

Outline:

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ANNUAL MEETING

DECEMBER 1-3, 2021 | VIRTUAL

INTRODUCTION

Mozambique is a country vulnerable to the adverse impacts of the Climate Change. It's geographical location accounts for this vulnerability.

Climate projections indicate that Mozambique will experience **increased temperatures, delayed start of the rainy season, and an increase in the frequency and intensity of extreme weather events**, which will place additional pressure and challenges on the health sector.

The "Instituto Nacional de Saúde" of Mozambique (INS) is showing its commitment to the Climate and Health issues from the past 5-6 years.

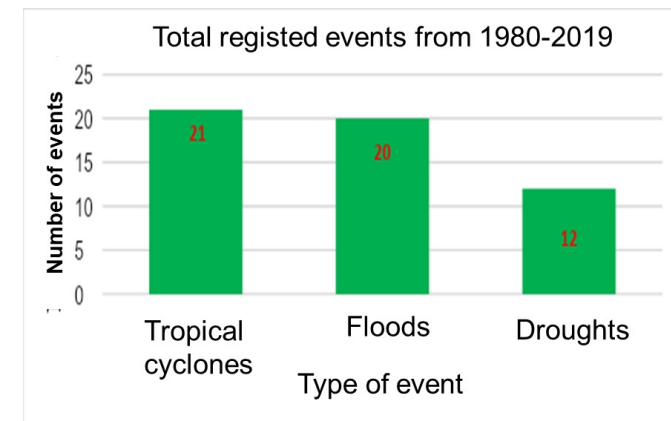
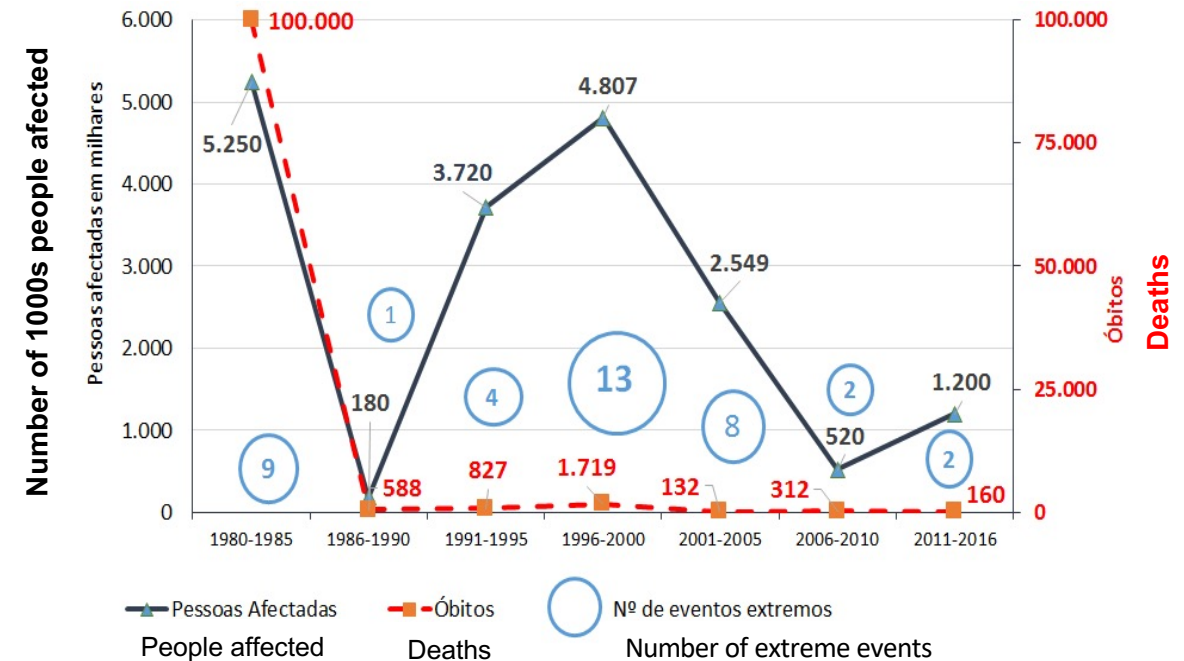


IMPACTS OF CLIMATE CHANGE (1)

The number of extreme weather events is historically variable along the time in the country, dominated by droughts, floods and tropical cyclones.

Trend of events recorded in the period 1980–2019, denotes a significant increase in the number of cyclones and floods from the 2000s onwards, together with a reduction in drought episodes.

The disease burden is dominated by communicable diseases, especially some climate-sensitive diseases such as malaria, diarrhea and cholera.

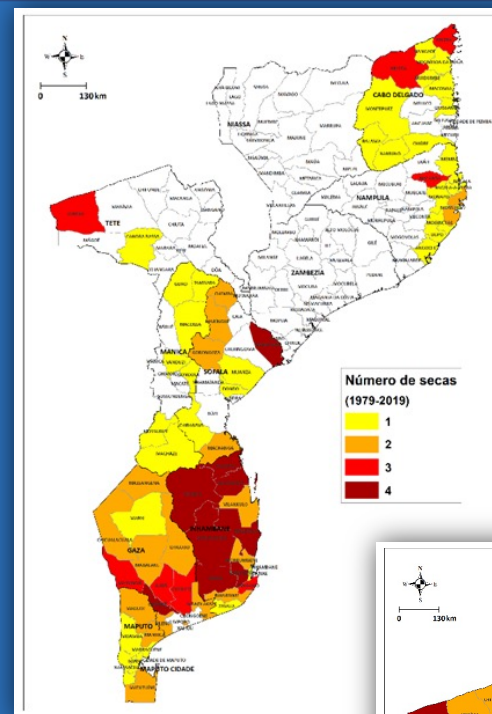


IMPACTS OF CLIMATE CHANGE (2)

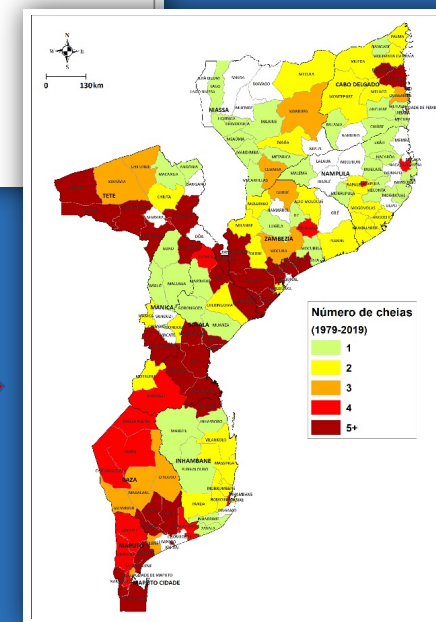
Around 12 episodes of **droughts** affected the country. Although in 2015-2016 severe droughts affected more than 1.500 M people.

About 20 events of **floods** affecting the main watersheds.

Around 21 events of **cyclones** affecting the country's coast. Only Cyclone Idai (a category 4 cyclone), struck Mozambique on 14 March 2019 affecting five provinces with heavy rains, severe flooding, and devastating winds. Nearly 1.85 million people were affected with an official death toll of 603.

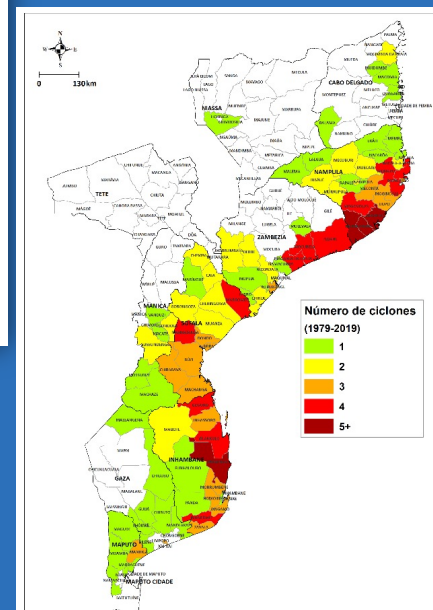


← Droughts



Floods →

↓ Cyclones



COUNTRY'S EXPERIENCES (1)

INS is also committed to **advocacy** in Climate Change and Health risks and impacts, in a sense that since 2016 convened the following meetings:

- Workshop for Health professionals for the awareness of the Impacts of Climate Change on Health
- Public Debate on the Impacts of Climate Change on Health
- Workshop of Communication of Climate Information on the Health Sector for the main stakeholders

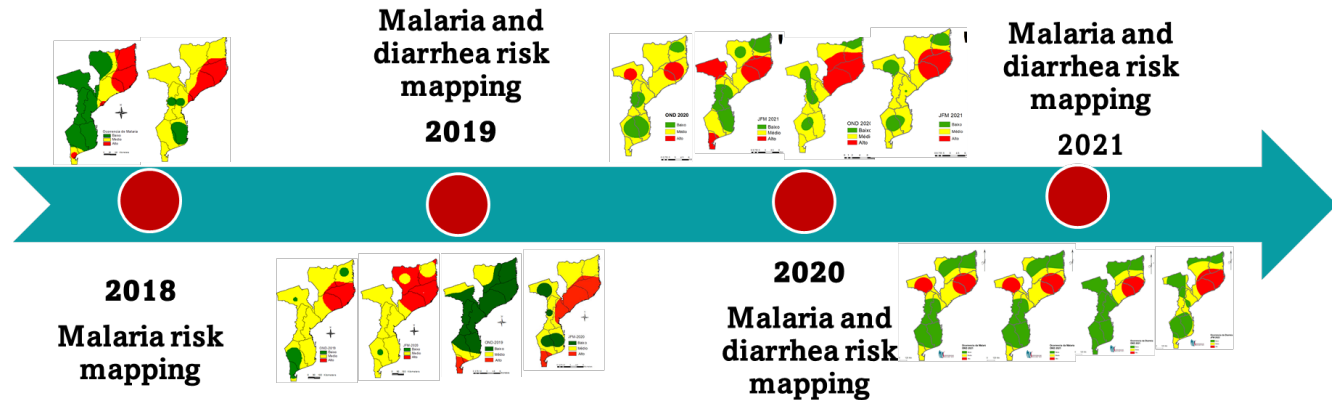


COUNTRY'S EXPERIENCES (2)

Predictions on the health sector are being made since 2018 by INS through the National Observatory of Health dedicated platform to Climate, Environment and Health. This predictions take into consideration the Met Office forecast for the next rainy season.

This evidence are being included in the National Annual Contingency Plan for the management and reduction of risk disasters for the following rainy and cyclonic season.

This is one of the actions of INS, contribution to address the health inequalities resulting from the impacts of the extreme weather events.



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3.4. Interpretação da previsão da época chuvosa 2021/2022 na Saúde

3.4.1 No que tangue a Malaria, espera-se:

i) Período de Outubro-Novembro-Dezembro (OND) de 2021:

- Região sul: risco moderado na Cidade e província de Maputo;
- Região centro: risco moderado no norte de Sofala, Manica e Tete e alto risco no norte da Zambézia e região central de Tete;
- Região norte: alto risco na província de Nampula e moderado no norte de Nampula e sul de Cabo Delgado e Niassa.

ii) Período Janeiro-Fevereiro-Março (JFM) de 2022:

- Região sul: risco moderado nas províncias de Maputo, Gaza e Cidade de Maputo;
- Região centro: risco moderado na província da Zambézia e Tete; e alto risco no norte da Zambézia;
- Região norte: risco moderado no sul de Cabo Delgado e Niassa e alto risco na província de Nampula.

Figura 9: Interpretação para a saúde (malaria)

3.4.2 Previsão de ocorrência de caso de diarreias:

i) Período Outubro-Novembro-Dezembro (OND) 2021:

- Região sul: risco baixo em toda região;
- Região centro: risco moderado no sul da província da Zambézia;
- Região norte: risco moderado no norte da província da Nampula e sul das províncias de Cabo Delgado e Niassa; e alto risco na província de Nampula.

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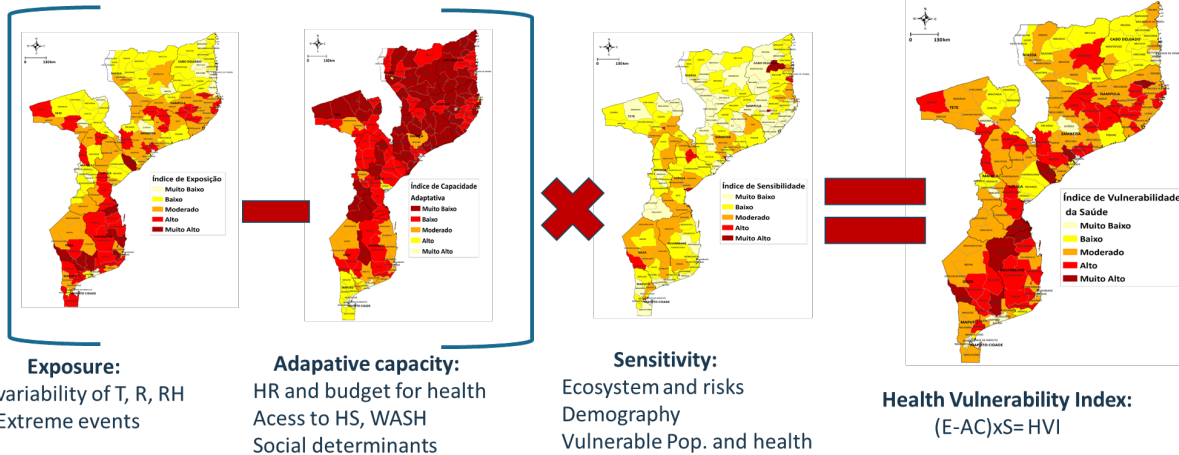
ii) Para o período Janeiro-Fevereiro-Março (JFM) 2022, prevê-se:

- Região sul: risco moderado na Cidade de Maputo e província de Maputo eitoral da província de Inhambane;
- Região Centro: risco moderado no centro da província de Manica, norte de Sofala, sul da Zambézia e este de Tete;
- Região norte: risco moderado no centro de Cabo Delgado e Niassa e alto risco em Nampula.

Figura 10: Interpretação para a saúde (diarreias)

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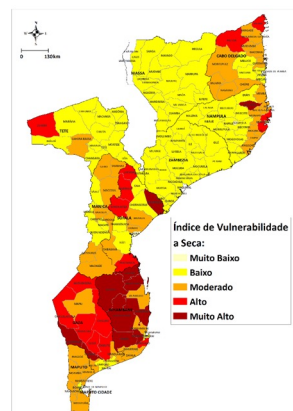


COUNTRY'S EXPERIENCES (3)

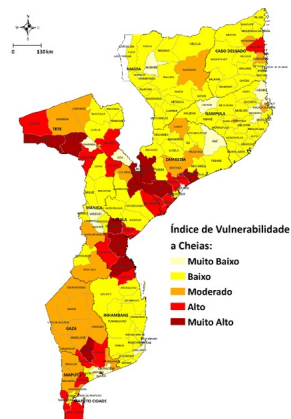
In 2019, a Vulnerability and Adaptation assessment (V&A) of the health sector to the climate change was conducted.

- 42 districts (out of 161) showed a High to very high HVI (31.8% territory, 24.1% population).
- 8 districts with very high HVI.
- 15 of the 20 least vulnerable districts are urban (75%).

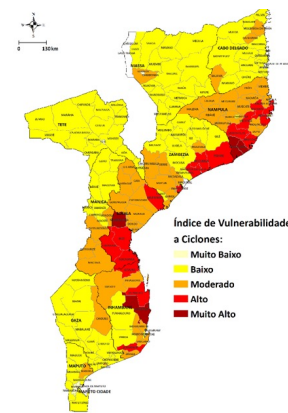
This is another action of INS contributing to provide evidence regarding health equity among the country.



Droughts



Floods



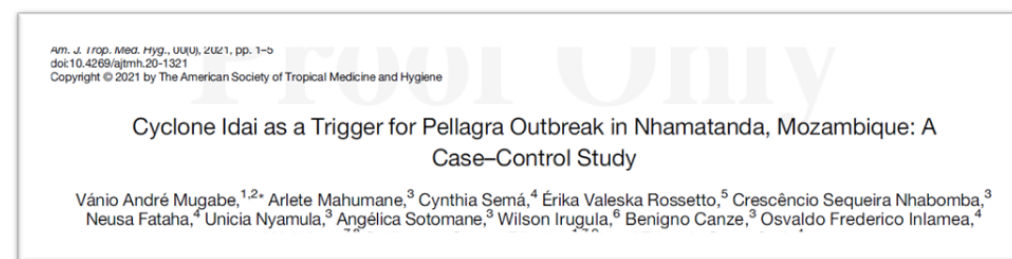
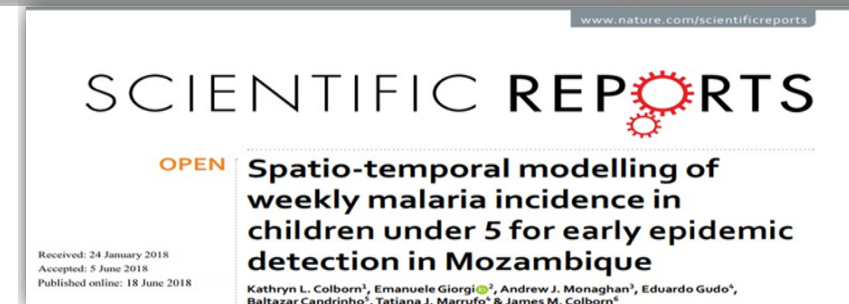
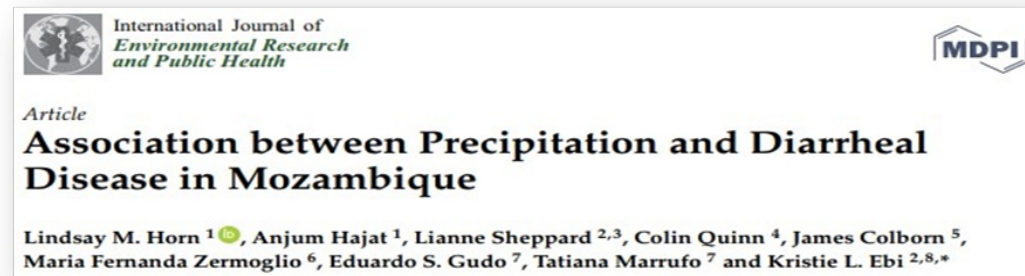
Cyclones

COUNTRY'S EXPERIENCES (4)

INS is contribution to the **generation of evidence**, in a sense that it was possible to improve understanding of the process of adaptation to the climate change.

For example:

- the relationship between the communicable diseases and the climate factors;
- impact of extreme events on the diseases outbreaks and how to respond and manage such emergencies;
- roles and responsibilities at different levels (individuals, communities, nations, institutions and the private sector);
- and what level of is needed for public health decision-makers to act.



Lequechane et al. *Infectious Diseases of Poverty* (2020) 9:66
<https://doi.org/10.1186/s40249-020-00692-5>

Infectious Diseases of Poverty

LETTER TO THE EDITOR

Open Access

Mozambique's response to cyclone Idai: how collaboration and surveillance with water, sanitation and hygiene (WASH) interventions were used to control a cholera epidemic



Joaquim Domingos Lequechane^{1*}, Arlete Mahumane¹, Falume Chale¹, Crescêncio Nhabomba¹, Cristolde Salomão², Clemente Lameira³, Sérgio Chicumbe² and Cynthia Semá Baltazar²



COUNTRY'S EXPERIENCES (5)

INS is committed to **respond to emergencies** as part of the health sector emergency response cluster for the impacts of the climate-related events, contributing with:

- Development and implementation of health information frameworks for emergencies;
- Development of early warning systems for diseases;
- Field epidemiology and outbreak investigations;
- Monitoring and evaluation of the health situation during and after the event.

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COUNTRY'S EXPERIENCES (6)

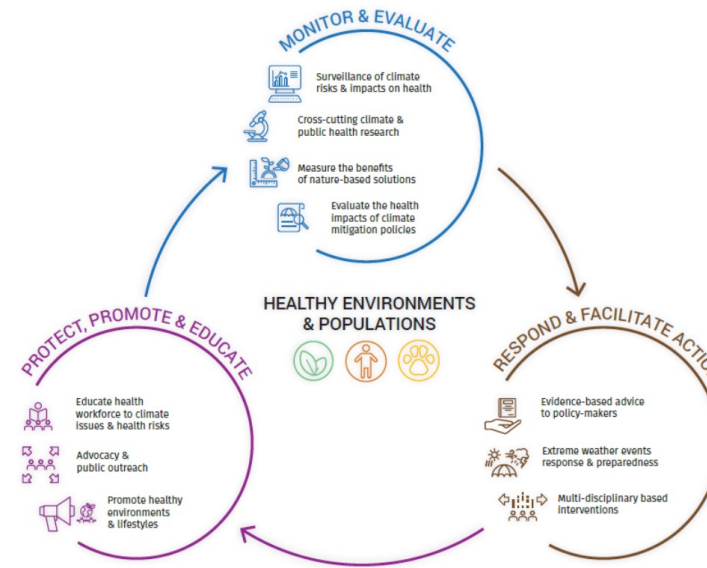
INS is also committed to **education and training** in Climate Change and Health issues, in a sense that since 2019 this topics were included in post-graduation courses as a package of ONE-HEALTH module facilitated by INS qualified technicians. The Programs are listed bellow:

- Field Epidemiology Master Program
- Public Health Master Program
- Public Health Specialization Program



PERSPECTIVES

1. **Implementation of Climate, Environment and Health Research Agenda**, to promote the use of evidence for action to prevent, reduce and compensate environmental health inequalities.
2. **Monitoring environmental health risks**, through the instalation of sentinel sites for observation of climate and health expanding the procedures to include social, spatial and environmental dimensions.
3. **Assess vulnerabilities in health care facilities**, so that facilities could be able to anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stress, and even bring ongoing and sustained health care to their target populations, despite an unstable climate.
4. **Contribute to the awareness and education**, through lectures and trainings to doctors, health practitioners and other relevant health care professionals so that they take inequality in risk exposure into account when making decisions.
5. **Support the health sector on the implementation of National Plans for adaptation and mitigation**, such as NDC and H-NAP.



CONCLUSIONS

INS is being contributing for **HEALTHY ENVIRONMENTS & POPULATIONS**, in Mozambique to:

1. **Monitor and Evaluation**, although more capacity should be acquired to conduct actions to measure the benefits of nature based-solutions;
2. **Protect, Promote and Educate**, and more commitment and actions are required in promoting health environments and lifestyles;
3. **Respond and Facilitate action**, a multi-disciplinary based interventions is still a challenge while adressing health inequalities.

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