

LESOTHO

Early Warning Climate Forecasting
2019-2023

Supported by the
Least Developed Countries Fund



SUSTAINABLE DEVELOPMENT GOALS



Increasing food security by developing an Early Warning System (EWS) to anticipate severe weather-related disasters to help 900,000 individuals to adapt



Achieving gender balance in the selection and participation of the EWS trainees, including a public awareness campaign with training of trainers for at least 10 district community leaders



Reducing climate-induced loss and damages by 50% for half of the 78,000 people living in the target communities, while installing 73 new pieces of weather and climate monitoring equipment

PROJECT TITLE:

STRENGTHENING CLIMATE SERVICES IN LESOTHO FOR CLIMATE-RESILIENT DEVELOPMENT AND ADAPTATION TO CLIMATE CHANGE

EXECUTING ENTITY:



Lesotho Meteorological Services

KEY TARGETS:

900,000

individuals benefitting from community-based early warning services

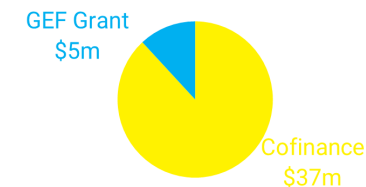
73

Weather monitoring equipment installed, including rain gauges and Agromet stations

45

Newly trained agro-meteorologists, forecasting officers, and early warning technicians

FUNDING:



PROJECT PARTNERS:

Ministry of Energy and Meteorology; Ministry of Agriculture and Food Security; The National University of Lesotho; Ministry of Water, Ministry of Tourism Environment and Culture; European Union; The World Bank, Monitoring of the Environment for Security in Africa project.



INTRODUCTION

- The Kingdom of Lesotho is a landlocked territory in southern Africa with a population over 2 million.
- This project is reducing the vulnerability of agriculture, water systems, and livelihoods to climate change impacts across the country by establishing new Early Warning Services (EWS) and scaling up existing EWS. EWS is an adaptive measure for climate change, using integrated communication systems to help communities prepare for hazardous climate-related events.
- Other approaches of the project involve training activities in climate data analysis, GIS techniques, and sustainable water management.
- This project is the 2nd phase of an earlier project that ran from 2011-2017, also funded by the Global Environmental Facility.

TECHNOLOGIES & METHODS

- The project is strengthening **early warning services** in Lesotho to improve climate adaptation.
- To achieve this goal, the **repair and upgrade** of existing climate monitoring equipment is required. In addition, the project is **installing new meteorological equipment**, including synoptic stations, automatic rain gauges, and Agromet stations. This equipment helps with the collection of climate data and information.
- To ensure sufficient **human resource capacity** to sustainably operate this equipment, project funding will facilitate the **training and capacity development** of additional agro-meteorologists, forecasting officers, senior technical officers, and GIS and IT operators/technicians.
- A strong training and capacity programme is being developed for **climate 'downscaling'**,

CLIMATE IMPACTS

- Climate change impacts Lesotho through increased frequency and intensity of droughts, heavy rainfall, snowstorms, and flash flooding.
- This affects the country's development and in particular the development of the agricultural sector, impacting rural communities who depend mainly on rainfed agriculture and livestock farming.
- The challenge is exacerbated by other environmental stresses, such as land degradation, deforestation, and desertification, which result in the drying up of wetland and mountain ecosystems, and a loss of biodiversity and natural resources that rural livelihoods depend on.
- The country's complex topography also enhances these risks and increases the intrinsic vulnerability of the communities and their livelihoods.

which involves breaking down large-scale regional weather forecasts into more specific locations, enabling much higher accuracy and precision.

- An **awareness-raising programme** on climate change risk is being designed and implemented to enhance decision-making at all scales.
- Climate change **risk mapping activities** will be carried out in 6 districts and disseminated to raise awareness and support for EWS.
- To better manage and share the climate information gathered by the project, a **Climate Change Information Platform** is under development.
- The project is also using and building on **needs assessments and baseline studies** conducted under the previous Phase I project.

PROJECT LOCATION



The project is being implemented in 6 districts of Lesotho.

- The project is designing and implementing pilot **community-based EWS** in at least 6 communes, which should reach a total of around 900,000 people.

CONTACTS

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