Republic of Mozambique
NATIONAL INSTITUTE OF METEOROLOGY

Climate Information for Improvement of Water Related Disaster Risk Management Experience of Mozambique

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Background

Mozambique is a southern Africa country, that due to its location (10°27'S - 26°25'S) is vulnerable to natural disasters

Natural Disasters in Mozambique:

- Floods (every year)
- Tropical Cyclones (every 3 to 4 years)
- Drought (every 3 to 4 years)
- Epidemics
- Windstorms
- Sea level rise
- Erosion

Background (Cont.)

More than 60% of the Mozambican population lives below the poverty line. They have low capacity to deal with the impacts of natural disasters.

Meteorological information play an important role to reduce the Disaster Risk of the Hydrometerological origin.

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- The National Institute of Meteorology (INAM) is mandated to provide meteorological information for safeguard of life and properties. This information is also important for planning purposes.
- INAM provides daily, 3 forecasts:
  - 2 valid for 24 hours (issued one in the morning and other in the afternoon);
  - 1 valid for 4 days (issued in the morning).
- Apart of these routine forecasts, through specific requests, forecasts covering different periods are prepared;
- In the beginning of the rainy season, INAM prepares a seasonal forecast that is discussed in a regional forum called Southern Africa Regional Climate Outlook Forum (SARCOF), to have a consensus forecast for the region;

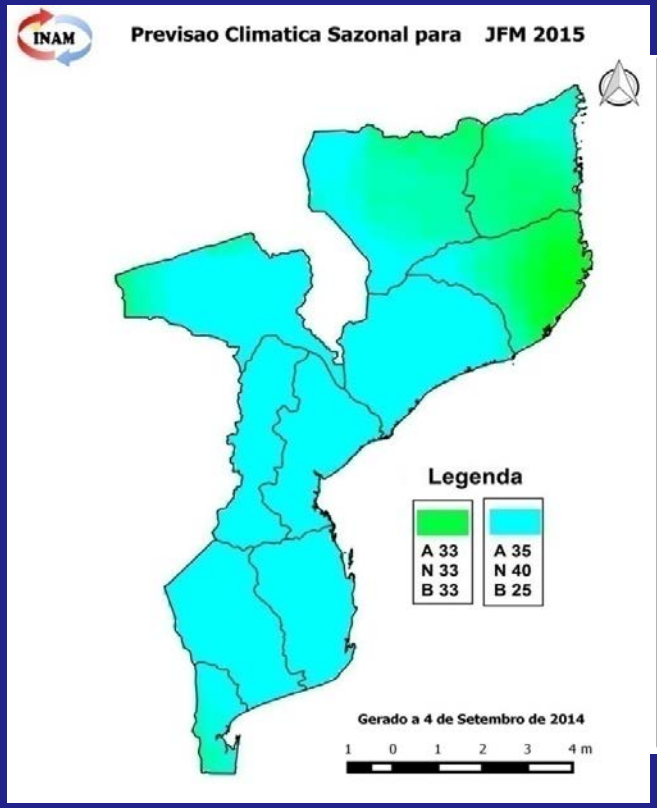
Climate Information Vs Disasters Risk Reduction

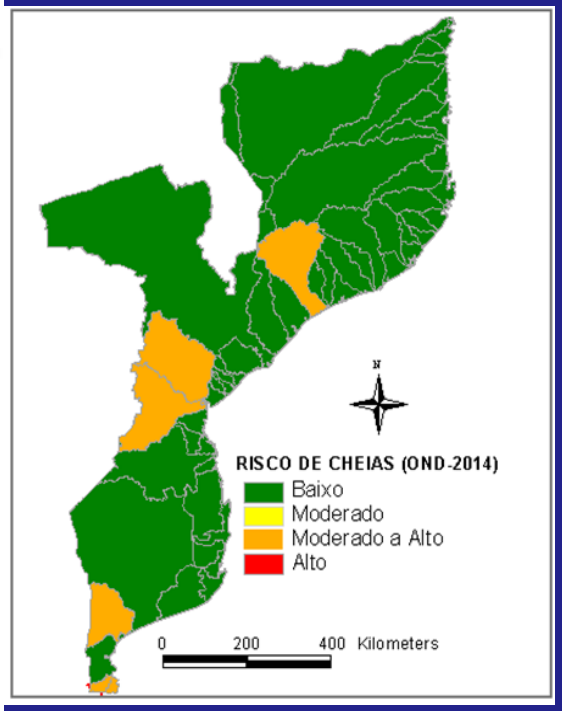
- After the SARCOF, INAM revises this forecast and send to the stakeholders for the preparation of the Sectorial Outlook. This process is followed by a pre-meeting of intersectorial outlook harmonization and interpretation, and then is issued a unique document composed by a brief Climate outlook for the season that is finally presented in a public session of NCOF.
- NCOF (National Climate Outlook Forum) is a dialogue framework which its main purpose is to bring together the producers of the climate information and the users. At this stage INAM is directly working with four main stakeholders, DNA, DNSA, INGC (traditional partners) and the Health sector as a new partner, that we expect to have outlooks for the sector next year.
- The Seasonal forecast is updated in a monthly base and it is disseminated through the Internet, email and media to different stakeholders.

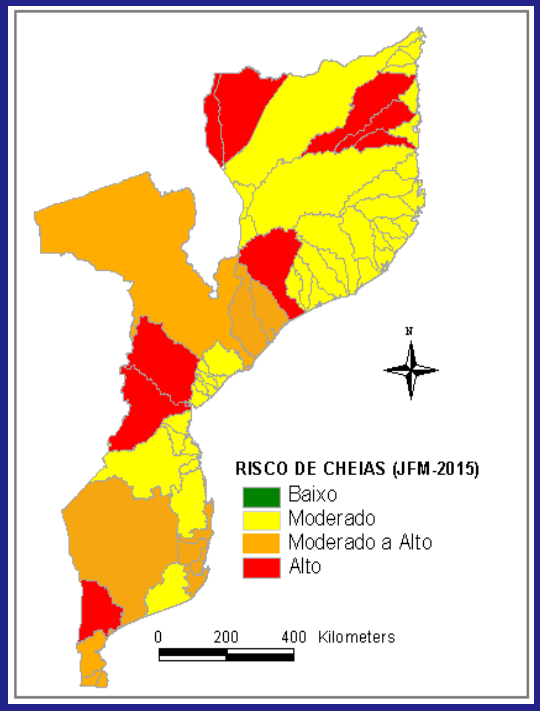
Interpretation of seasonal outlook for Water Authorities

National Downscaled

Flood risk map







Given the expected seasonal Forecast, the water authorities (DNA) produce flood risk map (above-right), which highlights the area in risk of floods.

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During the rainy season (October to March), apart of the previously mentioned weather bulletins, specific bulletins are prepared by INAM to CENOE;

As the rainy season is also the period where the extreme events occur, INAM also issues Alerts/Warnings of possible occurrence of events like heavy rains and Cyclones.

The information is systematically updated to the public and to INGC through CENOE, who is in charge of communicating the people what to do to save life and properties.

There are in place Early warning systems for Cyclones and Floods.

3.2 Tropical Cyclone Warning System

- Allows people to be informed of a tropical cyclone at least 48 hours in advance
- Colour coded messages including flags are used to warn the population
- The strength of winds is associated to possible physical impact
- People are advised on measures to take

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Obrigado