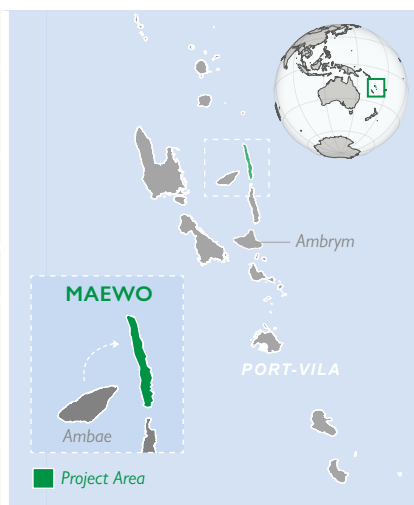


CASE STUDY

VANUATU 2018–2019 / AMBAE VOLCANO

KEYWORDS: Capacity building, Community engagement, Disaster Risk Reduction, Evacuation, Gender mainstreaming

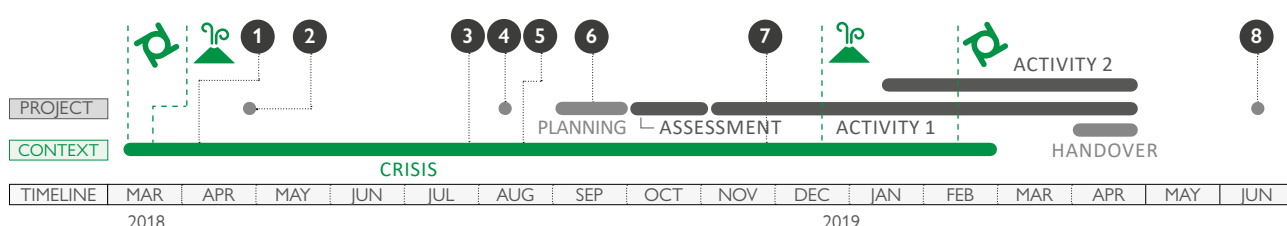
CRISIS	Ambae volcano, 2018
PEOPLE AFFECTED	11,670 individuals (the entire population of Ambae was affected and displaced to neighbouring islands)*
PEOPLE WITH SHELTER NEEDS	7,250 individuals (3,000 people displaced on Maewo and 4,250 people displaced on Santo in August 2018)**
PROJECT LOCATION	Maewo Island, Penama Province, Vanuatu
PEOPLE SUPPORTED BY THE PROJECT	Total of 1,474 HHs (5,818 individuals): - Displaced population from Ambae: 805 HHs (2,943 individuals) - Host population of Maewo: 669 HHs (2,875 individuals)
PROJECT OUTPUTS	Distribution with technical assistance: 2,000 HHs received emergency shelter assistance 222 HHs received resettlement kits 252 resettlement kits received by Community Disaster and Climate Change Committees (CDCCC) 24 communities received community toolkits Awareness and training activities: 40 people received a three-day Shelter in Emergency ToT 66 people received Shelter Focal Point for CDCCC training 134 people received community-based safe shelter awareness and support for shelter reinforcement 20 women attended “Women in Shelter” safe shelter awareness workshop Evacuation centers (EVCs): 35 EVCs technically assessed 9 EVCs (24 buildings) rehabilitated
SHELTER SIZE	25-30m² fully enclosed (excluding open kitchen).
SHELTER DENSITY	7-8m² of living area per person on average
DIRECT COST	USD 77 per HH for shelter materials USD 103 per HH for shelter materials and tool kits
PROJECT COST	USD 215 per HH on average



PROJECT SUMMARY

When the Manaro Vouli volcano covered Ambae with ash in July 2018, the government ordered the evacuation of the island, meaning that almost 3,000 people (800 households) were evacuated to neighboring Maewo Island, instantly doubling its population. The program provided emergency shelter for the evacuees, integrating them within the host community and developing an early-recovery response. The vulnerability of both evacuees and host communities to future cyclones was reduced through a program of cyclone shelter rehabilitation and strengthening.

* Source: Figure based on 2016 Vanuatu census data
 ** Source: National Disaster Management Office (NDMO) of Vanuatu



- Activity 1:** Community-based Shelter Activities.
- Activity 2:** Reinforcement of Evacuation Centers.
- 7 Mar 2018:** Tropical Cyclone Hola hit islands of Ambrym, Pentecost, Ambae, Malekula and Malo.
- 18 Mar 2018:** Manaro Vouli volcano alert level 2 to 3 on Ambae island.
- 1** **12 Apr 2018:** State of Emergency (SoE) for Ambae declared.
- 2** **30 Apr 2018:** Shelter Cluster strategy first draft for the Ambae Volcano response.
- 3** **26 Jul 2018:** Extension of SoE. Announcement of mandatory evacuation from Ambae.
- 4** **3 Aug 2018:** Immediate 1-month Shelter Cluster plan for Maewo.
- 5** **15 Aug 2018:** End of mandatory evacuation from Ambae.
- 6** **14 Sep 2018:** Updated Shelter Cluster plan and budget following assessment on Maewo and Santo.
- 7** **27 Nov 2018:** End of SoE for Ambae. Handover from NDMO to National Recovery Committee.
- 16 Dec 2018:** Ambrym volcano alert level 2 to 3.
- 15 Feb 2019:** Tropical Cyclone Oma.
- 8** **14 Jun 2019:** Lessons Learned workshop.

CONTEXT

Vanuatu is a Y-shaped archipelago in the Pacific Ocean, with more than 80 islands and a population of approximately 300,000. Most people live along the coast of the eight largest islands. Vanuatu is among the countries with the highest risks of natural hazards including cyclones, earthquakes, flooding, landslides, volcanic events and the effects of climate change. The tropical cyclone season normally runs from November to April.

In Vanuatu, as elsewhere in the Pacific, traditional coping mechanisms help to significantly reduce disaster impacts. For example, the understanding of weather patterns over the islands, or the observations of sea birds indicate impending strong winds, helping to alert people to prepare. Such local response capacity has been reinforced through Provincial Disaster Committees based in remote islands, leading coordination and support at a sub-national level. Many inhabitants of Vanuatu (Ni-Vans) are skilled at building or repairing their own dwellings and therefore a large percentage of the population live in self-constructed houses made of locally available natural materials.

SITUATION BEFORE THE CRISIS

The cluster coordination mechanism was adopted by the National Disaster Management Office (NDMO) and the Vanuatu Humanitarian Team in 2011. The Vanuatu Shelter Cluster was established in 2015 for the response to the category 5 Tropical Cyclone Pam, and remains active for preparedness and coordination of future responses in the country. Under the leadership of the Public Works Department (PWD), the Shelter Cluster includes government and non-government member agencies.

Following an increase in volcanic activity of the Manaro Voui volcano on Ambae island to level 3 then 4 in September 2017, the entire population of the island was evacuated,

mainly to Espiritu Santo, Pentecost and Maewo Islands, while some people went independently to the capital city, Port Vila, on Efate Island. Most people had been repatriated to Ambae by late October 2017 and the volcanic activity decreased to level 2 by early December.

SITUATION AFTER THE CRISIS

Category 4 Tropical Cyclone Hola hit the islands of Ambrym, Pentecost, Ambae, Malekula and Malo in March 2018 causing significant damage to housing, crops and community infrastructure.

On 18 March 2018 the alert level for Manaro Voui volcano was raised from level 2 to 3, as Ambae and the surrounding islands felt the effects of continuous ash fall and acid rain which contaminated water sources, destroyed crops, and led to the collapse of traditional houses. On 12 April 2018 the Council of Ministers (CoM) declared a State of Emergency (SoE) for the three months up to the 13 July, with a multi-sectoral emergency response triggered when the affected populations began moving to 17 designated evacuation centers on Ambae, and to host communities on neighboring Maewo Island.

Following a CoM decision on the 26 July, all of Ambae's 11,670 inhabitants were mandatorily evacuated, some with government support to Maewo, while some decided to do so on their own, evacuating to Santo and Efate Islands. On Maewo, evacuees were resettled organically within host communities in unplanned sites for emergency shelters, while some potential sites were identified for the Second Home Program. Shelter Cluster agencies provided emergency shelter materials and technical assistance, while the government response focused mainly on Maewo through the Second Home Program, which aimed to resettle displaced people on new land with new permanent houses, creating an alternative safe home for Ambaeans in the event of future volcanic activity on their island.



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On Maewo, evacuees from Ambae settled within host communities in unplanned displacement sites. Organizations provided emergency shelter materials and technical assistance.

NATIONAL SHELTER STRATEGY

The initial Response and Early Recovery Humanitarian Action Plan for Tropical Cyclone Hola and the Ambae Volcano Response was released by the NDMO on the 6 April 2018. In early May the NDMO requested the Shelter Cluster's plan and budget for the interim, medium, and long-term responses. Shelter Cluster Vanuatu responded to all updated requests. As no funding had been allocated to the shelter sector by the government and an international appeal was not launched, the capacity to respond to identified needs was inevitably limited to what Cluster members could mobilize internally.

The Shelter Cluster coordination team and partners conducted assessments and monitoring for TC Hola on Malekula, Ambrym, Pentecost and Ambae, and for the volcano response on Ambae, Maewo and Santo. These informed the iterative updates of the Shelter Cluster strategy, adapted to the limited resources available.

The strategic objectives were:

1. To provide life-saving shelter materials, essential household items and technical support to all the displaced population on Ambae;
2. Following the mandatory evacuation, to provide temporary family shelter improvements to more than 60% of evacuees on Maewo; and
3. To improve access to safe cyclone shelters for both displaced and host communities.

These objectives also applied to evacuees in Santo, but with very limited capacity for implementation there and limited support of the Government initially.

PROGRAM DESIGN

The program aimed to address the two most urgent shelter priorities identified to protect the displaced Ambae people sheltering on Maewo island, as well as their hosts, from adverse weather and the approaching cyclone season through urgent measures to:

- Strengthen the temporary family shelters through the distribution of reinforcement materials accompanied by safe shelter awareness training and support for shelter-strengthening techniques; and
- Improve access to safe cyclone shelters through mapping and reinforcement of existing facilities.

PROGRAM IMPLEMENTATION

The program implementation required significant community mobilization for both activities. A team of ten staff was recruited locally from the displaced and host communities as well as a few experienced specialists; logistician, shelter trainer and site supervisor.

For the emergency settlements, land issues were discussed and addressed by the NDMO and traditional and community

leaders during the displacement and first emergency shelter response. For the construction of second homes on Maewo, the NDMO involved community leaders and traditional authorities with provincial authorities (Area Council Secretary). The Global Shelter Cluster Housing Land and Property (HLP) focal point was also deployed to develop recommendations on land tenure issues on Maewo.

TARGETING

The program originally targeted blanket coverage of all displaced households on Maewo. As the situation developed and the State of Emergency (SoE) was lifted, some displaced households decided to return to Ambae and did not receive their shelter kits before departing (though these kits were then given to CDCCCs). The Shelter Cluster partners were not involved in targeting and selection of households for the Second Home Program, which was brought in separately by the NDMO and the Department of Strategic Policy, Planning & Aid Coordination (DSPPAC).

Regarding the reinforcement of cyclone evacuation centers (EVCs), after discussions with the Shelter Cluster, local authorities and the NDMO, and based on the needs and technical assessment, ten EVCs, mostly schools, were identified for reinforcement from a total of 36 potential EVCs.



Shelter Focal points from displaced and host community were trained by Shelter Cluster partners, to lead shelter reinforcement and preparedness related activities.



Model house structures were built at the community level on Maewo, to demonstrate traditional safe construction principles for all shelter training and awareness activities.

COMMUNITY ENGAGEMENT & COORDINATION

As the program of Safe Shelter Awareness and training components of the response aimed to help the affected population to reinforce their shelters and to support their preparedness for the upcoming cyclone season, the program supported both evacuees and host communities. Therefore, implementation and coordination of community-based shelter capacity building activities were carried out through continuous engagement with both displaced and host community leaders, all with respect to the organization's gender focus. For instance, this led to the identification of the Shelter Focal Points to be trained in equal numbers from both displaced and host communities, and the development of 'Women in Shelter' workshops. All of this was done in close coordination with the custom chiefs throughout, as these were deemed by them as important for the future Ambae and Maewo communities.

The community mobilization was coordinated with other components of the intervention such as gender protection and DRR capacity building. General information meetings were set up to present, discuss and report at key stages of the program with community leaders, traditional authorities, government agencies, local partners and local authorities. There was excellent coordination and cooperation between humanitarian shelter agencies, reinforced by their common understanding of the local context and constructive synergies in the benefit of affected communities, with the signing of a Memorandum of Understanding (MoU) and building up of shared teams for program implementation.

The implementation of the shelter activities was coordinated with other components of the response such as WASH and Health to optimize the resources of the

program (logistics, HR, budget etc.) and to improve communications with the communities in order to avoid unnecessary consultation.

GENDER AND PROTECTION

Both the organization team directly and the Gender and Protection team on the ground, with support from the organization, did various levels of gender assessment and data collection. This included a Gender and Protection rapid assessment led by the Cluster followed by a detailed referral and protection mapping and mapping of all women's groups on the island done by the organization, all of which involved consultation with local women. The organization then also ran 'Finding My Voice' workshops throughout the island which supported women representatives from all communities to develop their confidence, understand the humanitarian system and how to advocate for their needs.

There was also the specific identification of women to engage in shelter work and 'Women in Shelter' workshops for women participants to build specific shelter capacities and to develop micro-project management skills. The gender team followed up on gender and protection vulnerabilities and information was shared to allow the shelter team to adapt to the needs. The gender team also identified women to be Shelter Focal Points (SFP) (successfully) and members of the shelter team (unsuccessfully). The roles and responsibilities of women for shelter-related issues as informed by the Gender and Diversity Analysis, were incorporated in the SFP training package so that the male participants realized the key role of women in the construction process and maintenance of housing.



Gender and Diversity Analysis informed the incorporation of content on the roles and responsibilities of women in the construction process and maintenance of homes into the training package for Shelter Focal Points.

DISASTER RISK REDUCTION (DRR)

On Maewo, the strengthening of cyclone shelters responded to the threat of repeat cyclones, while the Second Home Program addressed the possibility of future evacuations caused by further volcanic activity on Ambae.

At a national level, this close coordination between Shelter Cluster partners during this response reinforced the shelter preparedness framework in Vanuatu. This was done through the development of systems and tools, as for the development of new Building Back Safer (BBS) Information Education Communication (IEC) materials, setting up a Facebook social media platform for safe shelter message dissemination, or mainstreaming of the community-based Shelter Focal Point positions within the CDCCC system.

It was also a good opportunity to enhance the continuity of collaboration between key local actors and sharing of good-practice resources, which is key to DRR and preparedness. This indeed paid off for the response to TC Harold in 2020, when the response to the category 5 cyclone had to be led entirely by local partners due to COVID-19 restrictions.

LINKS WITH RECOVERY

The response was designed to suit various scenarios based on eventual choices of those affected and Government policy, on whether to stay in host communities, resettle on Maewo, or return home to Ambae. The strategy changed from the upgrading of shelter kits to the strengthening of existing emergency shelters (tarpaulin-covered timber or bamboo frames). The content of the kits was adapted to be used as a resettlement shelter kit to support households who wanted to build a second home on Maewo.

MATERIALS AND SUPPLY

All shelter kits and toolkits were supplied from Port Vila with no negative impact on the local market, which could not have provided the quantity and type of items in the kits due to lack of markets on the island of Maewo. Only the sand, aggregate and timber for the reinforcement of the EVCs were supplied locally.

MAIN CHALLENGES

The main challenge was the uncertainty of the situation at different levels:

Governance decisions: lifting of the SoE and return of displaced households to Ambae, given the unpredictability of the activity of the Ambae volcano. This led to the needed adaptation of the resettlement kit content and distribution strategy. This was made possible by (1) the organization's knowledge and understanding of local and traditional coping mechanisms, and (2) trust and good relationships with donors, local authorities and the affected population.

Household level: household decision making about returning to Ambae, and the importance of good community engagement. The main safe shelter awareness activities had already been conducted on Maewo, through trained Community Shelter Focal points or 'Women in Shelter' workshops, therefore the organization was able to adapt the program quickly in close coordination with the evacuees who had chosen to return to Ambae.

Partners: lack of confidence in the Displacement Tracking Matrix (DTM) data led the organization to re-assess their lists of selected households to allow flexible programming adaptation and versatility to suit various potential displacement scenarios.

WIDER IMPACTS

The Shelter Cluster used the opportunity to **strengthen institutional capacity of the Cluster** and to inform standard operating procedures through workshops and training. The Ambae volcano response led to 15 recommendations for improving the Shelter Cluster's workplan in order to strengthen future responses. The Shelter Cluster also developed new IEC materials that were disseminated via a new Facebook page as well as other means. Shelter Cluster technical guidelines were updated to consolidate input from the Ambae volcano response.

An MoU was signed between two humanitarian shelter agencies for the implementation of this program. This **partnership approach** led to the formation of a similar partnership on Pentecost Island during TC Harold in 2020.

The Shelter Cluster response in Maewo provided a powerful example of how a community-led self-recovery approach to rebuilding shelters, which leverages traditional knowledge, traditional governance structures, architecture and resources, can **provide a viable and scalable model for shelter response after a disaster in the Pacific that is affordable and appropriate**. This is something that had otherwise been absent in Vanuatu in comparison to the very high cost and challenging delivery of an externally led housing construction program. This is critically important in the context of Vanuatu and the broader Pacific where disasters and damage to shelters are frequent and resources are limited. Already the approaches used in Maewo have been able to be replicated and taken to greater scale in neighboring Pentecost and Ambrym Islands after TC Harold (2020), where Maewo-trained Shelter Focal Points and Shelter Cluster partners have helped to rebuild housing for 1,800 households, and where the custom links opened with Maewo are being leveraged to access and mobilize powerful island-to-island support. In addition, during TC Harold it was possible to see the benefits of the Maewo shelter project, where all of the Maewo communities were safely sheltered in the EVCs that were delivered during the Maewo project, which held up and protected people who were in the outer zones of the path of the category 5 TC Harold.

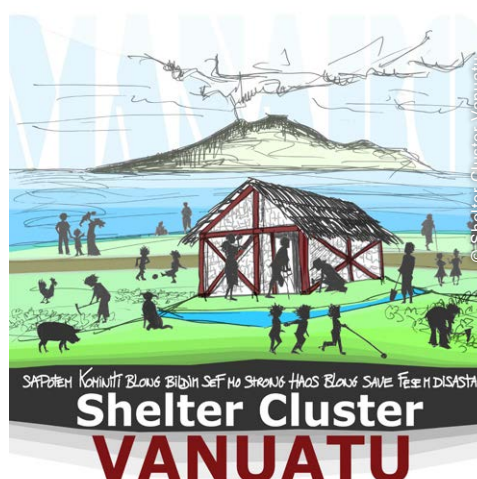
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

- √ **Scale of needs addressed.** The compulsory evacuation of Ambae meant that the population of Maewo doubled overnight and it is a notable achievement that the response addressed all of the needs on Maewo through good collaboration between shelter actors.
- √ **Supporting both host and displaced populations through a strong community-based approach,** building a common interest in the shelter activities, and mobilizing communities' leaders and the traditional authorities to drive the implementation.
- √ **Strong partnership between Shelter agencies, Shelter Cluster, national, traditional and local authorities,** and strong collaboration between Shelter Cluster members with available resource mobilization, coming from experience and capacities built from previous disaster responses in the region.
- √ **Enhancement of safe shelter preparedness and awareness framework,** with (1) development of new IEC materials, (2) update of technical guidelines, (3) setup of social media platform, (4) Shelter Focal Points for host and displaced communities on Maewo, and (5) Emergency Shelter Training of Trainers.
- √ **Strengthened local institutional capacity** recognizing that Vanuatu is exposed to regular natural hazards.
- √ **Good integration of gender, protection and shelter response** at host and displaced community levels. On Maewo there was also good coordination between the Shelter and Gender/Protection Clusters.

WEAKNESSES

- × **Limited resources and capacity available to expand the response to all evacuees,** including those in Santo, and to maintain organization presence over a longer term to provide continued support to affected communities on Maewo Island.
- × **Timeline: planning was too optimistic,** and it was difficult to establish a sound plan given the logistics constraints and the fluid nature of the displacement scenario. The context changed more rapidly than the responders were able to adapt and some Ambaeans started to return to Ambae before they had received kits as they were only given the kits after the associated training.
- × **No resources available to support displaced people in their returning process to Ambae.**
- × **No resources available to consider reinforcement of all cyclone shelters** in Maewo and by extension in Santo and Ambae.



Community Building Back Safer (BBS) awareness used this drawing of a safe shelter on Maewo Island. This collaborative drawing involved community and Shelter Cluster partners feedback to highlight shelter reinforcement. The drawing and BBS principles were disseminated through posters, t-shirts and through Facebook.

LESSONS LEARNED

- **Fast funding mechanisms** that allow adequate time required for procurement are critical to respond to evolving displacement scenarios.
- **Building trust and predictable collaboration** between Shelter Cluster lead and partners are key for a successful response.
- **Targeting and including host and displaced communities in the implementation of the program is critical** to maintain social cohesion and deliver successful program outcomes.
- **Taking the opportunity of a disaster response to enhance disaster risk reduction** through safe shelter awareness and cyclone shelter reinforcement should be institutionalised at national level.
- **Partnerships with Chiefs and traditional governance structures in Vanuatu is powerful and promotes community resilience.**