West Africa (MarCNoWA) Consortium

6 Countries from North Africa

- Algeria
- Egypt
- Libya
- Morocco
- Tunisia
- Mauritania

12 Countries from West Africa

- Benin
- Cape Verde
- Cote d’Ivoire
- Gambia
- Ghana
- Guinea
- Guinea Bissau
- Liberia
- Nigeria
- Senegal
- Sierra Leone
- Togo
Accessing the Early-Warning Alerts

• Download the GMES-UG mobile app from Play Store on android phone
  • or UG-GMES on IOS.

Go to Play Store and type GMES-UG in the search section.

Install the app
Accessing the Early-Warning Alerts

Open the App

Tap here to continue

Back to Welcome page

App Services

About the App and GMES sponsors and partners.
Accessing the Early-Warning Alerts

Tap this section to access maps of ocean state forecasts

Ocean state forecast map
Legend
Select forecast date
Accessing the Early-Warning Alerts

Tap this section to access ocean state forecasts alert as text for specific country.

Select forecast date

Ocean state forecast message in 3 languages (English, Portuguese and French)

Tap to select your country
Accessing the Early-Warning Alerts

Tap to select your country
Mobile USSD Service

• Dial a short code to access forecast.

• *920*88# for Ghana

• *348*87# for Nigeria
Value Addition to the Ocean Weather Service

- Addition of rainfall information to ocean state early-warning
- Service extension from West Africa to North Africa
- Extension of USSD services to other countries
- Dial-in services with voice over in local languages for USSD service
- In-situ data collection for model validation

Usage of the USSD Service

USSD Monitoring Dashboard

Global Monitoring for Environment and Security

USSD Sessions

Total Sessions: 6,173
Today Sessions: 410

PHONE NUMBER: 233257925467
DATE: Aug 26, 2022 at 01:05 AM
Field campaigns organized by GMet and the Regional Marine Centre
I just received a sad news from Liberia of four fishers dying due to bad weather which resulted in an accident at sea,

Whilst we mourn the lost we are encouraged to keep up with the sensitization on safety at sea.

We can only be grateful to GMET, GMES and all the partners for the information provided to us.

We look forward to supports from partners to enhance the process

In our situation where insurance is absent, we have embraced the ocean state information that we received, and making it part of our fisheries

Thank you too. A lot of Ghanaians have come to appreciate the forecasts from GMET and GMES and we will share as given to us

So sorry. There are plans with GMET to train other Meteo agencies in west and North Africa who need help in that field. Additional efforts are being made for Liberia to get the USSD code as well and

Is it possible to have voice messages as it is with the customer care call lines of the mobile networks
To achieve the Blue Economy agenda, it is important to address issues of safety at sea, also for artisanal fishers.

To achieve efficiency of marine weather services usage, there is:

- The need for Meteorological Agencies to be involved
- The need for adequate and consistent community engagement
- The need for simplicity
- The need for continuity ...
  - in providing **timely** forecast information
  - in creating **awareness**
  - in supporting this initiative to **protect life and property**
- The need for feedback

**Conclusion**
Appreciations

We are grateful to ...

• European Commission
• African Union Commission
• GMES & Africa programme
• All our partners