

Severe Wind Events: An Early Warning System for Madagascar Fishing Communities

Continuing Education Session- January 31st, 2023

Questions & Answers

Q: As a personalised early warning system is needed for different communities, is an exposure and vulnerability assessment carried out to assess the level of risk faced by each community?

Exposure and vulnerability assessments are among the first key steps in the implementation of the Early Warning System (EWS) Mitao Forecast for small-scale fisherfolk. Regarding exposure assessment, although fishing villages do not yet have EWS Mitao Forecast panels and focal points, the NGO Aquatic Service, collects and studies the situation of each region exposed to these strong marine winds.

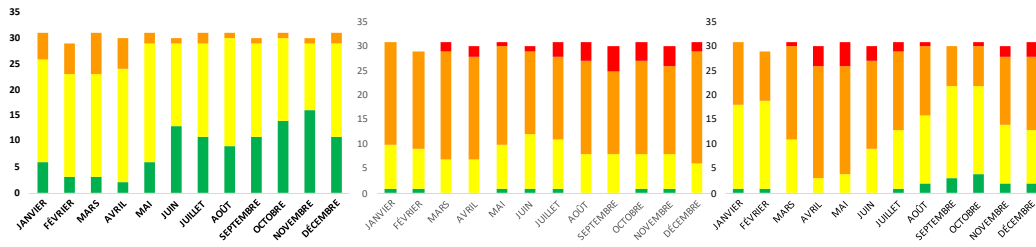
The vulnerability assessment, on the other hand, is carried out during the EWS implementation study in each village. The protocol for setting up and installing the Mitao Forecast EWS begins with surveys on the history of accidents at sea, the number of fisherfolk affected (and type of boat) in the village, the prevailing wind direction, among other information.

However, it is important to know that the daily warning information provided to fisherfolk is similar in different areas and the same degree of surveillance is conducted. This helps inform communities in cases of sudden change in wind strength, particularly during the cyclone seasons when that abrupt change tends to happen more frequently. In those months, the vigilance protocol is activated, in which apart from the focal points, other people residing in the villages are informed (village chief, notable, community leader, etc.), in order to impact the maximum number of people. This communication with additional community members happens in parallel to the update of information on the EWS panel and the land-sea communication system.

Q: In the graphs for the three regions, are the data on the vertical axis the days of each month?

Indeed, these are days of each month: on the x-axis you will find the months of the year and on the y-axis, the wind speed in km/h. The graphs (see below) represent the data of the monthly average wind speed of the 3 areas (Central America: Guatemala, Puerto-Quetzal, Southern Africa: Namibia, Cape Cross, and South Asia: India, Chennai) with the appropriate Beaufort scale using the colour codes of our EWS Mitao Forecast.

Archives other areas :



Central America (Pacific)
Guatemala, Puerto-Quezal

Southern Africa (South Atlantic)
Namibia, Cape Cross

South Asia
India, Chennai

	GREEN	YELLOW		ORANGE	RED
WIND	Less than 5 km/h	6 km/h	19 km/h	20 to 28 km/h	More than 29 Km/h
WAVE	0 to 0,1 m	0,2 m	1 m	1 to 1,5	Over 2 m



Q: The MITAO Forecast helps fisherfolk to know whether they can go fishing or not, but are there other complementary efforts to reduce accidents such as the provision of life jackets or improvements to boats?

Indeed, there are complementary efforts including the supply of life jackets from some other partner organizations. Concerning the boats, the fisherfolk of the East coast of Madagascar who cannot afford motorised boats prefer to use their traditional boats, dugout canoes, because they are better adapted to their fishing areas.

Q: Have you noticed an increase in the number of fisherfolk and is this having an impact on fish populations as well?

Yes, despite the low number of days at sea, there is still pressure on the fisheries resource, due to the increase in fishing effort (number of pirogues out at sea: 1 to 3 fisherfolk), which can be observed in almost all coastal areas of Madagascar.

Q: It was noticed that the map showing the places where you work included some places that seem to be rather inland (not on the coast) - are these places related to other types of water bodies (i.e. lake or other)?

These inland districts (Betroka, Bekily and Ambovombe) are part of our intervention sites which focus on village fish farming and community spirulina (food supplement) cultivation. However, our work developing Mitao Forecast systems is mainly focused on the coastal areas, in fishing villages.

Q: Have there been any measurements of the stocks/quantity of fish? Is it possible that this has increased due to the fact that it is more difficult for fisherfolk to go to sea?

At present, there is no reliable data on the existing fish stock at sea in the intervention areas, although the Ministry has mentioned some figures. This lack of data is due to the necessity of developing species-specific studies (data collection and analysis) spread over 5 years.