

PREPAREDNESS IN NATURAL DISASTER CONTEXTS

VANUATU PREPAREDNESS IN VANUATU

KEYWORDS:

PREPAREDNESS, DISASTER RISK REDUCTION, COMMUNITY PARTICIPATION, CAPACITY BUILDING, INFORMATION MANAGEMENT

CAUSE OF DISPLACEMENT	Natural disaster
PROJECT DATE	Preparedness focus large-scale evacuation during volcanic eruption (Manaro volcano eruption, Ambae Island, 2017-2018) - aftermath of tropical cyclone Pam (2015).
PROJECT LOCATION	Port Vila, Vanuatu (National Emergency Operations Center), MEND mission focused on three regions - Islands of Ambae, Gaua, Tanna and Ambrym .
NUMBER OF PEOPLE TARGETED BY THE PROJECT	11,000 (Ambae) + 75,000 (TC Pam)
CCCM COORDINATION MECHANISM	Evacuation Centers/CCCM Working Group active.



SUMMARY:

The MEND mission in Vanuatu was requested by the Government of Vanuatu in order to strengthen the disaster management processes of the humanitarian actors in the country and to promote disaster risk reduction, preparedness and response activities. A draft National Evacuation Plan was developed, incorporating sub-plans for three high-priority areas as indicated by the Government. Given Vanuatu's high vulnerability to disasters, the mission sought to provide concrete guidance on ways to improve preparedness and decrease vulnerability for the local population, including those most at risk during displacement and disaster.



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Ambrym Earthquake and volcano damage in January 2019

CONTEXT

Vanuatu is an archipelago island nation situated in the South Pacific, part of the Melanesian group. It has a population of approximately 260,000 people and it is made up of 83 islands, 65 of which are inhabited. There are three main urban developed areas located on the islands of Efate, Espiritu Santo and Tanna. The country is sub-divided into six provinces, and governance and administration are highly decentralized.

Vanuatu was consistently ranked the world's most at-risk country for natural disasters. Its location exposes it to geohazards such as cyclones, tsunami, volcano activity, earthquakes, mudslides and flooding. At the same time, climate change has impacted many communities in outer islands previously reliant on subsistence fishing and farming, triggering some communities to migrate to urban areas. This migration has often resulted, at least temporarily, in a breakdown of customary social structures through which communities prepared for and responded to natural disasters and other challenges for centuries.

Vanuatu has a robust institutional framework regarding disaster management, including a 2016 – 2030 national Climate Change and Disaster Risk Reduction Strategy, as well as a National

Policy on Climate Change and Disaster-Induced Displacement Policy, adopted in 2018. The National Disaster Management Office (NDMO) oversaw emergency response, which included support to people who chose to relocate, while the Prime Minister's Office (PMO) oversaw permanent resettlements.

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While there have been significant improvements in Vanuatu's national disaster warning and alert systems, the ability of local authorities to manage mass evacuations - which required consistently updated local planning and preparedness - has still been limited. In addition, plans developed at the national level were sometimes slow to be adopted and used at the provincial and community level, especially as Vanuatu's 81 outer islands differed greatly in terms of geography, accessibility, coping mechanisms and infrastructure of their three main urban areas. Operational capacity was challenged by geography, infrastructure, delegation of authority, and lack of presence at the community level, which was further impacted by the extreme remoteness of many locations. Given limited capacities, the government focus was on reduction of disaster risk through improving communities' and local authorities' planning and preparedness.

PROJECT

SELECTION OF BENEFICIARIES

Four islands were selected with the support of the government to further develop island-specific plans. These islands – Ambae, Ambrym, Tanna and Gaua – were chosen based on their susceptibility to volcanic eruption, which often required mass evacuation due to dangers posed by the eruption itself, subsequent seismic activity, ash fall, acid rain and other noxious gases resulting in contamination of water supply and soil. The displacement tracking matrix (DTM) was rolled out in 5 governorates, providing training for local authorities on collecting initial baseline registration data, and providing regular updates through existing local authorities' reporting structures. This system was also piloted with Evacuation Center (EVC) managers, many of whom were associated with schools or churches used as evacuation centers.

CCCM ACTIVITIES

As Vanuatu was exposed to a variety of different disasters which triggered displacement, the type of displacement was usually dictated by the type of disaster. For instance, a quick on-set disaster which inflicted sudden damage then retreats, such as Tropical Cyclone (TC) Oma in 2019 resulted in a large amount of displacement to evacuation centres, such as schools, churches and public buildings (Collective Centres). When the disaster was over (the Red Alert level has been removed) affected persons were able to return home and start to rebuild. The total time displaced was generally from 1 - 3 weeks. In a large-scale emergency with massive damage such as tropical cyclone Pam, many evacuation centres were overcrowded leading to the establishment of informal settlements by families with destroyed homes and properties.

On the other hand, slow-onset and longer-term disasters such as volcanic eruptions, climate change-induced sea level rise, soil erosion and decreased soil fertility may see large numbers of people displaced semi-permanently or permanently. For example, during the 2017 - 2018 eruption of the Manaro volcano on Ambae, approximately 11,000 people were evacuated from the islands due to physical danger from eruption as well as toxic gases and ashfall. Due to the continual danger of eruption as well as long-term negative effects of ashfall and toxic gases etc., families were displaced initially into evacuation centres to wait and prepare for longer-term solutions. They were then moved onto "second home sites" which were purpose-built areas (although with very limited services) to allow affected families to self-build shelters on other islands where they could flee in the event of another eruption, without relying on government coordination and assistance. Many also settled with host communities for longer-term stays, often putting significant burden on the financial and natural resources of these communities. This led to significant difficulties in distributions, registration and other centralized services as the displaced communities were dispersed throughout different communities and across different islands.

Coordination was a core function of NDMO and was one of the main challenges in Vanuatu primarily due to the remoteness of many islands, lack of clear delegation and communication channels between national and provincial levels, and from the provincial to community levels. Assessments and registration processes were rarely well-coordinated or harmonized due to these issues, and information does not always flow to the community (or from community to authorities) in an effective manner – although progress has been made in using traditional and social media to share alerts around risk and updated from Vanuatu Meteorological and Geohazards Division (VMGD) and NDMO.

MEND formed a portion of a broader intervention aimed at supporting local authorities and communities to prepare for displacement related to climate change or natural disaster. This included formal training and capacity building activities on evacuation centre management (based on the SOPs for operations and management), as well as a national exercise to select, assess and map the evacuation centres available for communities and work with infrastructure and shelter colleagues to improve the structure to meet disaster resilience requirements. The government and partner agencies were also working to establish a national-level Displacement Tracking system using tools and methodology from the global DTM, with pilots being deployed for the Ambae, Ambrym and tropical cyclone Oma disasters in 2018-2019.

This approach broadly looked at adapting global best practice around camp coordination camp management interventions to out of camp displacement in the Pacific context. Focused on improving information management through effective, locally appropriate displacement tracking, complaint and feedback/ community mobilization, better coordination and monitoring of service provision.



Tonga training, November 2018

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Drone training

IMPLEMENTATION

In 2016, a project in Vanuatu built around the Global CCCM Cluster's MEND (Mass Evacuation in Natural Disasters) Guidelines was requested by the Government of Vanuatu to strengthen disaster management in the country by humanitarian actors and to promote disaster risk reduction, preparedness and response in communities. The MEND mission was carried out under the leadership of the regional UN Resident Coordinator and in collaboration with the NDMO and other national and regional counterparts including the VMGD of the Ministry of Climate Change Adaptation (MCCA) and the Vanuatu Humanitarian Team (VHT).

The MEND guidelines sought to clarify coordination processes and channels, and highlighted the existing coordination structures, including the flow of decisions and communication from the Council of Ministers to the NDMO Director to the National and Provincial Emergency Operation Centres (NEOC, PEOC). The MEND exercise also had a particular focus on understanding and setting plans to mitigate threats faced by women and girls during displacement.

The mission methodology was based on the MEND Operational Guide and broadly followed the MEND structure, incorporating the following phases:

- Pre-Event / Strengthening Preparedness
- Early Warning / Public Information
- Decision / Activation of Evacuation Procedures
- Warning Stakeholders
- Evacuation to Safe Locations
- Emergency Shelter and Relief
- Towards Recovery-Return and Integration or Relocation and Settlement

Special emphasis was placed on Evacuation Centres, Early Warning Systems and Information Management during Evacuations. The MEND mission used workshops, tabletop exercises, key informant interviews, and direct field assessments to create a comprehensive picture of the mass evacuation needs at national and island level.

The mission was attended by 14 team members from various UN, government and non-government agencies (further described below). The team led several workshops and held key informant interviews, attending cluster and coordination meetings during their stay, to better evaluate and provide feedback. Team members also assessed current documents, SOPs, and contingency plans.

Team Composition/Functions:

- 1. Team Leader / Coordination/Liaison
- 2. Deputy Team Leader / Information/Logistics
- 3. Risks / Hazards and Early warning systems specialist
- 4. Communications / Assessments
- 5. Coordination / Assessment
- 6. MEND Expert
- 7. CCCM / Collective Centres
- 8. CCCM Rapid Response Officer
- 9. Emergency Operations Centres / DRM Specialist
- 10. Disaster Management / Liaison
- 11. Shelter and Settlements Expert / GoV Liaison
- 12. IM / Reports
- 13. GIS / Mapping
- 14. ICT Support
- 15. Administrative Support
- 16. Senior Provincial Liaison Officer.

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Maewo firld assessments, August 2018

IMPACTS OF THE PROJECT

The overall project goal was to save and protect the lives of people exposed to actual or imminent danger through their timely and rapid movement to safer locations, and to provide a tool to assist planning bodies in the development or refinement of evacuation plans in accordance with emergency management and humanitarian principles.

Key outputs achieved prior to the mission included the Evacuation Infrastructure Guidelines, which were already approved by NDMO and shared with key Ministries including Education and Public Infrastructure actors; along with the MEND Operational Guidelines. Key outputs achieved during the mission included the completion of the National MEND Draft Guidelines, the drafting of Island Annexes (finalized in January 2017 to meet national guidelines), and documentation of key findings.

In April 2018 a state of emergency was declared because of volcanic eruption in Ambae that brought ashfall and acid rain. The state of emergency was extended until November 2018 while over 11,000 people were displaced from the island. At the same time, a small-scale cyclone in the northern province, as well as a volcanic eruption and earthquake in the central province required an additional emergency response. In early 2019, category 2-3 cyclone tropical cyclone Oma hit four provinces, including three already heavily impacted by volcanic eruption, earthquake and previous cyclone (Penama, Sanma, Malampa provinces).

Warning systems both traditional and modern were employed and no fatalities were recorded, although communities suffered from loss and damage to property, agricultural fields and livestock. In addition, because tropical cyclone Oma hit those islands which were already hosting persons displaced from Ambae and other evacuations, there was a strong focus from NDMO and humanitarian actors to ensure those evacuee families living in temporary shelters were provided support in moving to evacuation centres.

Some general recommendations of the Ambae evacuation plan were referenced during the Ambae response in 2018: namely, the suggestion that those who could self-evacuate to areas where they had family ties should be allowed to do so, whereas those who had no family ties or ability to self-support would be supported by the government to evacuate to a neighbouring island and provided with limited shelter and food assistance. The geographic grouping of evacuations on islands proceeded along the same lines as suggested in the MEND guide. However, the plan itself was not referenced regularly, and greater training for NDMO Provincial Disaster Officers and DLA provincial authorities was required to ensure the plan was referenced and updated as necessary.

At the national EOC level, during the Ambrym response in late 2018-early 2019, the NDMO Director called for a task force including provincial authorities, who were given technical support to update the Ambrym MEND plan to prepare for potential escalation in seismic and volcanic activity which would require quick off-island evacuation. This included revisions of affected communities and their potential evacuation routes based on updated risk projections from the Vanuatu Meteorological and Geohazard Division.

ACHIEVEMENTS, CHALLENGES AND LESSONS LEARNED

ACHIEVEMENTS

- The MEND project helped build NDMO capacity by using an "on the job" experiential training model, as NDMO staff involved were able to build their planning skills during the mission.
- The MEND Guidelines were adapted to specific islands to form more practical outputs which provide concrete details such as availability of vehicles, Evacuation Centres, Staff and routes.
- Communities were consulted and involved in the drafting of plans, which triggered greater thinking around their own preparedness.
- The project triggered a national process of evacuation centre selection and mapping (ongoing) and critical services mapping.
- The project triggered a request for increased support to capacity building for local authorities, NGOs, community leaders and other stakeholders on displacement management, evacuation centre management, site planning (for planned relocation for long-term disasters) and displacement tracking.

CHALLENGES

- The MEND project needed a follow up project to support with awareness at community or provincial level and simulations based on the guidance.
- Plans need to be updated regularly to account for changes in population, infrastructure, availability of staff and resources etc.
- Frequent turnover in NDMO and other government staff meant that introduction to the MEND – how it was developed, how it should be used, how it should be updated – should be included in induction for new NDMO staff.
- It would have been good to link with other preparedness activities such as Disaster Ready school curriculum.

LESSONS LEARNED

- Government ownership was essential as MEND involves both technical operational guidelines, but also a decision-making process around 'triggers for action' which required high level Government actors; the document (and any SOPs) need to be 'live' and updated regularly as changes on the ground occur.
- MEND provided good guidance on what to think about, but more detailed planning (groundwork, government meetings etc) must be in place to respond to the questions that come out of the MEND activities.
- Preparing for the mission ensuring advance coordination with both local government and customary chiefs and community leaders. This allowed for adequate time on each island to reach remote areas and ensure proper consultation with the community.
- Involvement of police or military actors who often take lead in evacuations (Bill for the Disaster Risk Management Act No. of 2018).
- Involvement of private sector In Vanautu they were often called on to assist in evacuation by providing transport etc.
- Based on feedback from affected communities during Ambrym and Ambae volcanic eruptions and subsequent evacuations, there was limited awareness from provincial officials and affected communities on the availability of the island-specific MEND plans, and there was also a desire for these plans to be presented to affected communities accompanied by training or simulations.
- Ensuring that there was a plan and timeframe in place, including assigned focal points, to routinely update MEND plans was key to ensure their continued usefulness/relevance. This process can also serve as an opportunity to provincial authorities and at-risk communities to review their preparedness levels.
- Based on cyclone and tsunami simulation exercises carried out by the NDMO in Tanna island, it would be recommended that a Training Of Trainers (TOT) be given for provincial authorities including Community Disaster and Climate Change Committees and NDMO on how to carry out a simulation at the community level. This can be linked to MEND plan but will help to cement the evacuation process into practice.
- This lack of follow up was largely due to the fact that the small NDMO team was almost constantly responding to an ongoing barrage of small to medium-scale disasters, and thus has limited time to pursue more meaningful preparedness or follow up independently on plans supported by the international community.
- The project also underlined the urgency of a community-level assessment and mapping of evacuation centers, as many structures used as evacuation centers across the country were damaged in previous disasters and need repair or retrofitting, and many do not have adequate prepositioned supplies or improved facilities to support dignified even short-term accommodation for displaced persons.