

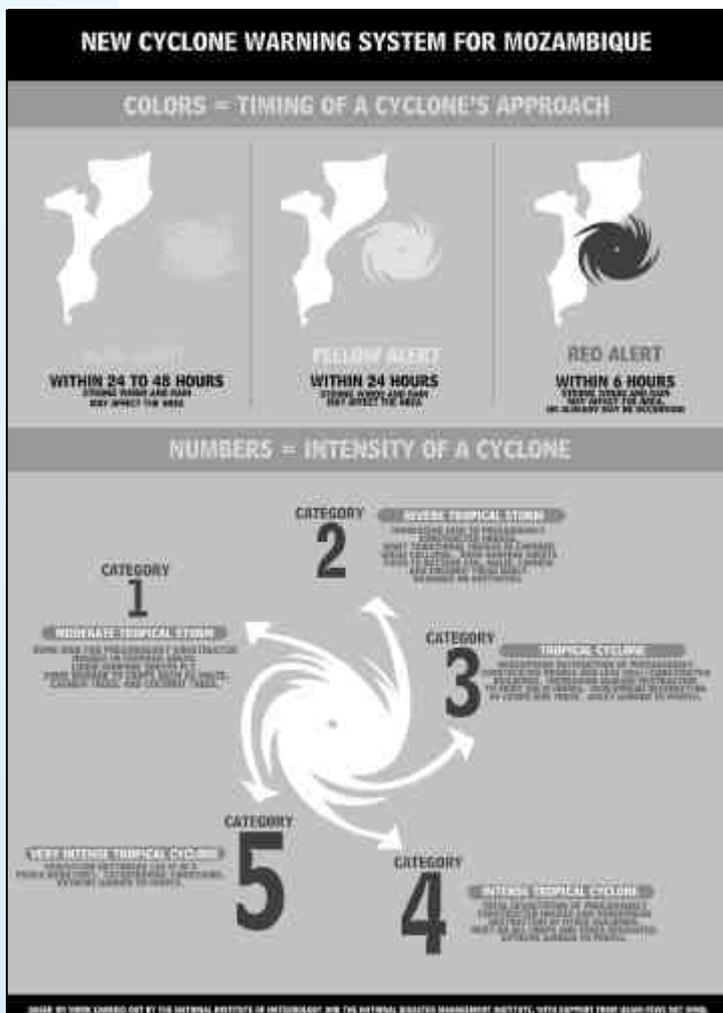


Battling nature in Mozambique

An innovative warning system approach in Mozambique helps raise awareness about cyclones.

Antonio Marvie
National Institute of
Meteorology, National
Institute of Disaster
Management and
USAID/FEWS NET MIND
amarvie@fews.net
www.fews.net

"Machanga, 24 March, 2003 - Julieta... believed she had found a way to exorcise the almost biblical forces of nature which curse the Machanga district of central Mozambique. After repeatedly losing her crops to floods or low rainfall, she had planted drought-resistant sweet potato and millet. Earlier this month, nature fought back. In the first week of March, Cyclone Japhet swept through Mozambique. Its gale force winds and torrential rains left a trail of devastation in their wake, before heading west into Zimbabwe. Worse was to come. Swollen by the cyclone's thick sheets of rain, Zimbabwe's rivers rushed down toward the Indian Ocean feeding into the Save River."¹



Julieta's story illustrates the agony experienced by thousands of Mozambicans whenever a cyclone makes landfall. In the case of cyclone Japhet, 50,000 people in Central Mozambique were left struggling to survive yet another natural disaster.

The Mozambican coast forms almost the entire western perimeter of an active tropical cyclone basin, the South West Indian Ocean (SWIO). An average of one tropical storm or cyclone, and another three or four tropical disturbances, impact Mozambique each year. In February 2000 intense tropical cyclone Eline brought severe floods and high winds which resulted in 700 deaths. In the year 2003 alone, two major tropical storms battered different parts of the country, bringing death and destruction.

Since cyclones can neither be prevented nor controlled, the only practical solution in minimizing their effects is preparedness, including an effective early warning system.

The initiative, "Improving the Tropical Cyclone Early Warning System in Mozambique", was

sponsored by USAID's Famine Early Warning System Network (FEWS NET) Mozambique Integrated Information Network For Decision-Making (MIND). A team from the National Institute of Meteorology, the National Institute of Disaster Management and FEWS NET MIND, led by the former director of meteorology for Western Australia, gathered information from local and national Government agencies and non-governmental organizations and embarked on field trips to cyclone-prone locations to examine local crops, trees and dwellings.

¹ Extracted from <http://www.reliefweb.int>.



The system is comparable to other warning systems operating in the SWIO region, but takes into account Mozambique's 60 per cent illiteracy rate, its housing styles and agricultural practices. The system includes two components:

Numerical Categories from 1-5 indicate the cyclone's severity based on its wind speed. Rather than provide communities with difficult to understand information about wind speeds, each number is related to the type of destruction likely to occur to locally made houses, common crops and trees.

Colour Categories provide communities with an indication of the time available before the onset of high winds. A Blue Alert is issued when a cyclone is between 24-48 hours from landfall; a Yellow Alert is issued when a cyclone is within 24 hours of landfall; and a Red Alert is issued when a cyclone is within 6 hours of landfall.

A wall-sized poster (in Portuguese) has been distributed in cyclone-prone areas. Media campaigns (mainly radio) have been launched to coincide with the cyclone season. Coloured flags hang at strategic sites when a cyclone approaches. To further reinforce the warning, various government and civil society actors are working together to improve community level awareness of the new system. With these weapons, Julieta and others like her can stand a chance against the future challenges that nature unleashes on them.