WASH CLUSTER REPORT ON MANARO EMERGENCY RESPONSE







This lessons learned report is produced by the Department of Water Resources and the Department of Public Health with technical assistance from the UNICEF to support WASH cluster learning and improvement. It provides a synthesis of good practices, lessons learned and recommendations for the cluster performance during emergency. The analysis draws on lesson learned workshop held in Santo with the participation of WASH cluster partners.

The recommendations highlighted will help WASH cluster to:

- Improved coordination and leadership during emergency response
- Strengthen WASH cluster response capacity both at the National and Provincial level
- Improved accountability, predictability and partnership

Thank you to all the partners who have supported WASH emergency response:

Department of Water Resources (Cluster Lead) UNICEF (WASH cluster co-lead) National Disaster Management Office Ministry of Health Vanuatu Red Cross Sanma Provincial Government Penama Provincial Government New Zealand Ministry of Foreign Affairs and Trade (MFAT) Department of Foreign Affairs and Trade (DFAT) Save the Children World Vision Live and Learn Vanuatu ADRA Vanuatu Oxfam Vanuatu

Vanuatu WASH Cluster, led by the Department of Water Resources, was established as part of national humanitarian reform, and provides an open, formal platform for all emergency WASH actors to work together

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Introduction

WASH cluster was activated to provide immediate support to the People of Ambae affected by Manaro volcanic activity. It is a massive response the country has ever seen. Due to the severity of the situation, the government had declared State of Emergency for Ambae and ordered for mass evacuation. Approximately more than 11,600 people were evacuated to Santo, Pentecost and Maewo.

WASH cluster immediately mobilized from Vila and set up its emergency coordination center in Santo jointly with the Health cluster. Over a very short period of time, huge support were given to assist WASH humanitarian activities from Vanuatu Government, United Nations Agencies, Red Cross, private sector and both International and Local non-organizations (NGOs) resulted in provisions of WASH infrastructure and services to the evacuees.

Throughout the duration of the emergency response in all camps sites in Santo, Pentecost and Maewo, there were no outbreak of diarrhea which is one of the best indicators of a successful WASH emergency program. WASH cluster either achieved or came closer to achieving minimum national standards adopted from the sphere standards and also DoWR Water Safety and Security Standard. This lessons learned report covers key technical services of the WASH cluster, focuses on the aspects of coordination, water, sanitation and hygiene promotion. For each of these technical areas the following subsections are presented: what went well, what did not go well/challenges and recommendations.

This document is intended for WASH practitioners in emergency preparedness and response. It is rich with practical examples of how the WASH cluster overcome emerging challenges, successful interventions as well as recommendation to improve WASH emergency response coordination

The Department of Water Resources and the Department of Public Health under the Ministry of Health wish to express sincere appreciation to the tremendous dedication of all those involved in the WASH Cluster response to the emergency across Government, UN agencies, Red Cross, NGOs and Private Sector. Furthermore, I wish to thank all the WASH specialist who have devoted time to share experiences and insights captured in this document.

WASH RESPONSE ACTIVITIES

1. Coordination

With a disaster of this magnitude, strong coordination was required to ensure WASH objectives and priority agenda is effectively communicated to all partners. This was to provide common platform, facilitate the effective and efficient use of limited resources and provide accountability and predictability for the WASH response as well as to coordinate with other clusters involved in the response.

1.1 Intervention and Outcome

- The WASH Cluster coordination in santo was very active under the leadership of the Department of Water and Department of Public Health and co-lead of UNICEF responsible for ensuring all evacuees have access to WASH services.
- The Director of the Department of Water officially activated National WASH Cluster in Vila on 25th September 2017. First WASH cluster was held on the same day with all WASH partners to develop WASH Response Plan based on 3 scenarios 1. On island evacuation 2. Response in evacuation centers setting 3. Response to camps setting. Plan and budget was then submitted to NDMO for financing
- WASH and Health cluster jointly operated in one Emergency Operation Center. Sound decision from the National WASH Cluster to relocate coordination unit to Santo enable partners to centralize planning and resources due to high number of people being evacuated to Luganville.



- Meeting agenda were similar each day because of cleaning planning and priorities were set well in advance. Meeting minutes were issued and submitted to NDMO PEOC in Santo.
- WASH Coordinator and Manger NPH attended daily PEOC briefing to share WASH and Health update and keep track of emerging issues from other clusters related to WASH and Health needing immediate intervention.
- The WASH cluster operation was supported by:
 - 1. WASH cluster coordinator and Manager of Public Health
 - 2. Team leaders for hygiene distribution and awareness
 - 3. One water quality specialist from the Department of Water

- 4. Water technical Team
- Technical working groups on hygiene promotion, water trucking & safety and sanitation were established supported by UNICEF and MFAT.
- Onsite joint operation center for WASH and health set up in Lolowai, west Ambae to coordinate emergency response to repatriation process

1.2 Lessons Learned

- WASH Cluster review team articulated the value of having experienced and trained WASH personnel in emergencies to understand emergency response mechanism and technical aspects of the emergency
- Proactive participation in the cluster by all partners provided common understanding of the prioritized needs of the evacuees.
- Transfer of National WASH Coordinator to Santo added value to Santo based Team
- If an emergency of this magnitude strikes again, WASH cluster should be more proactive to set up field coordination hub in each affected sites. This is important to enable data collection and response is based on needs as the situation evolves
- WASH Cluster to promote cluster approach at the provincial so WASH practitioners understand the role of cluster during emergency.
- WASH partner agencies were integral to the strength of the response. This action encouraged WASH agencies to take a holistic approach to WASH, minimize duplication and assist in controlling the quality of the WASH response.
- A Term of Reference for the provincial WASH Cluster needs to be prepared to clarify the role and range of interventions expected of them, and how other agencies related to WASH.

1.3 Preparedness and Action

- WASH and Health combining at provincial level works well and should be considered for other provinces as well.
- Develop clear and jointly agreed roles and responsibilities to deepen the commitment of WASH partners.
- Department of Water Resources must delegate and allow NGO WASH partners to assume leading coordination role in the field where appropriate or where they have they have their presence while maintaining overall coordination and supervision of wash emergency response
- Develop WASH Provincial Contingency Plan
- Develop WASH provincial coordination structure and identify areas for linkages with other clusters
- Develop Provincial WASH Standard Operating Procedure
- Conduct Simulation Exercises
- Training (coordination and management, EOC, WASH in emergency, Civil military
- Safety and security at clusters EOC

2. Assessment, Registration and Monitoring

Following the eruption of Manaro volcano and evacuation of the people on and off Ambae, WASH assessments were needed to quantify and qualify WASH response requirements and to prioritize needs.

2.1 Interventions and Outcome

- an initial WASH assessment was conducted by DoWR staff and partner agencies based on Ambae
- due to the nature of the emergency, ongoing WASH assessment and monitoring were conducted in camps and communities
- While there was no in depth WASH technical assessment conducted, the findings from the rapid assessments were useful to inform WASH intervention in camps and communities.
- High number of volunteers/health staff recruited who assisted with registration and distribution of supplies
- The absence of an information management officer resulted in data collection and management were not centralized
- Water quality assessment and monitoring was ongoing through all stages of the response

2.2 Lessons Learned

- The strength of the WASH rapid assessment came from both "story telling" and "numbers" collected as the situation evolved rapidly
- Need to train more WASH practioners how to use Standard WASH Assessment form uploaded in AKVO Flow application
- The assessment team deployed should be equipped with all the necessary communication means eg. Internet dongle, phone credits to be able to provide faster field findings to planning team in EOC.
- Assessment findings and report were better coordinated and shared with WASH cluster and other key clusters/ NDMO to help with response planning and coordination
- Early allocation and deployment of water technical team and hygiene promotion team help generate first-hand information on the type of assistance needed in each evacuation centers



• WASH cluster worked collaboratively well with the health cluster to minimize risk of diseases outbreaks in camps

• There needs to be a prioritization of WASH intervention at the cluster level. There is a tendency for agencies to pick areas and work there just because they have presence there. As a result agencies invest in activities not identify by the cluster as important.

2.3 Preparedness Actions

- Train more WASH practioners to understand and know how to use WASH Technical Assessment form
- Different WASH assessment forms should be prepared to collect appropriate data for:
 - 1. Type of emergencies (cyclone, flood, volcanic eruption)
 - 2. The different stages of an emergency
- Develop WASH Emergency Assessment guideline and procedures to better coordinate assessment activity

3. WASH Supplies & Hygiene Promotion

The Government of Vanuatu, UNICEF, NGOs, Red Cross and other donor partners immediately allocated

their resources to support WASH response intervention to provide safe and adequate clean water to evacuees in camps. Hygiene kits distributed to minimize the risk of disease outbreak supported by ongoing hygiene promotion awareness.

Hygiene promotion messaging and Information, Education and Communication (IEC) materials are required to assist the evacuees in practicing behavior that helps reduce the likelihood of disease outbreaks and other health risks.

3.1 Intervention Outcome

- All supplies from partners were stocked in health ware house. Repackaging was done and distribution better coordinated, utilizing health volunteers.
- Hygiene promotion awareness conducted in camps
- WASH NFIs sourced from partners in country and quickly dispatched to sites
- Good support from Donor partners
- MFAT staff help with the installation of chemical toilets to 6 evacuation centers, schedule days for the chemical toilets to be emptied when they are full, supply of hygiene kits, purchasing of the cleaning materials to be used in these chemical toilets, hired vehicle for 5 days and financial support for first water trucking by Santo Hardware
- UNICEF staff support the technical analysis of the situation to each sites, supply of tablets used for data collection by each WASH team members, compiling data to identify gaps, supply of hygiene kits and purchased 8x6,000lt poly tanks installed in 7 evacuation centers.



- Save the Children assisted with data collection from each camps sites, helped with hygiene kits distribution and organized Global Hand Washing day in camps sites, shipped WASH NFIs to East Ambae and distribution.
- World Vision assist with compiling of data collected each day, distribution of hygiene kits to evacuees hosted with families. Provided coordination and logistic support during WASH repatriation response in all parts of Ambae through PCA agreement with UNICEF.
- Vanuatu Family Health assists in hygiene awareness, upgrade of sanitation facilities to 8 evacuation centers and deployed to Ambae during repatriation to conduct similar activities in west and North Ambae.
- WASH NFIs first shipment to west Ambae and East Ambae on 24th October include 4x6,000lt tanks funded by UNICEF and 1x10,000lt Tank donated by Vanuatu Hardware, left over UNICEF hygiene kits, Red Cross hygiene kits and 5,000 roll of toilet papers



- WASH NFIs second shipment to East and West Ambae on 25th include 4x6,000lt water tanks funded by UNICEF, 235 hygiene kits, water bladders, 210x10lt water container filled with water, 36 toilet slaps, 6,400 toilet papers, repack 1 carton aqua tablets and 1 carton repack sanitary pads to east Ambae
- WASH supplies sourced from partners regional warehouses
- Central storage facility for WASH items
- Strong coordination between partners

3.2 Lessons Learned

- Construction of pit toilet prohibited in major evacuation centers in municipal area.
- Construction materials for pit slaps not purchased as requested resulted in unsafe latrine built by communities
- WASH IEC materials were available and used in evacuation centers. Posters were distributed and placed in central areas by WASH Partners.
- Late installation of porter loo toilets in evacuation centers due to late purchase of cleaning materials by Finance
- No digging tools and materials for pit latrine construction.
- Portable toilets provided by LL and NDMO were not used. (Logistical difficulty to remove and dispose of waste when full)
- NDMO was really slow to provide logistic support to WASH cluster to ship hygiene kits in Vila to Ambae for distribution

3.3 Preparedness Action

- Include tools and construction materials for pit toilets in planning.
- Design standardize latrine facilities based on urban and rural community context and needs
- Porter loo toilets used in camps **MUST** be handed over to WASH Cluster (Department of Public Health) for future events/used
- Review and Standardize hazard specific WASH EIC materials

4. Water Access

In the initial days following the arrival of the evacuees in various evacuation centers in Santo, Maewo and Pentecost, water technical team connected pipes and tap stands based on the capacity of the facilities to ensure people have access to safe and clean water at all times.

4.1 Intervention and Outcomes

- Provision of water to evacuation centers through water trucking and installation of extra stand pipes to meet national requirement.
- Drilling of new boreholes in schools
- Installation of water tanks to camps
- Water technical team quickly mobilize to sites
- WASH ERT conducted water trucking in Santo and on Ambae to communities where water is depleted. Approximately 6,000lt of water was distributed to communities
- UNICEF purchased and installed 8x6,000lt poly tanks in camps filled with water
- WASH ERT Teams had refilled 19 water tanks with 53,000lt of water through water trucking activity using Santo Hardware lorry, PWD water truck and VMF fire truck







- WASH ERT Team had done short water pipe extension with 38 new taps installed in 19 evacuation centers where they have access to Luganville water supply system
- DoWR purchased 1x6,000lt water tank with submersible pump installed at the evacuation center in Bambua Church of Christ
- WASH Drilling Team had drilled a borehole at Ngergar village
- Red Cross supplied 203x20lt water container filled with water and shipped to East Ambae
- Water quality test and sampling for analysis
- WASH ERT Team on Ambae had cleaned 30 wells in which water was contaminated by dead animals and extensive amount of volcanic ash. Wells were refilled using desalination machine at Lolowai

- Water trucking activity had delivered 36,000lt of water to communities in West Ambae and 18,000lt in North, 20,000lt of water in south Ambae
- Existing national water inventory useful for planning and decision making
- Awareness conducted in camps and schools

4.2 Lessons Learned

- Diarrhea outbreak was absent for the duration of the response which is partly attributed to the fact that the evacuees had access to treated water. In some cases, bottled water were distributed
- Water was accessible in all evacuation centers and used for washing, bathing and cooking
- Break down of private water trucker delaying trucking.
- Not enough equipment to conduct water testing in field
- Lack of provincial water laboratory delay awareness to be conducted in communities about status of community water accessible by the affected population which lead to confusion and frustration amongst the local community
- Water trucking on Ambae during repatriation was a real challenge due to shortage of logistic support, road conditions, isolation of communities
- High dependency on bottle water for drinking despite assurance of water supply safety

4.3 Preparedness Action

- Rehabilitate 7 water gravity and indirect system in Ambae to ensure people access safe and clean water and facilitate ease implementation of water trucking
- Install first flush system in communities to ensure community rain water systems are protected against volcanic ashes
- Drill 10 boreholes in Ambae in communities who may not access water from rehabilitated water
- Better planning required to avoid huge time and costs spent responding to EV sites of less water priority needs.
- Establish water laboratory unit at all provincial base to ensure water testing data and quickly analyze and findings are quickly documented to inform planning and intervention
- Purchase proper water testing equipment. Water quality being the back bone for WASH response, it is important to ensure water testing tools are given to all WASH emergency response team to conduct the activity in a timely manner
- Develop standard water key messages for awareness purposes and be approve by DoWR for use in communities
- Upgrade existing Evacuation Centers with WASH Facilities eg. Water access, toilets and waste disposal
- Water Bladders MUST be handed over to WASH cluster (DoWR) for use in future emergencies.

5. **Provision and use of Toilets in Camps**



Mass influx of the evacuees to schools, churches, community buildings chiefs Nakamal in Santo, Pentecost and Maewo resulted in an urgent need for sanitation facilities. Many of these facilities were overcrowded, lacked adequate toilets and washing facilities. The demand for sanitation support was an immediate need implemented by WASH cluster during the response

5.1 Intervention and Outcome

- Toilets facilities in camps were calculated based on the ratio 1 toilet for 30 females and 1 toilet for 40 males
- MFAT supported WASH cluster with by providing porter loo toilets which were installed in large evacuation centers such as Chapui Stadium.
- WASH Committees were set up in each evacuation centers to manage and maintain the use of the facilities
- Through MFAT funding support, WASH cluster contracted Wong Zeng Zing to undertake 3 removal of waste in porter loo toilets.
- MFAT also provided toilets cleaning tools as Vanuatu government support came very late just before repatriation commenced
- Hand washing facilities were established close to toilets

5.2 Lessons Learned

- Digging of toilet pits is prohibited for major evacuation centers within municipal area
- Construction materials for pit slaps not purchased as requested resulted in unsafe latrine built by communities
- Porter loo toilets were installed late due to late payment of toilet cleaning tools by the Department of Finance
- Lack of digging tools but other alternative were considered to use DoWR digger machine to dig toilet pits
- Portable toilets provided by Live and Learn were not used as it was considered culturally unacceptable for use by the evacuees. The materials for portable toilets were used instead as part of the hygiene kits

5.3 Prepared Action

- The DoWR and the Department of Public health to work closely with WASH Sanitation Working Group to standardize portable toilet base on urban and rural context
- Upgrade or strengthen existing evacuation centers in Santo, Ambae, Pentecost and Maewo, WASH facilities such as toilets, washing facilities
- Porter loo toilets used in evacuation center MUST be handed over to WASH Cluster through the Department of Public Health for use in future emergencies
- Include tools for toilet construction in portable toilet package design

Conclusion

This document has identified a lot of preparedness actions that need to be undertaken as part of WASH recovery activities for Manaro Response to help restore and improve future WASH responses. Accomplishing these preparedness actions will entail both technical and financial support from the government. The National WASH Cluster these actions into the cluster work plans to ensure WASH cluster agencies are engaged in the implementation.