PAPUA NEW GUINEA

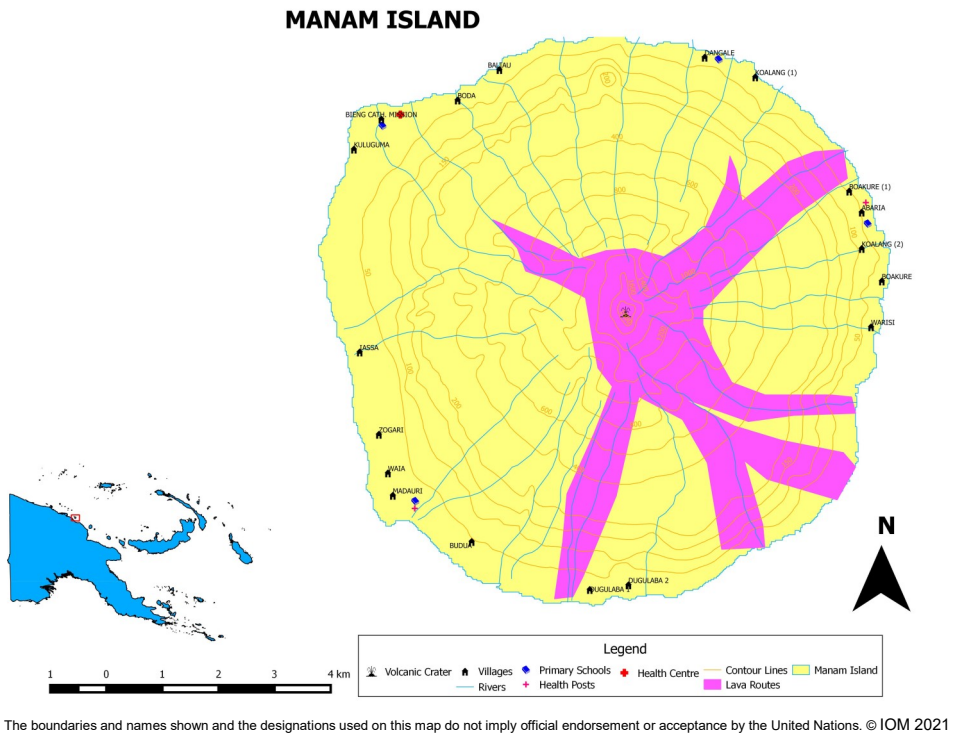
Manam Volcanic Activity

Situation Update: 11 November 2021

Manam volcano in Papua New Guinea's Madang Province started emitting ash on 20 October 2021. The emitted volcanic ash caused a thick dark smoke that covered the entire Manam Island. The Madang Provincial Disaster Centre (PDC), in partnership and with support from the International Organization for Migration (IOM), deployed a rapid assessment from 27-28 October 2021 in response to the volcanic activity.

KEY HIGHLIGHTS

- Manam volcano started emitting ash, smoke, and debris on 20 October 2021and this has continued to date.
- The hot volcanic ash and debris destroyed food gardens and fruit trees, contaminated the existing drinking water sources, and damaged shelters.
- A total of 4,648 people living on the Island are affected by the situation.
- Food, water and sanitation, and health assistance are among the identified immediate needs for the affected population.
- Manam Islanders continue to live in protracted displacement, spanning over a decade, and with limited access to basic services.



PRESENT CONTEXT

A finding from the assessment shows that the volcanic activity directly affected 4,648 individuals (2,460 males and 2,188 females). Though the volcanic activity caused no immediate displacement, volcanic ash falls caused severe pollution to rain-fed water tanks and shallow wells used by Manam Islanders to collect drinking water.

Hot ash from the volcanic activity damaged several food gardens, and food and fruit trees such as breadfruit, creating food insecurity for Manam Islanders. The limited access to safe drinking water coupled with food insecurity can cause serious negative consequences, including displacement, especially for the particularly vulnerable persons such as women, children, the elderly, and persons with disabilities.

This report presents key findings from the rapid assessment carried out by Madang PDC and IOM following the recent eruption of Manam and recommends actions critical to address the multi-sectoral needs of the affected population.

ANALYSIS

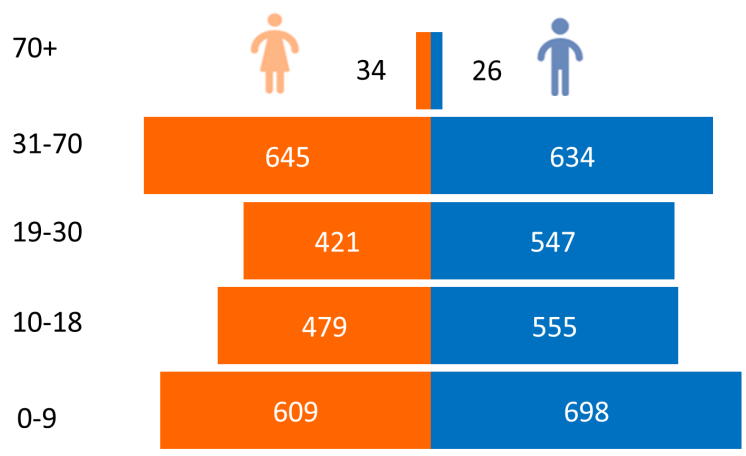
4,648 Affected individuals

1,335 Affected households

14 Affected villages

AFFECTED POPULATION BY GENDER

GENDER-AGE (YEARS) BREAKDOWN



PARTICULARLY VULNERABLE GROUPS

50.4% of the population are children

1.28% of women are pregnant

2.2% of women are breastfeeding

0.34% are persons with disabilities

1.29% of the population are over 70 years old

0.32% are persons with chronic illness

FINDINGS OF THE ASSESSMENT

FOOD SECURITY

Manam Islanders primarily rely on their food crop gardens for fresh produce supply. Also, they rely on food trees such as breadfruit, Galip (nuts), and Tulip (vegetable). Community members reported that they now have limited access to fresh produce following the volcanic activity that damaged their food crop gardens, making them rely on food assistance from their relatives who live on the mainland.

Purchasing food such as rice, tinned fish, and noodles for daily consumption was reported as a source of food though only a small fraction of the community can afford to buy such food supplies on a regular basis. As a coping mechanism, most of the population resort to having fewer meals per day or seeking assistance from their relatives living elsewhere. The volcanic activity also heavily affected the agricultural production system, on which most Manam Islanders rely as a primary livelihood source. The hot volcanic ash destroyed coconut trees and copra, which are a source of income for many of the Islanders. Apart from rice rations distributed by Madang PDC to students sitting for their Grade 8 examinations, no assistance has been rendered to Manan Islanders following this recent volcanic activity. That said, affected communities are in dire need of food supplies.

HISTORICAL BACKGROUND

Manam volcano, located 13 km off the northern coast of New Guinea near Bogia town, is one of Papua New Guinea's most active volcanoes. An extensive series of eruptions began at Manam in November 2004, forcing evacuations from the entire island. The 2004 eruption destroyed an estimated 3,000 homes and the livestock, cash crops, and food gardens of the island's 9,000 inhabitants, thereby displacing a vast majority of its population. Since then, the volcano has remained active, emitting ash and smoke occasionally. In 2014, the Government of Papua New Guinea classified Manam Island as a non-residential area as it is not safe for human habitation.

Manam Islanders displaced by the eruption in 2004 have continued to live on the mainland of Bogia District in Madang Province, awaiting guidance from the local authorities regarding their long-term relocation to a safe and conducive environment. Since the initial displacement in 2004, the Manam Islanders population has increased to an estimated 20,000 of which 80 per cent continue to live in temporary care centers in Madang Province that lack the infrastructure and land resources to support the population's needs. Competition over resources often lead to tensions between the displaced and host communities, and this has forced several Islanders to return to Manam Island in fear of their safety.

WATER, SANITATION AND HYGIENE (WASH)

The volcanic ash dispersed across the island polluted the existing drinking water sources, namely shallow wells, and rain-fed water tanks. The Islanders have drained their rain-fed water tanks following contamination by ashfall, leaving them with limited access to clean and safe drinking water. Safe water is critically needed across the many affected villages. Besides, most villagers lack sufficient materials such as jerry can and buckets to fetch and store drinking water.

For a long time, open defecation has been widely practiced by the community members because many households lack sanitation facilities. Only people living at the Government station at Manam have access to sanitation facilities. A healthcare staff contacted during the assessment reported a sharp increase in the prevalence of water-borne diseases among Manam Islanders linked with poor hygiene and sanitation conditions aggravated by volcanic activity.

There is a need for immediate distribution of Non-Food Items (NFIs), especially water jerry cans and buckets and water purification tablets, to help address the immediate and critical needs of the affected population. The NFI distribution should be accompanied by hygiene awareness messaging, including Risk Communication and Community Engagement (RCCE) on COVID-19 to attain the maximum impact of the intervention.

Manam Islanders collecting drinking water from a shallow well.
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HEALTH

Respiratory diseases, skins infections, and diarrhea were the major health concerns reported during this assessment activity, and the prevalence of the diseases increased after the volcanic eruption. There is a health facility at Boisa Island and another one run by church-run in Bien to provide healthcare services to the entire community, both of which have limited access and capacity to fulfill the needs of the total population.

Shortage of medical supplies and safe drinking water supply at the health facilities are among the main challenges to delivering basic healthcare services to Manam Islanders. Increasing the supply of essential medical facilities, and medications to the health facilities are recommended as priority.

EDUCATION

Manam Island has three primary schools. Two of the schools (Bien and Dugulava) are located on Manam Island, while the third one, Boisa Primary School, is located at Boisa Island. Schooling is disrupted each time Manan volcano erupts because the volcanic activity pollutes drinking water sources at the schools, that are already experiencing challenges related to providing safe and clean drinking water for students and staff. Delivering disaster awareness and evacuation drills, and child and youth-related programs or activities is essential to enable awareness and adaptation to climatic changes, disasters, and environmental stressors. Interruptions to education impose development delays for children and young people and place them at risk of family separation and early/forced marriages if/when families move children to different locations to offer them sustainable education and employment opportunities.

PROTECTION

Manam Islanders have a strong chieftain system in which social security and protection is provided by all Islanders. Manam community is peaceful and safe, and there were no recent reported cases of Gender-Based Violence or security incidents reported on the Island.

SHELTER

Many Manam Islanders live in traditional houses built using local materials which are vulnerable to the impacts of natural hazards and environmental stressors. The shelter materials are vulnerable to collapsing when volcanic ash falls on top of the roof. Awareness -raising on safe shelter construction, climate change adaptation and risk reduction is recommended to mitigate the impact of the volcanic activity and other hazards that may negatively impact the shelter conditions of Manam Islanders.

Traditional shelter at Manam Islander with roof damaged by ash fall.

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ACCESSIBILITY

Manam island is accessible by vehicle road from Madang town (5 hours drive, one way) and 45 minutes boat ride from Bogia station.

RECOMMENDED RESPONSE

- Supply of food rations for two or three months (minimum) to support the affected population;
- Improve the availability and accessibility of safe drinking water through the distribution of WASH NFIs, including water purification tablets and jerry cans, and maintenance of available water schemes;
- Deliver awareness on health and hygiene promotion and RCCE on COVID-19;
- Enhance essential medical supplies and maintain the water supply system at the health facility;
- Logistic support for the transportation of essential materials and/or supplies to Manam Island;
- Deliver child and/or youth-related programs or activities to support the increasing number of young people displaced and enable them to participate in educational, vocational, and youth development activities;
- Advance discussions and drafting of a policy framework for internally displaced persons and national relocation guidelines, inclusive of existing regional frameworks.

The field assessment was supported by:

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