

DISASTERS AND THOSE LEFT BEHIND



Papua New Guinea is one of the most disaster-prone countries in the world, due to its location on the northern edge of the Australian plate and in the volcanically-active Pacific Ring of Fire.

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In 2022, Papua New Guinea (PNG) was ranked 22 out of 189 countries on the Inform Risk Index based on vulnerability to hazards. This score reflects the country's inability to cope with hazards, its remoteness, lack of infrastructure and aid delay.

Disasters have a particularly significant impact on some of the most vulnerable in the community, especially women and children.

GOVERNANCE

The National Disaster Centre (NDC) is the lead agency for disaster management and disaster risk reduction. It leads research, education and response coordination. Provincial Disaster Committees develop and coordinate preparedness and emergency plans for the provinces.

The program **Strengthening Disaster Management in PNG** developed a multi-hazard risk assessment methodology that has been used to map hazards and establish disaster risk reduction plans in several high-risk provinces.

The National Disaster Risk Reduction Framework 2017-2030 identifies targets and actions to reduce risk.

TYPES OF DISASTERS

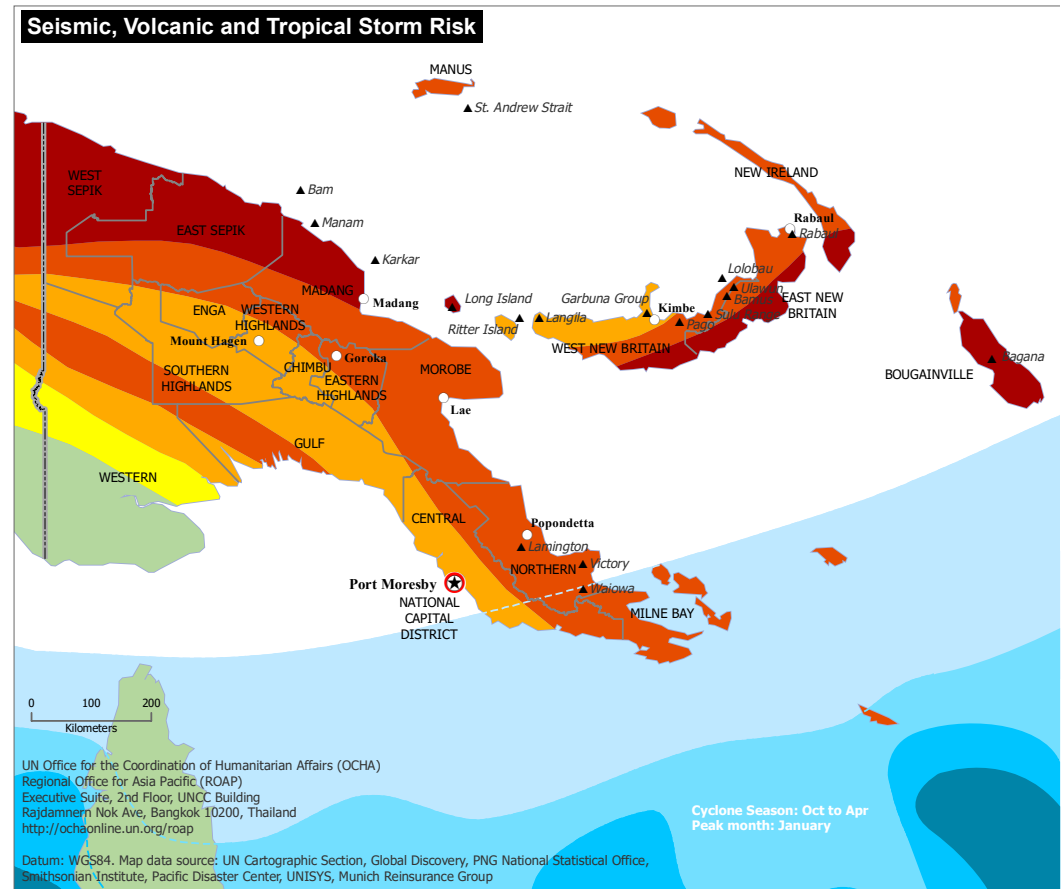
Natural hazards occur across PNG but the eastern and northern part of the country are particularly at risk. The main hazards are:



Tectonic - volcanic eruptions, earthquakes, landslides and tsunamis.



Climate related - droughts occur frequently and impact water availability and food security; coastal and riverine flooding is high risk in most areas; tropical storms and cyclones have high impact especially in coastal regions.



The names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Figure 1. Combined hazard risk areas of Papua New Guinea

HAZARD EXPOSURE

People who are already living in marginal conditions with poor land for gardening, lack of services and poor health are likely to be most affected by disasters, particularly related to climate induced droughts, floods and coastal inundation.

Papua New Guineans are highly exposed to hazards:

80% exposed to El Nino droughts

 **> 500,000**

people live near the coast exposed to sea level rise, storm surges and coastal inundation

> 1 million 

people live within 30km of 16 active volcanoes

The ability to respond to disasters is poor due to poor communications, poor infrastructure, high poverty and inequality.

Communities are frequently highly exposed to environmental disasters, such as mine tailing dam failure, pollution from extractive industries, and increased likelihood of floods and landslides due to clearing operations.

IMPACTS OF NATURAL DISASTERS

- Death, injury, trauma and stress
- Economic loss
- Food insecurity
- Loss and damage to infrastructure – water, sanitation, transport, energy
- Lack or loss of access to services
- Exposure to disease
- Loss of housing/shelter
- Displacement and violent clashes with other communities
- Migration to urban areas and often exposure to further hardships in informal settlements.



IMPACT ON WOMEN

The most vulnerable are women and children. Women are often forgotten and marginalised in disaster response and resilience.

Women grow and sell produce and are critical to food security, especially in disasters. Men, as the heads of households, often are the sole receivers of aid and other support, which can leave women and children vulnerable if not fairly distributed.

When displaced from their homes, women face increased risk of exposure to violence, including sexual assault. The 2018 earthquake in Hela and Southern Highlands Provinces resulted in human displacement, with many women forced to seek shelter in neighbouring villages where they were prone to rape, abuse and forced labour.

DISASTER PROGRAMMING FOR WOMEN AND THE MOST VULNERABLE

Due to remoteness and lack of infrastructure and services, community-led resilience building will be at the core of any disaster planning strategy. For the UN system and partner organizations working in disaster resilience, a gender-sensitive approach must be considered, taking several forms including:

- ☑ **Ensure women are at the centre of disaster resilience strategies**, including preparedness, response, recovery and governance matters
- ☑ Involve women in all levels of decision making, including land use planning to identify and map sites prone to hazards, and to develop adaptation strategies and resettlement options
- ☑ **Train women to 'build back safer'**, such as instruction in safe housing construction and location to enhance resilience
- ☑ Support schools to build awareness of disaster risk reduction and climate change adaptation, as is currently done through the Tsunami awareness campaign
- ☑ Ensure that response measures address issues related to shelter, access to water and sanitation to protect women and children following a disaster
- ☑ **Support women in efforts to enhance environmental protection** e.g. planting mangroves, protecting forests, and sustainable livelihoods that can provide support during some disasters.

In addition, stronger regulation and enforcement are needed to ensure that extractive industries are managed to avoid harm to the environment and to people. Response plans need to be formulated and ready to implement in the case of accidents such as oil spills or pollution releases. Planning regulations should prevent clearing of vegetation on the shoreline and riverbanks, and more climate-resilient building codes need to be adopted.



This factsheet is a summary from the Environment and Climate Analysis for the 2022 Common Country Assessment and has been prepared by the United Nations Development Programme in Papua New Guinea. For more, see <https://environment-climate.png-nrmhub.org/>