

# Strengthen Early Warning System and Climate Services Eswatini

## THE PROJECT

The project provides for the strengthening of the national weather forecasting and warning system through: the installation of 10 new meteorological stations in sites identified by the Department of Meteorology, and 8 hydrometric stations in sites identified by the Department of Water, (both departments are part of the Ministry of Tourism and Environmental Affairs of Swaziland); the provision of advanced meteorological and climate forecasting systems to the Department of Meteorology; the adoption of a CAP, (Common Alerting Protocol) platform at national level.

## BACKGROUND

The Kingdom of Eswatini Meteorology Department was established in 1992. It has 38 hydrometric stations and 83 meteorological stations. First-rate climate and meteorological services are recognized as a priority to enable better management of climatic events, for the benefit of populations and economic activities.

## OBJECTIVE

Improving meteorological observation and forecasting systems, reducing the vulnerability of the territory to extreme climatic events linked to climate change.

## PLANNED ACTIVITIES

- Tenders for the purchase and installation of 10 meteorological stations, 8 hydrometric stations and relative installation; application of sensors to upgrade some of the existing weather stations; training of local personnel aimed at the use and maintenance of the systems.
- Tender for the acquisition and installation of technologies for high performance computing and installation of numerical weather prediction systems, (Numerical Weather Prediction system - NWP), at the Department of Meteorology.
- Analysis of training needs through workshops, focus groups and interviews and training of Meteorology Department personnel on the CAP protocol, elaboration and adoption of a CAP platform at national level; test of the Cap protocol through simulation and raising awareness of the population via web, newsletters, brochures, workshops and publications.
- 6-month training aimed at 2 technicians of the Meteorology Department, by the external provider, on the use of the RegCM4 system of climatic forecasts.

## SUBJECTS

### Promoters:

- Ministry of the Environment and Energy Security (MASE)
- Ministry of Tourism and Environmental Affairs of Swaziland (MTEA)

### Actuators:

- Ministry of Tourism and Environmental Affairs of Swaziland (MTEA)
- UNDP – Center on Climate Change and Sustainable Development for Africa
- ENEA

## DURATION

November 2018 – June 2023

## TOTAL COST OF THE INITIATIVE

€ 970,880

Lender: MASE

## CONTRIBUTION TO

➡ [NDC Swaziland](#): Strengthen the skills of weather alert centers to improve emergency preparedness and capacity to respond to environmental risks and disasters.

➡ [2030 Agenda](#): Goal 13 – Climate Actions.

## OUTPUT

- 10 meteorological stations and 8 hydrometric stations installed, and personnel trained on their use.
- Numerical model for weather forecasts in use at the Department of Meteorology in Mbabane, capital of Eswatini.
- Nationally adopted Common Alerting Protocol, (CAP), platform.
- 2 technicians from the Swaziland Department of Meteorology trained on the use of the RegCM4 system.