

STRENGTHENING CLIMATE INFORMATION AND EARLY WARNING SYSTEMS FOR CLIMATE-RESILIENT DEVELOPMENT AND ADAPTATION TO CLIMATE CHANGE - ZAMBIA

CIRDA PPP Workshop
Kampala, 3 March 2015

Project objective and outcomes

- **Project objective:** To strengthen the climate monitoring capabilities, early warning systems and available information for responding to climate shocks and planning adaptation to climate change in Zambia
- **Outcome 1:** Enhanced capacity of Zambia Meteorological Department (ZMD) to monitor and forecast extreme weather and climate change
- **Outcome 2:** Efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans

Zambia CIEWS project - Achievements to date

Date	Achievement
April 2014	Project inception workshop held
April 2014	30 computers purchased for manual weather stations, to facilitate electronic submission of weather data
June – August 2014	Project staff recruited
September – October 2014	Introductory visits undertaken to pilot districts for two-way community based early warning systems
November 2014	ZMD awareness-raising workshop on the CIEWS project held
December 2014	Microsoft 8 and Excel training conducted for meteorological assistants
December 2014	Refresher training for senior meteorological assistants and training in introductory meteorology for agricultural extension officers conducted
January 2015	CIEWS National Task Team convened, with representation from all partner institutions
January 2015	12 ZMD staff sponsored for weather forecasting diploma programme at Zambia Air Services Training Institute
February 2015	CIEWS project facilitated ZMD's participation in the African Ministerial Conference on Meteorology

Zambia CIEWS project - Challenges and constraints

- Protracted procurement processes delay project implementation.
- Meteorology is a scarce skill in the country, make it difficult to source qualified staff and local consultants.
- Community engagement has to be suspended during the rainy season, as farmers are often too busy to attend community meetings.
- There is insufficient manpower, ICT access and/or transport to obtain data from all rainfall stations.

Zambia CIEWS project – Next steps

- Procurement and installation of 28 Automatic Weather Stations across the country
- Rehabilitation of all 39 manual weather stations in the country
- Development and implementation of CIEWS communication strategy
- Sponsorship of ZMD staff for higher education in meteorology and climatology
- Establishment of two-way community-based EWS in 3 pilot districts

Zambia Meteorological Department – Current Partnerships

- MoU with MicroEnsure on weather index based insurance - utilization of weather data to develop smallholder farming policy schemes. MoU approved by Ministry of Justice and awaiting Permanent Secretary's signature.
- MoU with the National Remote Sensing Centre to enhance ZMD's capacity in applying GIS and remote sensing tools for production of enhanced climate products and services.
- Partnership on drought early warning system and adaptation technology with the Chinese Ministry of Science and Technology, including support to the production of 10-day crop weather bulletins during the rainy season.
- Participation in the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL)

Conclusion

- Further efforts are to be made to ensure the sustainability of meteorological services in Zambia, e.g. establishing PPPs with mobile service providers for hosting of weather sensors and dissemination of adverse weather warnings.
- The current Meteorological Bill proposes that the Zambia Meteorological Department should be permitted to introduce marketable products and services, enabling it to generate the finance needed to improve and expand its operations.