



WORLD  
METEOROLOGICAL  
ORGANIZATION



2024 EVENT - INTERNATIONAL TRAINING COURSE

## EWAfrica: Enhancing Early Warnings for Climate and Weather Extremes

Supporting the Early Warnings for All Action Plan for Africa

*Two-Week Course, Italy*

### Overview

Africa grapples with severe climate challenges—floods, droughts, cyclones, storms, and heatwaves—impeding socio-economic progress. From 1970 to 2021, Africa accounted for 35% of global weather-related fatalities, yet only 40% had access to Early Warning Systems (EWS), a global low.

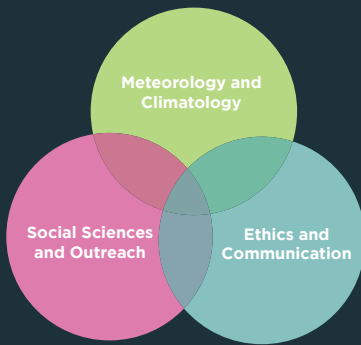
The **World Meteorological Organization's** 2022 report highlights socio-economic impacts, emphasizing the urgent need for effective early warning systems. These systems yield a 30% damage reduction with just 24 hours' notice.

The **Early Warnings for All Action Plan for Africa**, part of the Early Warning for All Initiative, unveiled in Nairobi on September 4, 2023, aims to safeguard lives and livelihoods. Focused on monitoring, capacity building, communication, and community engagement, it enhances disaster preparedness, increases awareness, and fosters regional cooperation.

### Goal and Aim

Strengthen knowledge and technical expertise to establish Multi-Hazard Early Warning Systems (MHEWS) in participants' respective countries and regions, addressing local needs within a robust global scientific framework. The training course caters to the learning needs of National Meteorological and Hydrological Services (NMHS) and Disaster Risk Management (DRM) agencies, focusing on co-designing multi-hazard, people-centered, and impact-based EWS in Africa. Each course pillar addresses specific learning topics that promote collaboration, partnership, inclusion, interoperability, and transdisciplinary approaches.

Support the implementation of the Early Warnings for All in Africa Action Plan by building capacities of NMHS and other agencies involved in early warning of climate and weather-related risks. This involves addressing key topics related to the principles of MHEWS and the four pillars of EW4ALL (Early Warning for All).



## WHAT ARE THE REASONS TO ATTEND THIS COURSE?

Participants will improve their knowledge and technical capabilities in the design and set-up of MHEWS in their own countries and regions, responding to local needs within a global and robust scientific framework. The training course will provide participants with knowledge through best practices and key studies on methods, approaches and ethical implications to respond to some of the main challenges in implementing MHEWS.

## Key Topics

### Principles of Multi-Hazard EWS

Key components of global risk reduction, EWS face implementation challenges. A robust legislative framework is vital, establishing rules for roles, responsibilities, and processes. This ensures alignment with national disaster risk management strategies and upholds human rights. Emphasizing a people-centered, impact-based approach, the principles include partnership, monitoring, evaluation, and ethical considerations for just and equitable MHEWS development and implementation.

### Disaster Risk Knowledge and Management

Multi-risk assessment, encompassing social, environmental, economic, political, and ethical aspects of vulnerability to various climatic hazards.

### Preparedness and Response Capabilities

Inclusive contingency planning, training, and awareness-raising among local communities, including the integration of indigenous knowledge. This aims to enhance community involvement in early warning systems, focusing on response capability and equality.

### Observations, Monitoring, and Forecasting

Monitoring and forecasting multiple hazards, whether occurring simultaneously or cumulatively over time, across various spatial scales (from regional to local, transboundary) and temporal scales (seamless from nowcasting to seasonal). This involves utilizing open standards and platforms for data and information sharing, ensuring interoperability and employing distributed systems to enhance the monitoring and forecasting capacities of climate and weather-related parameters.

### Dissemination and Communication

Inclusive communication campaigns, emphasizing the ethics of warning communication (non-exclusivity, inclusion of disadvantaged groups, etc.). This involves integrating digital technology and traditional social networks, along with collaboratively defining comprehensible warning messages with communities. The goal is to enhance the establishment of robust and diversified communication strategies for disseminating early warnings to all.

The course is still in the planning phase, with anticipated implementation in 2024.

## Organizers

The course is co-organized by Italian Air Force Meteorological Service, World Meteorological Organization Regional Training Center in Italy in collaboration with the Sant'Anna School of Advanced Studies and the Center of Excellence in Telesensing of Environment and Model Prediction of Severe Events of the University of L'Aquila in Italy.

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