

From Experience to Change

LESSONS LEARNED FROM THE 2018 MAYON VOLCANIC ERUPTION



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- Most perfect-coned shape volcano
- Philippine's most active volcano
- Home to about 277 flora & fauna species
- Source of livelihood for residents nearby
- **Cause of disaster when it erupts**

A photograph of Mayon Volcano, a perfectly conical volcano, erupting at sunset. The volcano is on the right side of the image, with a plume of orange and yellow smoke rising from its peak. The foreground is a green field with some palm trees and other vegetation. The sky is a mix of blue and orange from the sunset.


MAYON VOLCANO



On Jan. 13, 2018, Mt. Mayon started its eruption which...

- Affected 23,075 families (in 61 barangays)
- Caused evacuations, class suspensions, & flight cancellations
- Evacuated 17,308 families (66,468 persons)
 - Put Albay in the “State of Calamity”
- Incurred agricultural damages amounting to PHP 166M (approx. \$3.2M)
- Lasted until March 29, 2018 (76 days)

BACKGROUND



Although we can consider that the recent Mayon operations was generally successful, we still have a lot to work on.

**How do we improve the
disaster management
practice & policies
in Albay for the
next Mayon eruption?**

PROBLEM



This research looked into:

1. Response activities did by the local gov'ts in the Mayon Cluster through their Local DRRM Offices;
2. Assessment of various areas in the response operation; and
3. Learnings & realizations of LDRRMOs after the volcanic eruption.

OBJECTIVES

GUIDE QUESTIONS:

1. How did your LGU respond to the Mayon Volcanic Eruption? Please narrate in brief the chronological activities that your LGU/Council/Office had done.

2. What?



ASSESSMENT MATRIX

CATEGORIES/IMPROVEMENT AREAS	WHAT WENT WRONG?	WHAT WENT RIGHT?	WHAT NEEDS TO BE IMPROVED?
Warning & Advisories			
Communication & Information			
Reporting and Data Management			
Coordination			
- With LGU			
- With other agencies			
- With community			
- With media			
Evacuation			
A. Security			
B. Transportation			
C. Health			
D. Relief			
Policies			
Funds/Assets			
Role of NDRRMC			
Other Issues			



LESSON LEARNED WORKSHOP

- To see the positive & negative aspects of the operations AND to create an avenue to discuss successes, unexpected results, & innovative suggestions (*White & Cohan, 2010*)
- Done through (1) workshop forms with guide questions & assessment matrix; & (2) presented through focus group discussion (FGD)

METHODS

This research resulted to:

1. LADA's Proposed Volcanic Eruption Response Protocol for LGUs; &
2. LADA's Practice and policy recommendations for various response areas



RESULTS

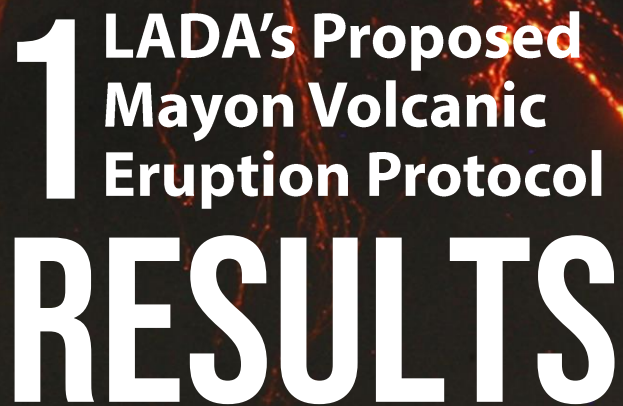
PROPOSED RESPONSE PROTOCOL

- Consolidated steps did by the different LGUs to respond to the hazard;
- List of activities that have to be done in chronological order & duration of each;
- It is a four-month plan to guide leaders and disaster managers on how to respond in the local level.



1 LADA's Proposed
Mayon Volcanic
Eruption Protocol

RESULTS

[illegible]



**Practice and Policy
Recommendations** are the
combined results of the (1) area
assessments, (2) highlights, (3)
lessons learned, and (4)
realizations of the participants.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS

A dramatic image of a volcano erupting at night. Bright orange and red lava is flowing down the dark, jagged slopes of the mountain. The sky is dark, and the lava's glow illuminates the surrounding area.

RESPONSE OPERATION AREAS

- Warning & Advisories
- Communication & Coordination
- Information Management
- Evacuation Management
- Disaster Managers
- Infrastructure
- Local Policies & Plans

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



WARNING & ADVISORIES

- Warnings and advisories must be given in advance to give lead time for residents and local governments to prepare.
- Monitoring devices & equipment must always be in-place, functional, & regularly upgraded.
- Persons responsible for the monitoring & warning must always be on-site.
- Markings & signages for the permanent and extended danger zones must be properly delineated, conspicuous, and upgraded as well.
- Information dissemination must be done down to the barangay and household levels.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



COMMS & COORDINATION

- Proper coordination must be observed by any actor who will be involved in the response operation.
- These actors must collaboratively set a clear communication & coordination protocol between & among LGUs, NGAs, NGOs, private donors, and other stakeholders during response operations to ensure the safety of the people and efficiency of resource use (manpower, time, funds, goods, etc.).
- Coordination meetings shall be set in advance and be properly communicated to all involved to give lead time for the participants to prepare.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



INFORMATION MANAGEMENT

- LGUs shall (1) hire permanent personnel with appropriate skills and qualifications to be in-charge of data gathering and information management;
- (2) allocate funds to upgrade the information technology (IT) equipment to be used, and
- (3) ensure that the Local DRRM Council secretariat has reliable & fast internet connectivity with or without power supply.
- Data flow protocol must also be established to ensure the maximum dissemination of information to all offices/agencies needing it.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



EVACUATION MANAGEMENT

is sub-divided into

(1) security,

(2) transportation,

(3) health, water & sanitation,

(4) welfare goods distribution

2 Practice & Policy
Recommendations
for Various Areas

RESULTS

EVACUATION MANAGEMENT

TRANSPORTATION

- LGUs shall purchase additional vehicles to be used to (1) transport residents during evacuation and decampment and (2) welfare goods during pick-up, delivery, and distribution.
- They must also establish protocol on the proper use of the transport vehicle.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS

EVACUATION MANAGEMENT

SECURITY

- Office of Civil Defense (OCD) V shall augment their force proportional to the need of the LGUs and magnitude of hazard.
- The LGUs, in coordination with the police force & the barangay public safety office, shall deploy adequate number of security personnel & ensure proper scheduling of security forces at ECs & barangays to prevent crime incidents, looting, & return of evacuees to their homes w/o decampment order yet.
- Camp managers shall orient evacuees to raise awareness on various possible security issues that might arise during their stay at the evacuation centers.



**2 Practice & Policy
Recommendations
for Various Areas**

RESULTS

EVACUATION MANAGEMENT

HEALTH & WATSAN

- Restrooms, wash areas, and cooking areas in the evacuation centers must be adequate and safe.
- Potable water supply must be available in or near the evacuation center.
- Local health department and LGUs shall purchase needed medicine and upgrade health, water, and sanitation equipment.
- Medicines and health equipment shall also be prepositioned to areas that need those.



2 Practice & Policy
Recommendations
for Various Areas
RESULTS

EVACUATION MANAGEMENT

HEALTH & WATSAN

- Camp managers shall also (1) strictly follow the standard ratio (room-to-number of occupant) to prevent occurrence of diseases and (2) educate and empower evacuees to observe proper housekeeping, sanitation, and waste segregation while staying at the evacuation centers.
- Mental health must also be addressed by conducting regular and appropriate psycho-social activities.



2 Practice & Policy
Recommendations
for Various Areas
RESULTS

EVACUATION MANAGEMENT

WELFARE GOODS FOR DISTRIBUTION

- The LGUs, through the local social welfare and development office, shall establish a centralized warehouse that can house all the welfare goods for ease of storage and accounting.
- Donors and donated goods must be properly recorded and accounted for.
- During operations, the LGUs must hire additional manpower for faster pick-up, delivery, and distribution.



2 Practice & Policy
Recommendations
for Various Areas
RESULTS



DISASTER MANAGERS

- After the response operation, LGUs realized that they lack the adequate manpower to handle the long-term response operations.
- Factor contributing to this is the lack or limited government budget to hire adequate manpower (with regular employee status and adequate benefits) needed in the operation.
- LGUs and NGAs must hire additional manpower during long-term disaster response operation

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



INFRASTRUCTURES

- The area of the LGU operation centers, where the disasters managers stay, must be large enough to cater various response activities (meetings, press briefings, proper sleeping area, kitchen dining, etc.).
- LGUs must establish permanent evacuation centers (with adequate facilities and basic lifelines) outside school campuses and danger zones.

2 Practice & Policy
Recommendations
for Various Areas

RESULTS



LOCAL POLICIES

- Integrate risk assessment & procedures on evacuation and decampment to local DRRM and contingency plans;
- The Provincial Council shall pass a resolution prohibiting the settlement of residents within the 6-kilometer permanent danger zone of the Mayon Volcano.
- LGUs and local councils should also update their respective policies before, during, and after response operations given the unforeseen changes in how operation works and how people behave.

This shall be done in close coordination and consultation with line agencies and stakeholders.

**2 Practice & Policy
Recommendations
for Various Areas**

RESULTS



LOCAL PLANS

- Risk assessments shall be integral part of the local DRRM and contingency plans of the communities
- Evacuation & decampment procedure shall be clearly stipulated & incorporated in the local plans and be properly communicated to the community members;
- Reorientation of barangay officials & camp managers on evacuation & camp management (evacuation-decampment procedures, assignment of ECs, new legal issuances, and other protocols);
- Residents currently living in the permanent and extended danger zones must be prioritized in the relocation efforts.
- **Ultimately, LGUs realized that they should craft their plans to prevent disasters, not to respond to it.**

2 Practice & Policy
Recommendations
for Various Areas

RESULTS

- The Province of Albay and the 18 LGUs, especially the nine (9) LGUs in the Mayon Cluster, still have a lot to do.
- As we make an effort to learn from our experience, changes have to be done not only in the local governments, but also in the national government agencies, NGOs, other stakeholders, and our residents.



CONCLUSION

- The research could further be improved if the Office of Civil Defense will conduct lesson learned workshop with more participants representing the LGUs, NGAs, NGOs, and evacuees themselves;
- Conduct of LLW should always be done after every major disaster (caused by any hazard);
- Results shall be immediately submitted to appropriate officials, agencies, & stakeholders for them to read, reflect, and act on it.

RECOMMENDATIONS

This is how we think we can help improve our disaster management practices in our Province should the next Mayon Eruption happen...

Thank you!



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