

RISK REDUCTION MANAGEMENT CENTERS INCREASE THEIR ACTION IN EARLY WARNING SYSTEM



Conceptualization of RRMCC

The Cuban model of Risk Reduction Management Centers (RRMC) emerged in 2004 from a pilot project, proposed to strengthen the capacity of risk management at a local center complemented by Points of Early Warning (EWP) acting in the stage of community warning. After ten years, this model has matured and has spread in the country, reaching 101 centers for management and 310 EWP; currently it exceeds the limits of the island to reach five Caribbean countries and a municipality of Chile through South-South Cooperation.

In Cuba, the RRMCC dealing with the collection and sorting of the study's results on territorial risk, facilitates the organization and implementation of measures for disaster management, and promote the perception of risk in the population. The Risk Reduction Management Center fully manages information on risks and disasters in order to assist the decision-making by local authorities. On the other side, the EWP has the mission to transmit the monitoring mission to RRMCC and, simultaneously, be sufficiently trained to serve as first responders, provide information about the situation to the population and communicate the measures to be taken.

RRMC increase their function on EWS

Under the project "Strengthening of the Hydrometeorological Early Warning System to increase disaster preparedness in the provinces affected by Hurricane Sandy in the eastern region of Cuba", the RRMCC expands its scope and wins a role in monitoring, raising its position in the Early Warning System. It is not only a center for analysis, processing information to decision-makers and warning the population, but also now it is part of the monitoring network and together with the Provincial Meteorological Centers contributes to the forecast and the monitoring of extreme hydrometeorological conditions.



Portable weather station installed in the radar in Pilón which completes meteorological coverage in the south of Granma

Installation of portable weather stations in isolated communities

12 portable weather stations (DAVIS type) have been installed under the project and in coordination with Provincial Meteorological Centres, on EWS of vulnerable and isolated communities located in low weather coverage, which are being operated by volunteer scouts.

What problem was solved?

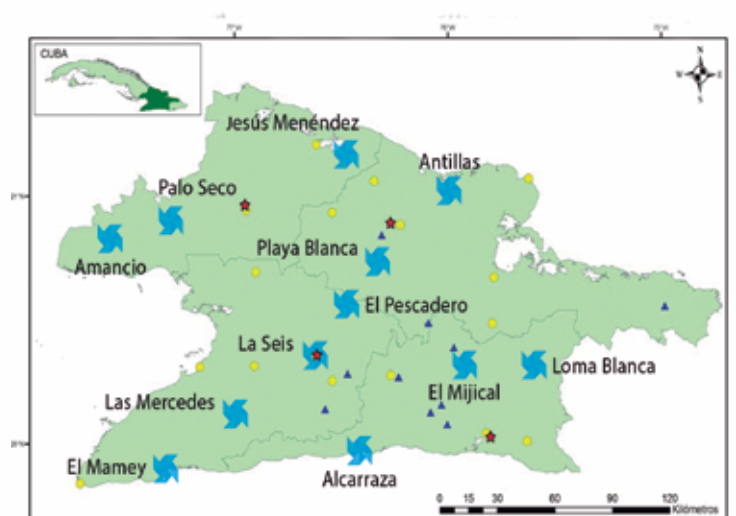
These weather stations, distributed as shown in the map of the eastern region of the country comprising in the project, consider the northern and southern region, which allows performing for the first time, actions of weather monitoring in areas of low coverage of meteorological measurement.

The installed equipment measures and tracks the following variables:

- Temperature
- Humidity
- Amount of acid rainfall
- Atmospheric Pressure
- Precipitation
- Wind speed and direction

The recorded values are communicated to RRMCC to provide effective information to assist the authorities in decision-making and to Provincial Meteorological Center in forecasts.

Early Warning System for Hydrometeorological events



Legend

- Meteorological Stations
- ★ Institutions
- ▲ Hydrological Stations
- ▲ Early Warning Systems
- Centro Meteorológico Provincial
- Centro de Gestión y Reducción de Riesgo
- Centro de Gestión y Reducción de Riesgo Oriente

This material has been made in the framework of the project: **“Improvement of the hydro-meteorological Early Warning Systems to increase disaster preparedness and to reduce vulnerability of the population living in the affected provinces by Hurricane Sandy (Cuba)”**; implemented by the United Nations Development Programme (UNDP) and the Action Plan for the Caribbean from the European Commission’s Disaster-Preparedness Programme (DIPECHO).

Contacts: **Civil Defence Headquarters** | (537) 8640000 - **Meteorological Institute (INSMET, Cuba): Pablo De Varona De Varona** | pablo.varona@insmet.cu - **National Institute of Hydrological Resources (INRH): Argelio Fernández Richelme** | argelio@hidro.cu - **Hazard, Vulnerability and Risk Group (PVR Group), Environment Agency (AMA): Herminia Serrano Méndez** | herminia@ama.cu - **UN Habitat, Cuba: Marilyn Fernández Pérez** | marilyn.fernandez@undp.org - **UNDP, Cuba: Rosendo Mesías González** | rosendo.mesias@undp.org - www.undp.org | www.crimi-undp.org | www.eird.org

Increase in awareness of community risk

Meteorological stations located in the EWP or in social agencies assisted by the EWP, increase the awareness of community risk and risk prevention works. The experience of situating this technology in schools, health clinics and other social buildings was rewarding, and even in resident housing who voluntarily and with great commitment are doing monitoring duties.

The United Nations Development Programme has increased the scope of EWS promoting their majority of age. Under the project, the acquisition of high technology has been propitiated and it has also contributed to the monitoring with simplest equipment in hard to reach places without weather coverage. This action has increased the interest in risks prevention, as it has been evidenced by the movement of volunteer observers and also with circles of interest on meteorology that have been developed in some communities mainly involving children.

Portable weather station installed in the primary school Jesús Rabi where a circle of interest on meteorology works



Installation of a portable weather station on a hydrological station operated by volunteer scouts

Home in El Pescadero, Cacocum where an Early Warning System radicates which increases its action with the installation of the Davis station, operated by volunteer scouts

