

MOZAMBIQUE RISK SEVERITY CLASSIFICATION

COUNTRY OVERVIEW

Mozambique, located in southeastern Africa has an estimated **population of 32 million** [1].

The country is frequently affected by different **hydrometeorological extreme events** such as tropical storms, cyclones, floods and droughts. At least 10% of the population in Mozambique live in districts located in arid and semi-arid regions [2].

The country is divided into **10 provinces** namely Cabo Delgado, Gaza, Inhambane, Manica, Maputo City, Maputo, Nampula, Niassa, Sofala, Tete and Zambezia (see fig. 1).

RISK SEVERITY ANALYSIS

Risk severity to natural hazards in Mozambique is assessed based on three pillars:

- Pillar 1 - People have dwellings
- Pillar 2 - The dwelling is functional
- Pillar 3 - People have access to appropriate access to common services and infrastructure from their dwelling

Data (see table 1) on different indicators is analysed to assess risk and derive a severity score for each province in the country.

Table 1: Indicators used in the Risk Severity Analysis

Indicators	For Preparedness	Data
Percentage (%) of households (HHs) living in safe and dignified dwellings	Risk that natural disasters will affect the shelter	% of structural buildings
		People at risk
Percentage of HHs living in a functional domestic space	Risk that natural disasters will affect the domestic life	People at risk
Percentage of HHs with access to appropriate common services and infrastructure	Coping capacity	Relative Wealth Index (RWI)
		% of HHs with electricity
		% of elderly population
		% of displaced population

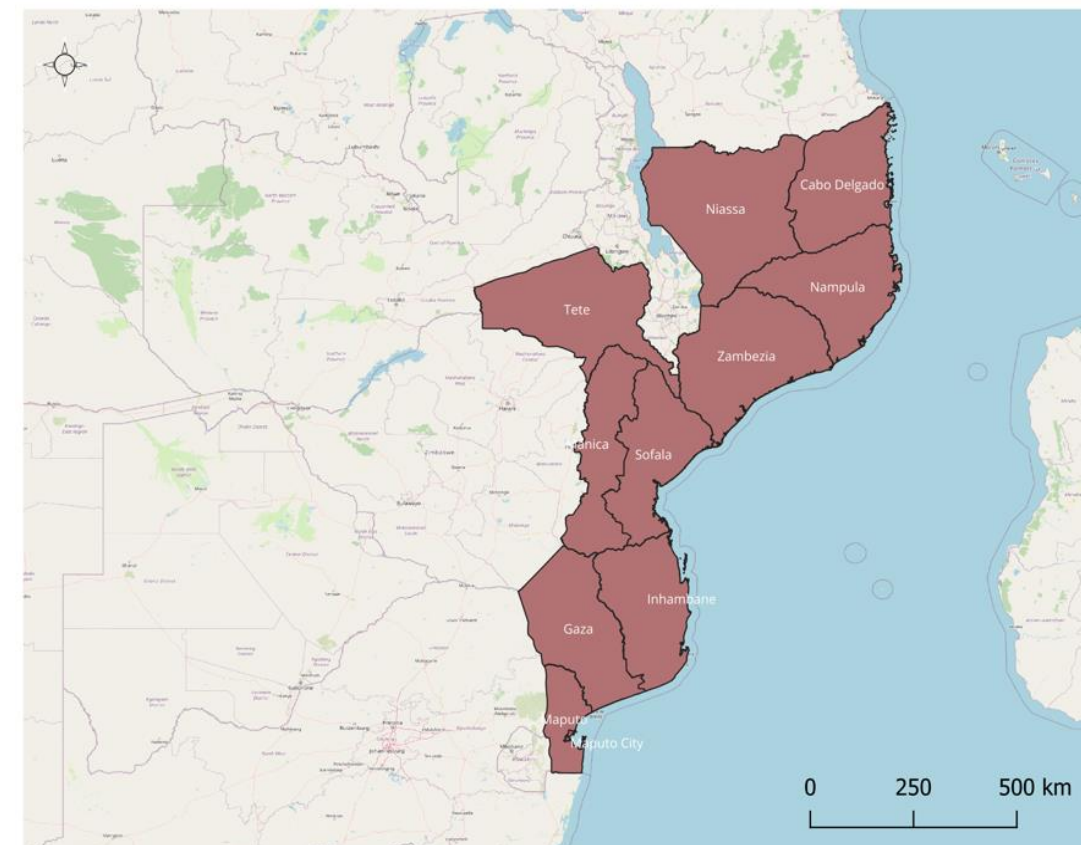


Fig 1: Location Map

RISK SEVERITY IN MOZAMBIQUE

Severity of risk to natural hazards is classified on a scale of 1 to 5, with 1 being very low risk severity and 5 being very high-risk severity.

At a province level (see fig. 2), the provinces of Manica, Maputo City, Nampula, Niassa and Tete have the highest proportion of people falling within severity score 2 (low risk severity).

For the provinces of Gaza and Maputo, the population is distributed in both severity categories 2 and 3, with most of the population in severity category 2.

In Cabo Delgado, Inhambane, Sofala and Zambezia, the population is distributed across all severity categories 2, 3 and 4.

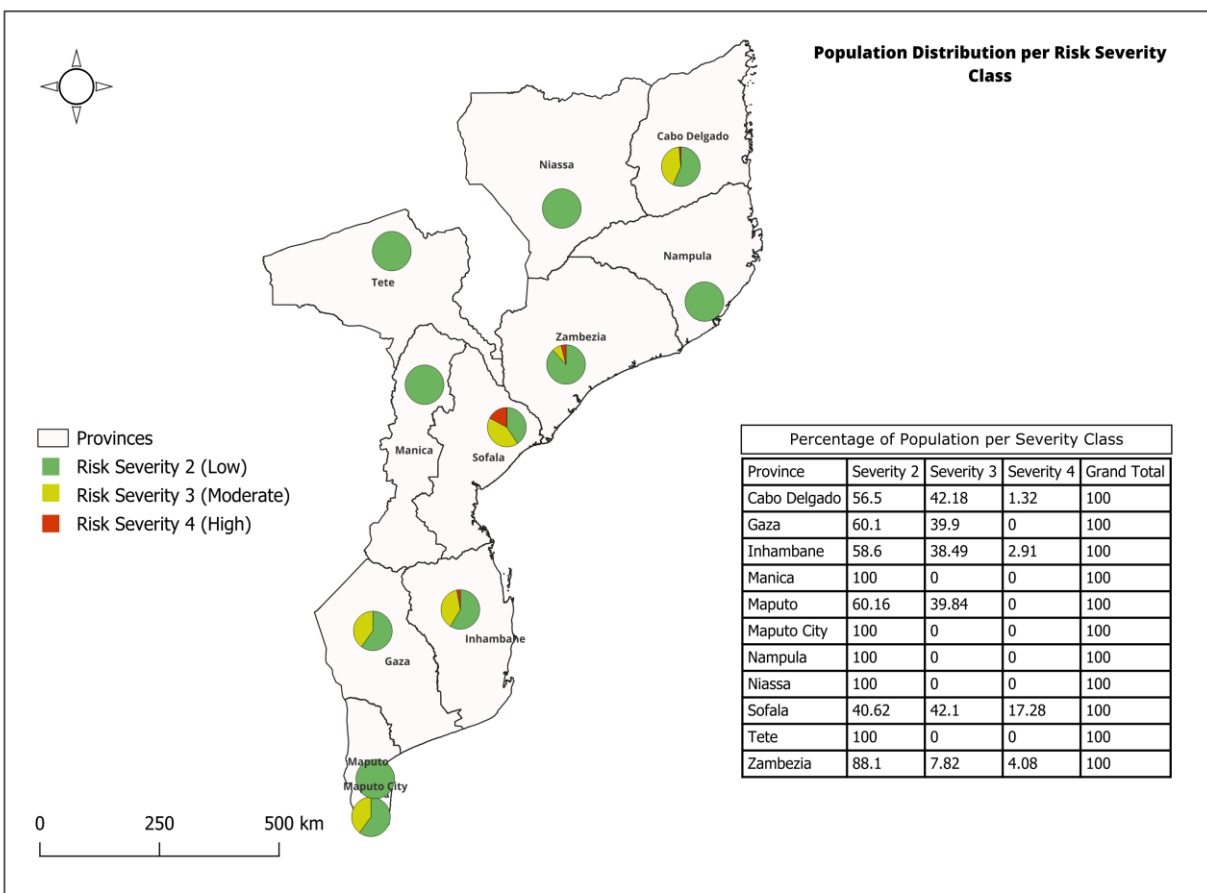


Fig.2 Population Distribution per Severity Class

DISTRICT SEVERITY CLASSIFICATION

Severity of risk to natural hazards is also analysed at the district level to determine which districts in the country face what level of risk.

Number of Districts per severity class

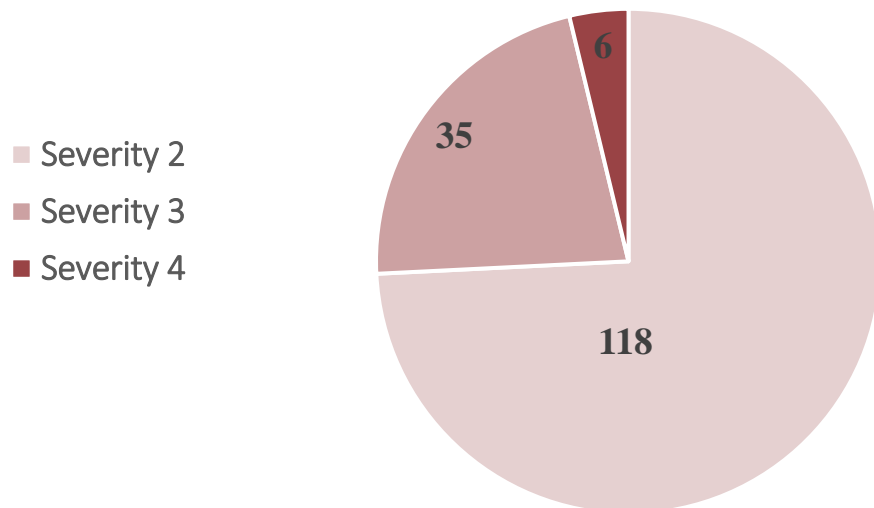


Fig.3 Districts per Severity Class

Most of the districts in Mozambique fall under risk severity classification 2 which is considered low risk (as shown in fig 3 and 4.).

The **districts with high-risk severity** to natural hazards include Ibo and Nangade (Cabo Delgado), Funhalouro (Inhambane), Buzi, Caia and Machanga (Sofala), Nicoadala (Zambezia), Mabalane (Gaza), and Nacarao (Nampula).

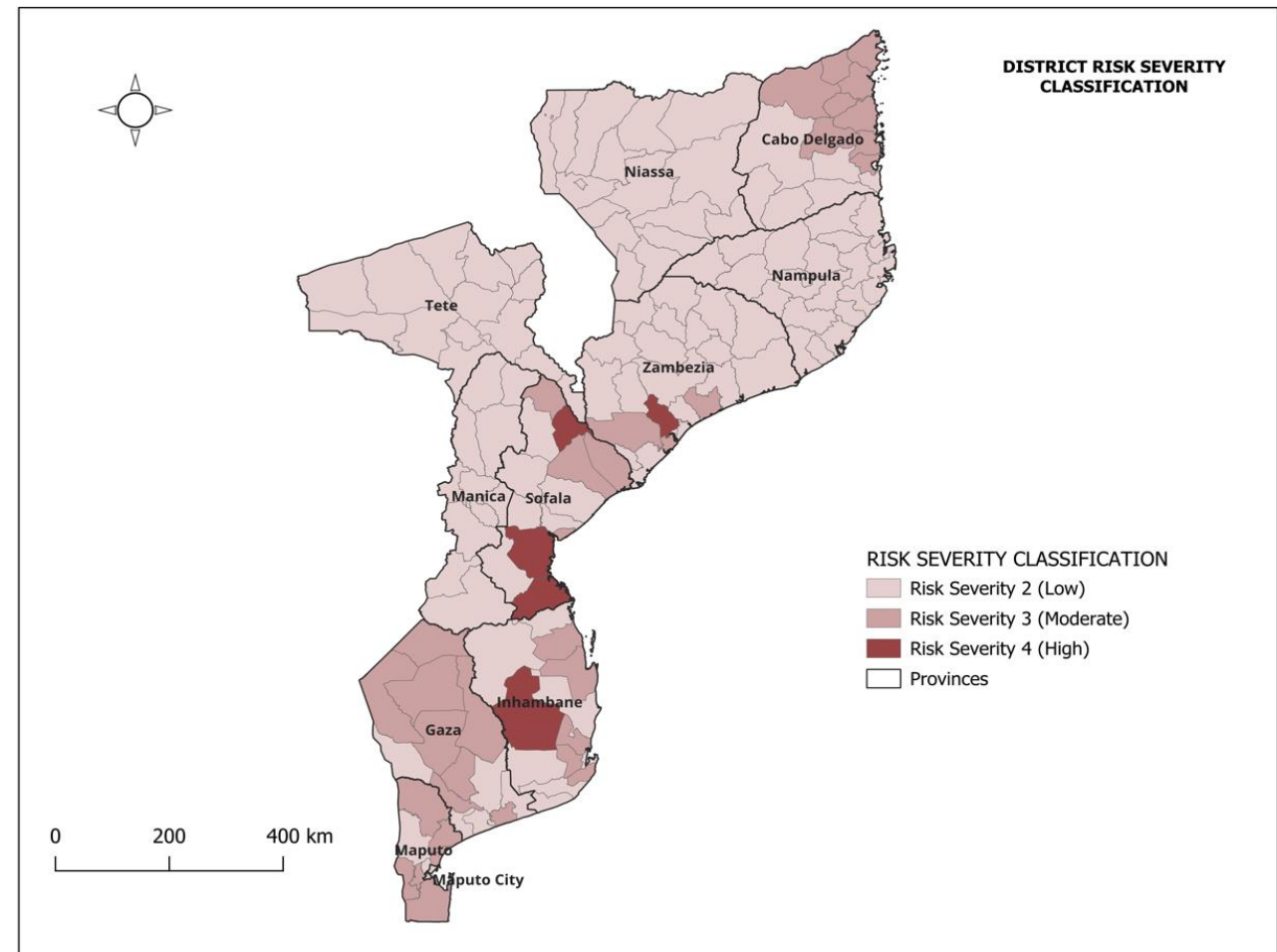


Fig.4 District Risk Severity Classification

PROVINCE SEVERITY CLASSIFICATION

Cabo Delgado

Cabo Delgado is the northernmost province of Mozambique and has an estimated population of 2.6 million.

Based on the analysis of risk severity in the country, the province falls within **severity category 3** (see fig. 5). Among the factors that contributes to the levels of risk is community shelter vulnerability which is influenced by the low access to services such as electricity. Additionally, the coastal location of some of the areas in the province also increases risk to cyclones and floods and further intensifies shelter vulnerability.

Gaza

Most of the districts in Gaza lie in the basin of the Limpopo river and the province has an estimated population of 1.63 million.

The province of Gaza also falls under risk severity 3. The vulnerability in Gaza is explained by the low proportion of structural buildings as only 25% of the buildings are made of structural materials such as concrete or stone.

Inhambane

Inhambane is located on the coast in the southern part of Mozambique and has a population of 1.67 million.

Inhambane is characterized by relatively high severity scores across all indicators: relatively low proportions of structural buildings, and in some districts large proportions of the population exposed to natural hazard risks including cyclones and floods, plus relatively low access to common services.

This all impacts the level of vulnerability in terms of shelter of the population.

Manica

Manica situated in the central interior area of Mozambique and has a population of 2.49 million.

Based on the analysis of risk severity, Manica falls under severity 2 with districts such as Macossa having the highest proportion of population at risk of cyclones while Guro, Tambara and Sussundega have the highest proportion of population at risk of floods.

Sussundega is the only district in the province with a high displaced population which contributes to the overall risk severity of the province.

Maputo

Maputo is the southernmost province and has a population of 2.45 million.

One major factor that contributes to the risk severity in Maputo is the quality of buildings, as only 6% of buildings are constructed from structural sound materials, significantly elevating vulnerability to shelter damage during natural disasters.

Matutuine district in Maputo has the highest risk of cyclones and floods which increases the overall risk severity in the province.

Nampula

Nampula located in the northern part of Mozambique has a population of 6.84 million. The province of Nampula has minimal flood risk.

However, the districts of Ilha De Moçambique and Mogincual have a high risk of cyclones.

The province is relatively poor compared to others which contributes to reduced coping capacity.

Meconta district has the highest displaced population in the district which contributes to the overall risk severity of the province.

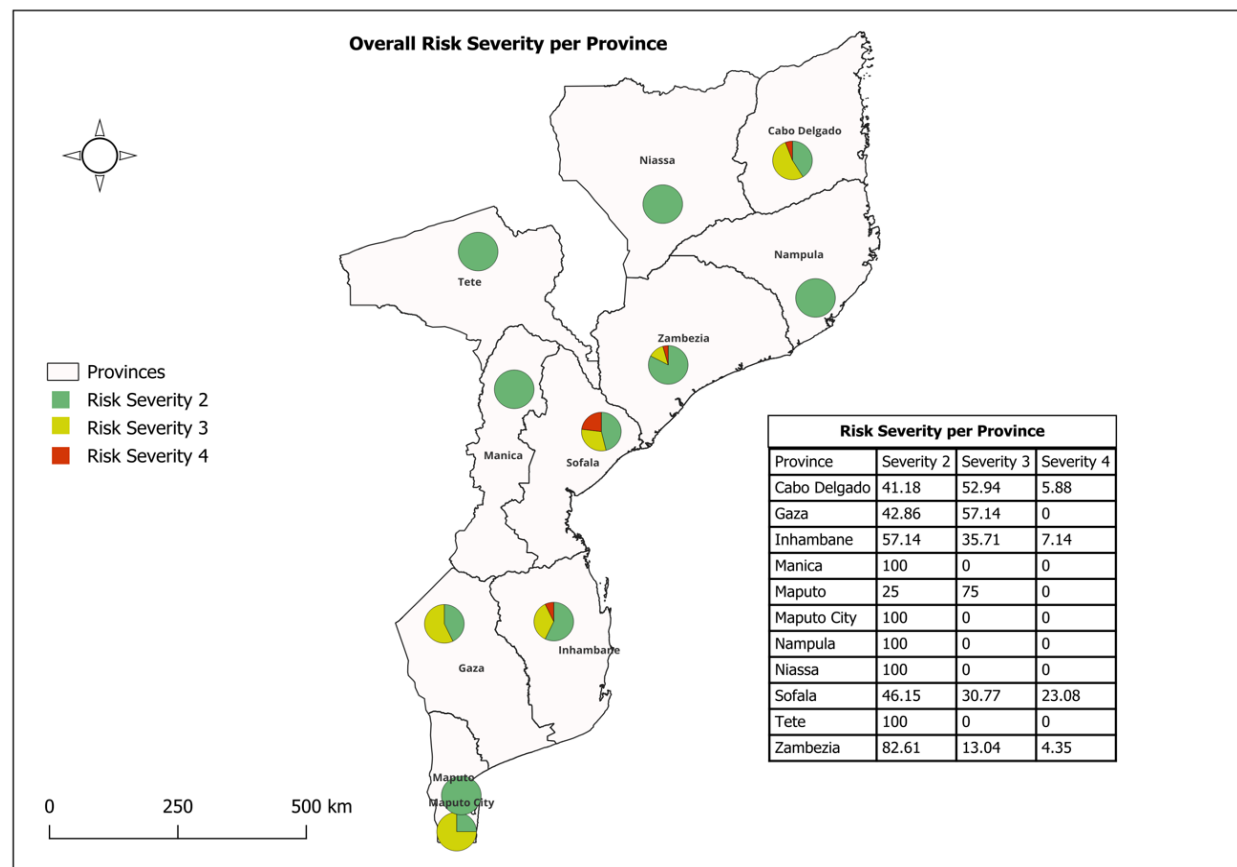


Fig.5 Overall Risk Severity per Province

Niassa

Niassa has a population of 2.18 million and is the most sparsely populated province in the country. No districts are at risk of cyclones in Niassa; however, the district of Maua has a high flood risk. In terms of access to services such as electricity, the province has the lowest electricity coverage. Overall, the risk severity in the province is low compared to other provinces.

Tete

Tete province situated on the right bank of the Zambezi river has an estimated population of 3.3 million.

The province does not face any cyclone risk which reduced its overall severity score. With regards to flood risk, the district of Mutarara has a high flood risk in the province.

Zambezia

Zambezia has an estimated population of 6 million and is the second most populated province in Mozambique.

Zambezia has an overall severity score of 2. The risk of cyclones and floods is present in the province particularly in the districts of Inhassunge, Mopeia, Mulevala, Nicoadala (for cyclones) and Luabo as well as Maganja Da Costa (for floods).

The district of Nicoadala also has the highest proportion of displaced population in the province.

Sofala

Sofala has an estimated population of 2.8 million. The population living in the province is distributed across all severity categories 2, 3 and 4.

The province faces the highest shelter vulnerability regarding natural disasters. A substantial portion of the population is at risk of floods and cyclones.

Coupled with a relatively low connection to essential services, this contributes to an overall high shelter vulnerability.

References

- [1]. <https://www.worldbank.org/en/country/Mozambique/overview>
- [2]. World Bank (2019). Disaster Risk Profile: Mozambique

Additional info

If you have questions about this analysis, please feel free to reach out to the Global Shelter Cluster IM team (heleen.Elenbaas@sheltercluster.org). Also your feedback is really welcome. If you are interested to learn more about the methodology of the Shelter Severity Classification, please have a look at sheltercluster.org.