

MADAGASCAR

Cyclone Gamane

KEY FIGURES

89,000
PEOPLE AFFECTED

24,000
PEOPLE DISPLACED

19,500
HOUSES DAMAGED

5.5/10
INFORM CLIMATE
CHANGE RISK SCORE

FUNDING AND RESPONSE CAPACITY

UN responders
(OCHA, WFP)

Madagascar Red Cross

Madagascar government

CRISIS IMPACT OVERVIEW

- Between 26–29 March 2024, tropical Cyclone Gamane struck north and east of the Indian Ocean island of Madagascar, primarily affecting the regions of Analanjirifo, Atsinanana, Diana, and Sava (AJ 28/03/2024; OCHA 28/03/2024; ECHO 03/04/2024). The cyclone made landfall in the Sava region on 27 March, resulting in flooding and subsequent displacement (FEWS NET 29/03/2024).
- Nearly 88,200 people have been affected, over 24,000 of whom have been forced to flee their homes, and at least 20 have died across the four affected regions (WION 03/04/2024; ECHO 03/04/2024). A total of 135 schools sustained damage, leaving over 24,100 children unable to attend school (ECHO 03/04/2024; OCHA 04/04/2024).
- On 3 April, the Government officially announced a national state of emergency (ECHO 03/04/2024; OCHA 04/04/2024).
- There are currently 2.3 million people in need in Madagascar, 1.64 million of whom are food insecure and dependent on humanitarian aid (WFP accessed 03/04/2024; UNICEF 28/12/2023).
- Madagascar has an INFORM climate change risk score of 5.5/10, as well as 6.7/10 for hazards and exposure to cyclones (INFORM accessed 03/04/2024). The country scores 7.1/10 for lack of coping capacity, meaning that crisis impacts are likely higher than response capacity and, with recurrent climate hazards, affected people's ability to recover may be constrained.

ANTICIPATED SCOPE AND SCALE

As at 3 April, eastern and northern Madagascar are expected to experience additional intense rainfall over the next 72 hours (ECHO 03/04/2024). This may result in further damage to houses and displacement. Most of those already displaced have been sheltering in temporary sites, and more capacity will be required to shelter additional people (OCHA 04/04/2024).

HUMANITARIAN CONSTRAINTS

Cyclone Gamane has caused significant damage to critical infrastructure, including roads and bridges (MedaFrica 01/04/2024).

The rains have caused the closure of the road that connects the capital Antananarivo to the affected regions, making access far more challenging. Reaching these regions has always been difficult, even under more usual circumstances. Typically, without such rain, it takes around three days to get from the capital to the affected areas (OCHA 28/03/2024).

Such access issues will also have an impact on mobile clinics' ability to reach affected areas and restore health services (WHO accessed 04/04/2024).

CRISIS IMPACTS

WASH

In Madagascar, there are substantial gaps in access to essential water and sanitation services, a problem further compounded by the substandard quality of available services. 54.4% of the population have access to basic water services, while only 12.3% have access to basic sanitation services (WB 17/06/2022).

The combination of rising temperatures, reduced precipitation, and more frequent cyclones worsens the problems of water scarcity and quality in Madagascar (USAID 27/03/2024).

Health

In Madagascar, extreme weather events and temperature fluctuations worsen pre-existing health issues, such as infectious disease and waterborne illnesses, making socioeconomically disadvantaged groups more at risk (USAID 27/03/2024). There is also a public health concern regarding tuberculosis, which

is estimated to have an incidence rate of 233 cases per 100,000 people (WFP 02/04/2024). In 2023, the country also faced malaria and polio epidemics (UNICEF 28/03/2024).

Access challenges are affecting mobile clinics' ability to reach affected areas. Since June 2022, Madagascar has had 20 mobile clinics, allowing one million people access to health services in areas where health facilities were no longer operational or severely damaged, particularly during emergencies (WHO accessed 04/04/2024). As at 4 April 2024, the cyclone had damaged 22 health centres (OCHA 04/04/2024).

Food security and livelihoods

Cyclone Gamane has flooded nearly 1,700 hectares of rice fields, aggravating an already existing nutrition problem (ECHO 29/03/2024). Prior to the floods, Madagascar already could not meet its own rice demand, as national need exceeded local production (approximately 2–3MT per hectare) (AKDN 19/01/2022).

Madagascar has an alarming level of hunger, ranking 124 of 125 countries in the 2023 Global Hunger Index (Concern/WHH 12/10/2023). As at 3 April, 1.64 million people in Madagascar are food insecure and dependent on humanitarian aid (WFP accessed 03/04/2024). Impoverished and extremely impoverished households, i.e. most of Madagascar's population, have exhausted their food reserves. As such, there is a possibility that many households will experience Crisis (IPC Phase 3) or higher levels of food insecurity as the lean season, which lasts in northern and central regions from March–May, continues as a result of low yields (OCHA 13/03/2024; FEWS NET 10/2016). Food insecurity will worsen as a result of this, compounded by rising food (OCHA 13/03/2024).

Intense precipitation events, such as those observed during cyclones, can create favourable conditions for locusts. These insects thrive when there is a sudden increase in vegetation growth, which can have a detrimental effect on harvests reduce the amount of crops produced (USAID 27/03/2024).

Damages caused by recurrent cyclones, specifically damage to agricultural fields, have restricted households' access to agricultural and self-employment incomes. As a result, households must now rely on markets instead, where prices are high during certain seasons and steadily rising (USAID 22/12/2023).

In November 2023, rice prices were 22% higher than the average over the previous four years, indicating that the price of staple foods has also increased significantly (WFP 02/04/2024).

Impact on critical infrastructure

In total, 19,500 houses, 135 schools, and 22 health centres have been damaged by the cyclone as at 3 April (ECHO 03/04/2024; OCHA 04/04/2024).

DRIVERS OF THE CRISIS

Exposure to natural hazards, particularly cyclones

Madagascar's geographic location, in the southwest Indian Ocean Basin, makes it a hazard-prone country, frequently experiencing natural hazards such as cyclones, floods, and drought. Madagascar is considered the most cyclone-exposed country in Africa (WFP accessed 03/04/2024). Cyclones occur, on a yearly basis, approximately six times on average. Since 2020, Madagascar has been hit 16 times by cyclones (World Data accessed 03/04/2024). Climate change has increased the frequency of natural hazards, the impacts of which are intensified by the El Niño weather pattern (UNICEF 28/12/2023).

Cyclone Gamane reached a maximum wind speed of 165km per hour, corresponding to a category 2 cyclone (World Data accessed 03/04/2024). In 2023, Cyclone Freddy hit Madagascar twice, between 6–24 February and 2–14 March, with maximum wind speeds of 213 and 183km per hour respectively, equivalent to category 4 and category 3 cyclones (World Data accessed 03/04/2024; VOA 07/03/2023).

COMPOUNDING/AGGRAVATING FACTORS

Nutrition

Madagascar has experienced over 50 natural hazards in the past 35 years, including cyclones, drought, floods, and locusts, affecting over half of the population. These natural hazards have resulted in food shortages, contributing significantly to high levels of malnutrition throughout the country (USAID 03/2018; USAID accessed 04/04/2024). Children face particularly dire nutrition conditions, with 40% suffering from chronic malnutrition (WFP 02/04/2024).

The impact of cyclone damage on agriculture will most likely reduce people's access to food, particularly rice, which is a staple food in Madagascar and has already been damaged by the cyclone. Therefore, the situation of malnutrition among children may worsen further (AKDN 19/01/2022).

High rates of poverty

As a result of its limited economic and development capacity, Madagascar faces challenges adapting to a variable and changing climate. High levels of poverty and the absence of effective institutions heighten vulnerability to natural and climate hazards (WB accessed 03/04/2024). Infrastructure is a major barrier to economic growth for most residents. The country has over 49,800km of roads, but only 11% are paved. Most national and local roads consist of earth roads that are in below-standard conditions. Despite government infrastructure improvements, cyclones often destroy roads and bridges (MKLF accessed 04/04/2024; WB 10/02/2023).

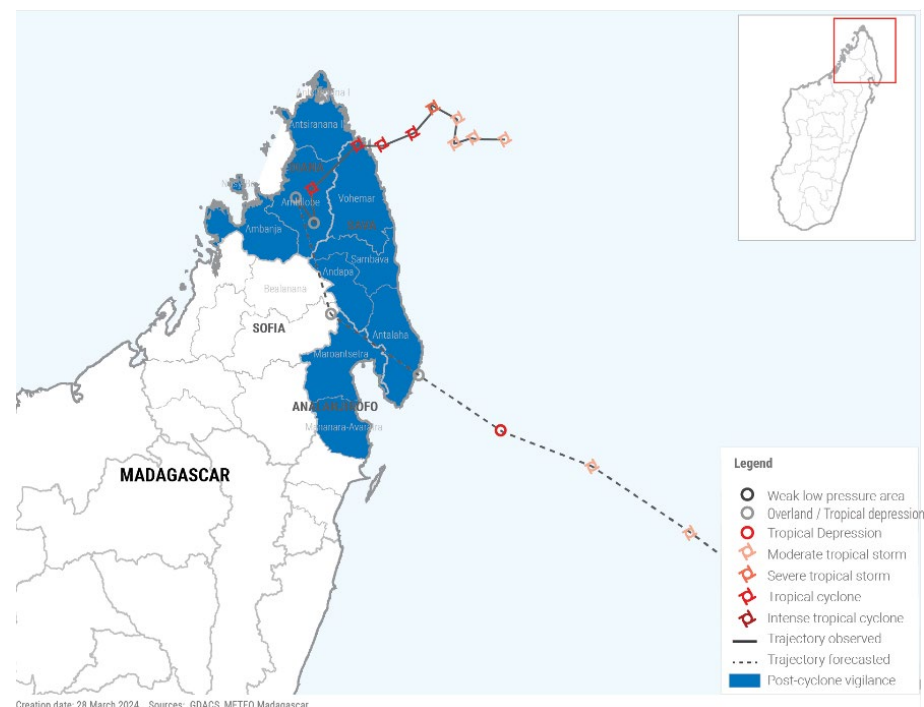
Approximately 80% of Madagascar's population lives in poverty, on less than USD 2 per day (WFP 02/04/2024; El País 09/07/2023). 83% of children in Madagascar live in extreme poverty (WFP 02/04/2024). In the country's Gamane-affected regions, a large proportion of the population lives in extreme poverty: Analanjirifo (37.4%), Atsinanana (51.5%), Diana (37.5%), and Sava (37%) (Instat-CCER 10/2021). As at 2022, Madagascar's GDP per capita was approximately USD 517, one of the lowest in the world (WB accessed 03/04/2024).

FUNDING AND RESPONSE CAPACITY

Authorities and humanitarian responders are working together to increase the scale of the response to Cyclone Gamane. Humanitarian responders report that pre-positioned stock in the northeast region is running scarce, and certain sectors lack any stock on site. Challenges to reaching the affected regions mean that stock must be transported by air or sea from Toamasina city, located on the eastern coast (OCHA 28/03/2024).

The WFP has expanded its emergency relief efforts to provide assistance to one million individuals affected by cyclones and drought (WFP 02/04/2024).

Tropical cyclone Gamane



Source: OCHA (28/03/2024)