



## **Majestic Mayon’s Impact: Mitigating the Socio-Economic Effect on Affected Communities through LGU and NGO Initiatives**

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### **Abstract**

This study aims to investigate the collaboration of the Local Government Unit and Non-Government Organization in giving assistance to the victims affected by the 2018 eruption of Mayon volcano in Barangay San Roque, Malilipot and Barangay Lidong, Santo Domingo in Albay-two most affected barangays. In particular, the study describes the roles played by the LGU and NGOs on the basis of their expressed goals vis-à-vis the actual provision of assistance as stated on Section 2 (e) of Republic Act No. 10121 and 1991 Local Government Code. Through non-random sampling, the interviews with residents revealed that organized and joint response when it comes to the delivery of aid resulted to general satisfaction among the constituents. However, informants expressed the needs to increase effort particularly the LGU in their attempt to reduce the aftermath of the eruption. Hence, the study highly recommends that the local government must be fair in providing goods and services and always at the front line of emergency measures to ensure general welfare among its constituents.

**Keywords:** Barangay, Calamity, Disaster, During, Emergencies, Eruption, Goals, Initiatives, Local Government Unit, Management Plan, Mitigate, Mobilization of resources, Municipality, Non-Government Organization, Post-disaster, Pre-disaster, Preparedness, Programs, Provision, Reduction, Rescue, Rehabilitation, Retrieval Operations, Risk, Search, Services, Sustainability, Volcano



## 1. Introduction

### Background of the Study

January 14, 2018 the Philippine Institute of Volcanology and Seismology (Philvocs) made an announcement that the alert level was raised from level 1 to level 3, an indication that the tendency of Mayon to have hazardous eruption has increased. Twenty-nine barangays in the Municipalities of Guinobatan and Camalig (Southwest of the Volcano) were covered with ash falls on the morning of January 15, 2018. Lava flow and rock fall events and short pyroclastic flows were seen on the 16th January 2018. And residents from twenty-five villages in three municipalities and two other cities evacuated. The alert caused the evacuation of 5,318 families (21,823 people) in 18 different evacuation centers. (International Federation of the Red Cross IFRC, 16th January, 2018)

As stated on Section 2 (e) of Republic Act No. 10121, an act strengthening the Philippine Disaster Risk Reduction and Management and Framework and institutionalizing the national disaster risk reduction and management plan, appropriating funds therefore and for other purposes, “Develop, promote and implement a comprehensive National Disaster Risk Reduction and Management Plan (NDRRMP) that aims to strengthen the capacity of the national government and local government units (LGUs), together with partner stakeholders, to build the disaster risks, including projected climate risks, and embracing disaster preparedness and response capabilities at all levels.”

According to the 1991 Local Government Code, LGUs are expected to be at the frontline of emergency measure in the aftermath disaster to ensure general welfare of its constituents. Every LGU should formulate a Local Disaster Risk Reduction and Management Plan (LDRRMP) that will cover all aspects of DRRM as stated in NDRRMC’s framework are the following: disaster preparedness, prevention, mitigation, response, rehabilitation, and recovery. These LDRRMPs should be implemented by the Local Disaster Risk Reduction and Management offices in each city, municipality, and province in the country (Bueza, M., 2014).

Specialists say that failure to put in place a comprehensive disaster preparedness policy means its response to high-risk events such as droughts, floods, epidemics, and major accidents tend to be slow, poorly coordinated and unnecessarily expensive. Based on the guide for emergency managers, if the government struggles in risk reduction and management, a cooperative relationship between the government and community-based organizations can provide the best assurance that the needs of under-served people and the needs of the community for a long-term recovery will be fully addressed.

Because of this policy gap, most initiatives in disaster response are ad-hoc and short term. Improvement of LDRRM and NDRRM plans are expected from time to time given the fact that the Philippines places third having the risk of 27.98% in a study conducted by the United Nations University for Environment and Human Security or UNU-EHS that shows the 2012 World Risk Index of countries prone to disaster. Numerous disaster and calamities that occurred challenged the resiliency of Filipinos and the efficiency of the government in program and service implementation.

In the after-effect of every tragedy and calamity, the LGU is expected to be the first to respond to the affected areas making sure that the people are safe and well taken care off. But the lack of LGU’s capacity to handle emergencies and calamities has resulted to always resorting to the outside help. And often, it is the NGO and other private organizations that provide the most support and assistance to the victims. In spite the enactment of the Philippine DRRM Act of 2010, 5 years after it was acted, the country continued to face a lot of specific needs and gaps that are to



be addressed. Because of this, a series of roundtable discussion (RTD) were organized for the objective of increasing resilience of high-risk communities around the country.

The researchers should identify the following problems to be investigated to improve the existing challenges encountered by the affected communities in relation to the performance of local government units (LGUs) and non-government organizations (NGOs).

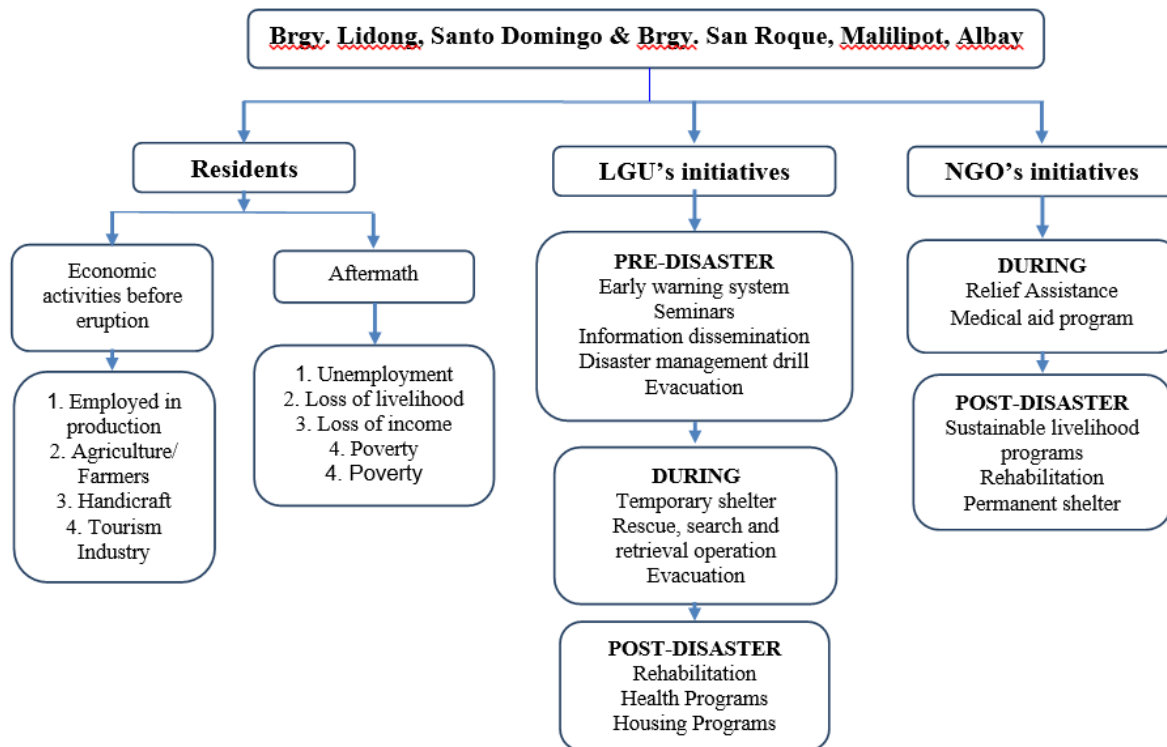
### Statement of the problem

The study seeks to describe the role of the LGUs and NGOs as expressed in their goals vis-a-vis the actual provision of assistance among the selected communities in Albay.

Specifically, the study intends to answer the following questions:

1. What is the socio-economic status of the affected communities?
  - a. Before the eruption?
  - b. After the eruption?
2. What are the different initiatives of LGUs and NGOs based on National Disaster Risk Reduction and Management Council (NDRRMP)?
3. On what grounds do the LGUs and NGOs are effective in helping the affected communities?
  - a. Mobilization of resources?
  - b. Coverage (Does it reach certain number of people?)
  - c. Equitability?
  - d. Goal-driven?
  - e. Sustainability?

### Conceptual Framework





The conceptual framework shows how the researchers would assess the effectiveness of LGUs and NGOs' initiatives in mitigating the socio-economic impact of the recent Mayon Volcano eruption on most affected communities. The efficiency will be measured by comparing the actual provision of assistance and accomplishment of goals in providing mitigation efforts. The Social Contract Theory, Theory of Moral Obligation and Humanitarianism will be used to further understand the vision of assistance among LGU and NGOs.

According to the social contract theory, humans agreed to surrender their absolute freedom and liberty on the condition that the civil government safeguards the people and their private property. This theory was championed by Thomas Hobbes, John Locke, and Jean-Jacques Rousseau in the 17<sup>th</sup> and 18<sup>th</sup> centuries during the Age of Enlightenment. Additionally, in the 1987 Constitution of the Republic of the Philippines – Article II: Declaration of Principles and State Policies, the government is called to serve and protect the Filipinos, particularly in sections 4, 5, 9, 10, and 11.

The Theory of Moral Obligation also known as deontological ethics or deontology emphasizes obligation and duty as a core value. Immanuel Kant is the first great philosopher who defines deontological principles way back in 18<sup>th</sup> century. The main argument is that an action is considered morally good because of the action itself whatever the consequences on human welfare may be. Humanitarianism on the other hand, is a movement towards the improvement of humans and is also used to describe wide number of activities for variety of areas relating specifically to human wellbeing (P.W. Van Arsdale & R.A. Nockerts, 2008).

## **Review of related Literatures**

### **Mayon and Its Eruptive History**

The name of Mayon Volcano is derived from Daragang Magayon (translated in English as 'Beautiful Princess'), the legendary princess-heroine of the Bicol folk tale. It rises to 2,462 meters (8,077 feet) above the Albay Gulf in Bicol (Region V) of Luzon, the largest island in the Philippine archipelago.

Renowned as the "perfect cone" for its symmetry, Mayon Volcano is the Philippines' most active volcano. It has erupted over 50 times since July 1766 of which lasted for 6 days. Its most destructive eruption was in 1814 with a death toll of 12,000 when the town of Cagsawa was buried. Together with other volcanoes including the massive eruption of Indonesia's Mount Tambora in 1815, this led to the year without a summer in 1816 that resulted in a major food shortage across the Northern Hemisphere. [INQUIRER.NET](http://INQUIRER.NET)

### **Effects of Disasters**

Volcanic eruption and other natural calamities in most cases bring negative effects to community or the country most especially in health and socio-economics. To the victims, physical and psychological health is at stake. According to National Centre for PTSD, disasters really affect the mental health of the victims and these people who are highly exposed have a bigger possibility of acquiring mental problems. Child Fund.Org through an article entitled "The Devastating Impact of Natural Disasters," says that displacement of people contributes to the mental suffering as victims are resettled to different areas. Thus, having improper meals, unsafe water, unstable support and unidentified source of living comes next.



## **The Needs of Affected People**

With all the damage that has been done, the victims of the recent Mayon Volcano eruption continue to appeal for donations whether in cash or in kind or both. Displaced victims beseech for sustainable response to meet relief, rehabilitation and recovery from the calamity. Aside from comfortable places to stay, the victims need food and non-food items that are still not yet available in most evacuation centres as of the 29<sup>th</sup> of January. Non-food items include Medical face masks preferably the N95 type, components of hygiene kits (toothpaste, toothbrush, sanitary napkins, diapers, face towels, body soaps), Mosquito net, blankets, and mats (banig). Basically, food items that are badly needed are bottled water, canned goods, rice, noodles and other instant goods.

## **Responding to the Needs of the People**

Meeting the needs of the people that suffer when a calamity strikes is a task that the government alone is impossible to achieve. The government need not only the assistance of NGOs but also the CBOs and the people of the community. Community-Based Organization (CBO) is defined as a local organization (which may or may not be an affiliate of a national organization) with a primary mission to provide services to specific groups of people. This includes those who are developmentally disabled, homeless, low-income elderly, non- English speaking or others. CBOs are usually non-profit organizations. Some may have the non-profit status granted by the Franchise Tax Board. In size, they range from all-volunteer organizations that get by on virtually no budget, to multi-million operations. Examples include Food Banks, Centres for Independent Living, Immigrant Assistance Programs, Easter Seals, Neighbourhood Clinics, and Family Centres.

The idea is that, a cooperative relationship between the government and the CBOs provides the best assurance that the needs of under-served people in the community for long-term recovery will be fully addressed. The CBOs capacity to perform neighbourhood assessments can identify specific disaster-related needs in a community. Based from the past disaster records, CBO involvement in the community to the search and rescue, relief, and post-disaster recovery was profound.

In this context, the terms “vulnerable” or “special needs” people or populations are used to define groups whose needs are not fully addressed by the traditional service providers. It also includes groups that may feel they cannot comfortably or safely access and use the standard resources offered in disaster preparedness, response, and recovery.

According to bloodandmilk.org, CBO is a catch-all for any group of people working together toward a common goal in the event of calamity. Findings revealed that collaboration of the government with other agencies proved to be effective and efficient. And coordination with other agencies is an effective way to provide services to the victims.



## 2. Methodology

### Research Design

The researchers used a descriptive method of research. This type of method describes what exists and may help uncover new facts and information that may give light in addressing taxing conditions that are based on studies anchored on sufficient facts and authentic data gathered. Adequately, this type of research method suffices the need of the study to assess the Disaster Risk Reduction Management Plan in the Municipalities of Malilipot and Santo Domingo, Albay. The study aimed to evaluate the effectiveness of disaster risk reduction management programs of Local Government Units (LGUs) in Albay and Non-Government Organizations (NGOs) in terms of disaster preparedness, response and rehabilitation. Selected households of Brgy. Lidong in Santo Domingo and Brgy. San Roque in Malilipot will be interviewed regarding the aforementioned components. All the information gathered through the interviews will be used as major reference for the evaluation of the programs. The study will also utilize the LDRRM Plan of Albay Public Safety and Emergency Management Office (APSEMO) as means in formulating an evaluation tool in terms of achieving the plan's goal.

### Sampling

The researchers used three sampling techniques namely, purposive, convenience and snowball. The participants will be selected through purposive sampling. The data will be gathered from the participants through interviews and key informant method. A purposive sampling is a type of non-probability sampling in which the units to be observed are selected based on the researcher's judgement about which ones will be the most useful or representative (Babbie, 2008). This sampling describes a random selection of sampling units within the segment of the population with the most information on the characteristics of interest (Guarte, 2004).

Second sampling technique would be convenience sampling where it is defined as one of the main types of non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity. Here, all respondents are selected because they are the most accessible to recruit for the study. The researcher did not consider choosing respondents that are representatives of the entire population.

Lastly, snowball sampling is also a non-probability technique that will be used when members of a population are difficult to locate. This sampling technique is more likely called as chain referral. The researchers asked for assistance from the first respondent to help identify people with a similar trait of interest.

### Research site

The provincial government of Albay declared Santo Domingo and Malilipot as two of the most affected areas by the recent Mayon eruption along with the other six municipalities. Media reported that the two municipalities have the most number of displaced families. The GMA News Team chooses the two municipalities as well to be given aid few days after the eruption. The areas of interest are in the municipalities of Malilipot and Santo Domingo, two of the eight municipalities and cities around the Mayon volcano. Malilipot has a total land area of 44.13 km<sup>2</sup> (17.04 sq mi) and a total population of 37,785 as of 2015, bringing the total population density to 860/km<sup>2</sup> (2,200/sq mi). It is politically subdivided into 18 barangays, three of which are inside the 6-km radius Permanent Danger Zone (PDZ) namely, Calbayog, San Roque, and Canaway. San Roque





and Canaway are also within the 6.5 to 8 km Extended High Danger Zone (EDZ). Within the PDZ, San Roque has 39 out of 496 families (7.8%) and 204 out of 2,253 persons affected (9%) while within the EDZ, San Roque has 494 families, or 2,193 persons affected.

On the other hand, Santo Domingo has a total land area of 51.22 km<sup>2</sup> (19.78 sq. mi) and a total population of 34,967, bringing the population density to 680 km<sup>2</sup> (1,800 sq. mi). It is politically subdivided into 23 barangays, nine of which were at risk to pyroclastic flow namely, Sta. Misericordia, San Fernando, Fidel Surtida, Lidong, San Roque, Bagong San Roque, Poblacion Proper, San Andres, and San Isidro. Lidong is at the 7-km EDZ and described by barangay officials as one of the most affected barangays of Santo Domingo.

The area within 6 km PDZ and the EDZ has long been declared as a “no man’s land” by the Philippine Institute of Volcanology and Seismology (PHIVOLCS) due to the dangers of rockfalls, landslides and sudden explosions or dome collapse that may generate hazardous volcanic flows.

### **Method of Data Gathering**

The researchers used both direct and indirect method of data gathering. An interview type falls under the direct method of gathering data where in this approach, the researchers visited households to identify the head of the family as respondents. Likewise, the researchers used Key Informant Method whereas personnel from Barangay and Municipal office as well as the Albay Public Safety and Emergency Management Office (APSEMO) serve as the key informant as those whose social positions in a research setting give specialist knowledge about the people, processes or happenings that is more extensive, detailed or privileged than ordinary people, and who are therefore particularly valuable sources of information to the researchers. The questions will be asked in either Filipino or English as the medium depending on the respondent’s preference. (methods.sagepub.com)

### **Research Procedure**

- a. The researchers, through news report identified two affected barangays, and acquired information about the economic activities of the residents before eruption, and its aftermath via internet research.
- b. The researchers sent letters addressed to Hon. Cenon B. Volante from Municipality of Malilipot, and Hon. Herbie B. Aguas from Municipality of Santo Domingo, Albay asking for permission and assistance in visiting their communities for proper ocular inspection and interviews.
- c. The researchers conducted ocular inspection on target communities particularly Brgy. Lidong in Santo Domingo and Brgy. San Roque in Malilipot, Albay to locate focal persons from barangay and municipal office, and households that will be the respondents of this study. All the information that will be gathered will be used as the guidelines for researchers to finalize and choose the most affected communities as focus of the study.
- d. The researchers also sent a letter to Dr. Cedric Daep, Chief of Albay Public Safety and Emergency Management Office (APSEMO) to seek for secondary data regarding the Local Disaster Risk Reduction Management Plan (LDRRMP) in the Province of Albay.
- e. The researchers visited the selected communities to interview 30 respondents from different households per community to identify the socio-economic impact of the recent eruption. Also, residents were asked to assess the initiatives in disaster risk reduction management of LGU and NGOs.



f. The researchers also interviewed the LGU and NGOs concerned as respondents of the study.

### Research Instruments

The researchers devised guide questions to be used in interview. The set of questions is for the residents of Brgy. Lidong, Santo Domingo and Brgy. San Roque, Malilipot, Albay.

### 3. Results

This chapter presents the results of the interview that was conducted to the 30 respondents each coming from Brgy. Lidong, Santo Domingo, Albay and Brgy. San Roque, Malilipot, Albay.

The researchers analyzed the data based on the assessment of the residents on pre-disaster, during and post-disaster programs and services of LGU and NGOs.

**Table 1.** Demographic profile of the respondents

	Frequency	Percentage (%)
Age:		
20-30	10	16.67%
31-40	14	23.33%
41-50	9	15%
51-60	12	20%
60 above	15	25%
Mean: 47.9		
Sex/Gender:		
Male	17	28.33%
Female	43	71.67%
Marital status:		
Single	10	16.67%
Married	46	76.67%
Widow	4	6.67%
Religion:		
Christian	10	16.67%
Catholic	50	83.33%
Education Attainment:		
High School Level	30	50%
High School Graduate	23	38.33%
College Level	6	10%
College Graduate	1	1.67%
Employment status:		
None	2	3.33%
Self-employed	41	68.33%
Employed	17	28.33%





Estimated monthly income:		
Php 5,000 below	23	38.33%
Php 5,001-10,000	23	38.33%
Php 10,001-15,000	7	11.67%
Php 15,001-20,000	3	5%
Php 20,001-25,000	2	3.33%
Php 25,001-30,000	2	3.33%
Median: Php 14,625		
Number of household members:		
2-4	30	50%
5-7	23	38.33%
8-10	7	11.67%

### Background of the Respondents

Table 1 presents the summary of the important characteristics of the constituents as respondents of this study.

Most respondents are 60 years old and above with 25% in total, followed by 31-40 age bracket having 14 respondents which is equivalent to 23.33%, while 12 of 60 respondents or 20% belong to 51-60 age group. 16.67% or the other 10 respondents fall under the 20-30 and the rest, 15% or 9 of the 60 respondents are ages 41 to 50 years old (see Figure 1). The average age of respondents is 47.9 (converted to 48 to be exact).

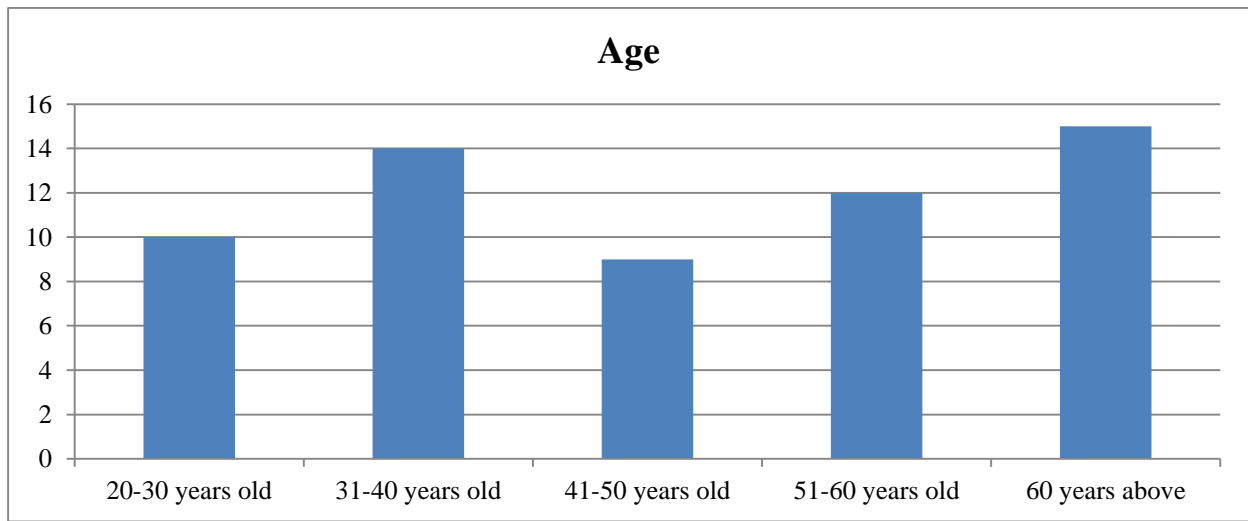


Figure 1

A total of 43 out of 60 or 71.67% of the respondents are female while only 17 or 28.33% are male (see Figure 2). Among the 60 respondents, 46 or 76.67% are married, 10 respondents or 16.67% are single and the remaining 4 or 6.67% are already widow (see Figure 3). Moreover, out of 60 respondents, 50 or 83.33% are Roman Catholic while only 10 or 16.67% are Christian (see Figure 4).

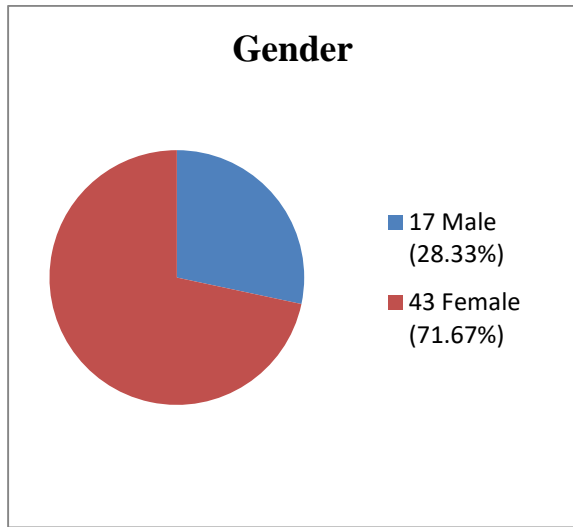


Figure 2

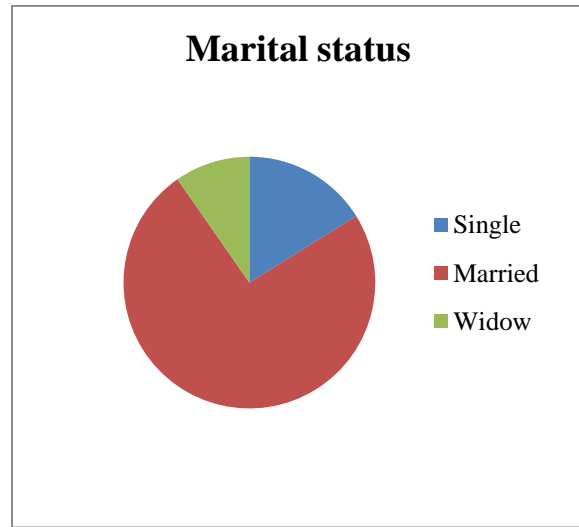


Figure 3

Exactly half of the 60 respondents (50%) were able to reach secondary education while 23 other respondents (38.33%) graduated from high school. Six other respondents or 10% reached college level, and only one of 60 respondents (1.67%) graduated with a degree (see Figure 5).

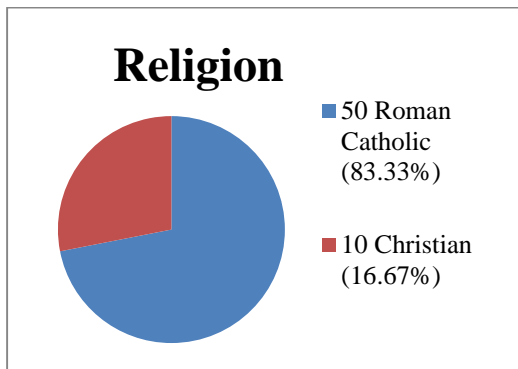


Figure 4

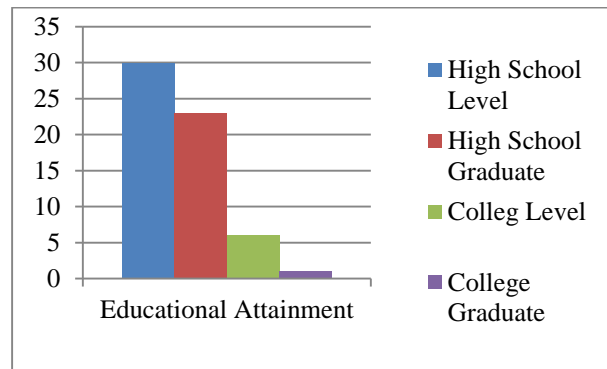


Figure 5

Given that respondents live in a rural community setting, majority are considered self-employed with 41 respondents or 68.33% where most are involved in farming and abaca weaving. 28.33% or 17 of 60 respondents are employed and only two person or 3.33% no longer work (see Figure 6).

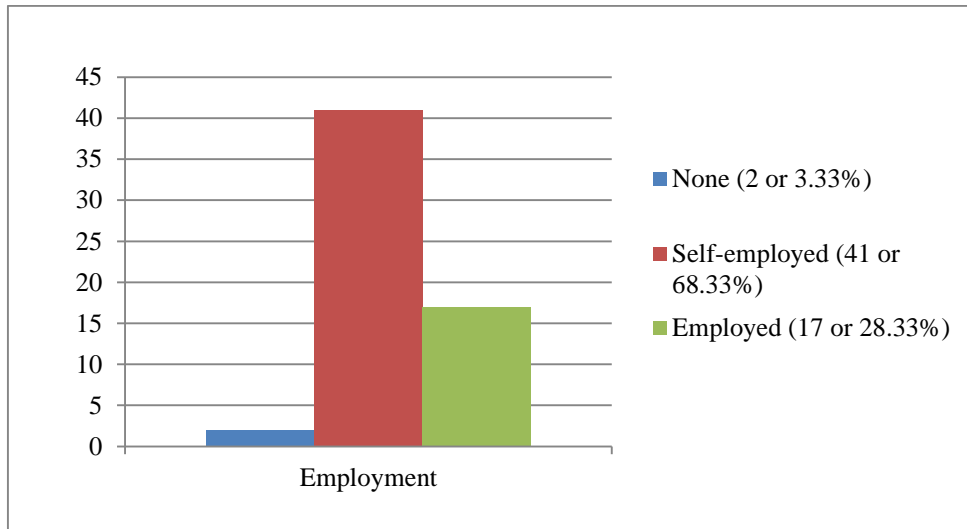


Figure 6

When asked about the estimated total monthly income of all the members of the household, 23 of 60 respondents or 38.33% earn below Php 5,000. Also, other 23 of 60 respondents or 38.33% monthly income range from Php 5,001 to Php 10,000 (see Figure 7). The lowest monthly income recorded among the respondents is Php 750 while the most is Php 30,000 with a median of Php 14,625.

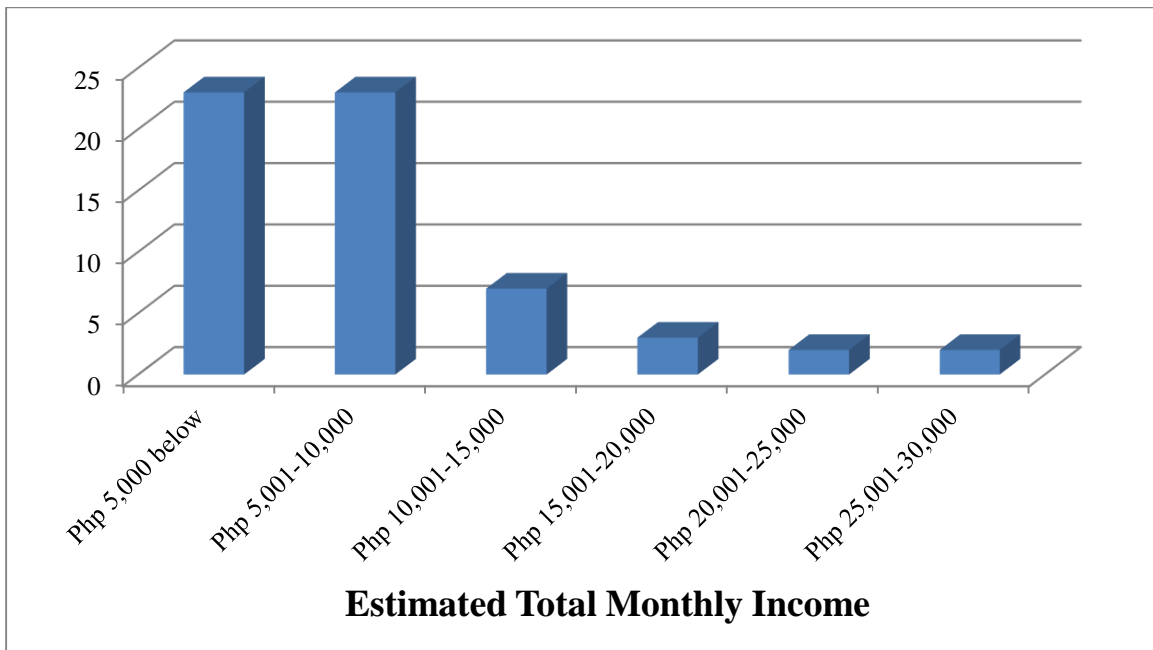


Figure 7

Half of the total number of respondents (30 of 60 or 50%) has 2-4 household members, while 23 or 38.33% are in 5-7 bracket and 7 respondents or 11.67% lives in a family with 8-10 household members (see Figure 8).

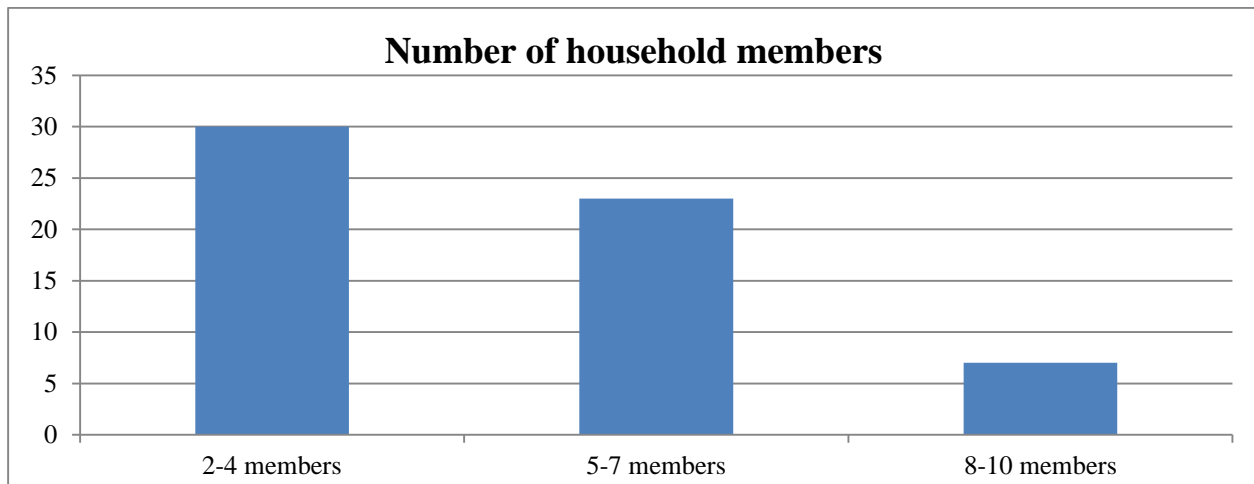


Figure 8

**Table 2.** Assessment of the residents on pre-disaster, during and post-disaster programs and services of LGU and NGOs.

Questions about the Local Government Units	Mean score	Interpretation
<b>Pre-disaster</b>		
1. Provision of proper information needed by the community to get assistance in times of eruption ( <i>Pagbibigay ng sapat na impormasyon sa komunidad para makakuha ng tulong sa oras ng pagputok ng bulkan</i> )	4.02	Good. Residents are satisfied with the assistance given.
2. LGU's early warning system ( <i>Paunang babala na isinasagawa ng LGU</i> )	4.16	Good. Residents are satisfied with the assistance given.
3. Regular conduct of disaster preparedness in schools and communities ( <i>Seminar na ginagawa sa mga paaralan at sa komunidad patungkol sa pagiging handa sa pagharap ng sakuna</i> )	3.52	Fair. The Residents thought that this area could still be improved.
4. Evacuation center/s ( <i>Mga lugar na malilikasan</i> )	3.31	Fair. The Residents thought that this area could still be improved.
<b>During Disaster</b>		
5. Immediate response to the needs of the people in times of disaster ( <i>Pagtugon ng LGU sa panahon ng kalamidad</i> )	3.93	Fair. The Residents thought that this area could still be improved.
6. Capacity of evacuation centers to accommodate large number of people in the community. ( <i>Kapasidad ng mga evacuation centers para magpatuloy sa mga lumilikas</i> )	3.35	Fair. The Residents thought that this area could still be improved.



7. Availabilities of emergency supplies of LGUs. ( <i>Kagamitan ng LGU sa panahon ng pangangailangan</i> )	3.88	Fair. The Residents thought that this area could still be improved.
8. LGU's initiatives in response to search, rescue and retrieval operations ( <i>Pagkukusa ng LGU sa pangunguna, paghahanap, at pagsasagip ng mga biktima sa panahon ng sakuna</i> )	4.25	Good. Residents are satisfied with the assistance given.
<b>Post-disaster</b>		
9. LGU's provision of livelihood programs for the victims to cope after the disaster ( <i>Pagbibigay ng LGU ng mga programang pangkabuhayan para sa mga biktima</i> )	3.8	Fair. The Residents thought that this area could still be improved.
10. LGU providing the community with financial support after the eruption ( <i>Tulong pinansyal ng gobyerno sa komunidad pagkatapos ng pagputok ng bulkan</i> )	3.96	Fair. The Residents thought that this area could still be improved.
11. Provision of support in a fair way ( <i>Pagbibigay ng patas na tulong sa inyo ng gobyerno</i> )	3.77	Fair. The Residents thought that this area could still be improved.
12. Rate the improvements in your living conditions and other desired results after the eruption? ( <i>Paano mo titimbangin ang mga bagay na may kaugnayan sa pagbabago sa inyong kasalukuyang pamumuhay at iba pang inaasahang resulta?</i> )	3.38	Fair. The Residents thought that this area could still be improved.
13. LGU's provision of health programs ( <i>Pagbigay ng mga programang pangkalusugan</i> )	3.96	Fair. The Residents thought that this area could still be improved.
14. LGU's provision of housing programs ( <i>Pagbigay ng programang pabahay</i> )	2.07	Poor. Residents expressed dismay on this matter.
15. In reference to the rehabilitation of the community, does LGU refer to previous experiences in disaster? ( <i>Pinagbabatayan ba ang mga karanasan sa kalamidad sa panahon ng rehabilitasyon ng mga tao at ng buong komunidad?</i> )	3.45	Fair. The Residents thought that this area could still be improved.
16. LGU's reconstruction of the damages done in prone-disaster communities ( <i>Pagsasaayos ng LGU sa mga lugar na madalas maapektuhan ng kalamidad</i> )	3.4	Fair. The Residents thought that this area could still be improved.
<b>Questions about the Non-Government Organization</b>	<b>Mean Score</b>	<b>Interpretation</b>
<b>During Disaster</b>		
17. Relief assistance provided by NGOs ( <i>Mga tulong na ipinagkakaloob ang NGO?</i> )	4.47	Good. Residents are satisfied with the assistance given.



18. NGOs' response in the event of the disaster ( <i>Pagtugon ng mga NGO sa panahon ng kalamidad</i> )	3.37	Fair. The Residents thought that this area could still be improved.
19. How were their medical aid programs? ( <i>Kumusta ang kanilang mga programang pangkalusugan?</i> )	4.26	Good. Residents are satisfied with the assistance given.
20. How were their livelihood programs for the victims after the disaster? ( <i>Kumusta ang kanilang mga programang pangkabuhayan para sa mga biktima?</i> )	2.83	Fair. The Residents thought that this area could still be improved.
<b>Post Disaster</b>		
21. How were their housing projects? ( <i>Kumusta ang kanilang mga programang pabahay?</i> )	2.08	Poor. Residents expressed dismay on this matter.
22. How suitable are their programs based on the past calamities? ( <i>Gaano kaangkop ang kanilang mga Gawain batay sa mga nakalipas na kalamidad?</i> )	3.68	Fair. The Residents thought that this area could still be improved.

Table 2 presents the questions regarding LGU's pre-disaster, LGU and NGOs' during, and post-disaster activities, as well as the mean score using the Likert scale (Very Good-5 points, Good-4 points, Fair- 3 points, Poor-2 points, Very Poor-1 point) given by 30 respondents from Brgy. Lidong, Santo Domingo and 30 respondents from Brgy. San Roque, Malilipot both in Albay province and lastly, the interpretation given for every mean score achieved.

#### 4. Discussion and Conclusion

As embodied in the 1987 Philippine Constitution and the Local Government Code of 1991, the Local Government Unit (LGU) is expected to be at the frontline of emergency measures before, during and after the event of disaster. According to Disaster Management Cycle, disaster management aims to reduce, or avoid the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and effective recover. Complying with the Provincial Disaster Risk Reduction and Management Plan/Framework, the Province of Albay carried out plans that helped mitigate the effect, rehabilitate residents, and recovery of the most affected communities in the 2018 Mayon Volcano eruption.

As presented in Table 2, respondents scored the assistance given to them by LGU and NGOs before, during and after the eruption. LGU's pre-disaster, during and post-disaster activities resulted to a 'Fair' response which means that residents are satisfied but still believe that some areas in mitigation, preparedness, response, and recovery stages could still be improved in the future execution. Likewise, mean score among the 60 respondents resulted to a 'Fair' response when it comes to NGOs' initiatives during and after the eruption.

Many of the respondents appreciated the efforts exerted by LGU and most especially local and international NGOs during their at least three-month stay in the evacuation centres. Several respondents mentioned that they were part of the "work for food" program were they still earn money despite being in the evacuation centres. It is very helpful for evacuees knowing that their main source of income-farming, abaca weaving-is affected by the calamity. Some were still able to receive relief assistance six months after the eruption. On the other hand, questions number 14 and 22 in table 2 pertaining to the housing programs spell the difference as majority answered





‘Very Poor’ primarily because there is no such project proposed by the LGU or any NGO for the residents living in the 6-kilometer danger zone.

Although LGUs are expected to be the first to take actions, somehow, it is still expected that NGOs respond as quickly as possible during a calamity with the same objective of saving as many lives as they can with the allocated funds. That is why; most humanitarian agencies are more often called upon to deal with immediate response and recovery (C. Warfield, *The Disaster Management Cycle*).

Based on the data gathered, residents showed more enthusiasm on the assistance given by NGOs compared to LGU’s. Informants strongly believe that NGOs are more effective in providing relief goods and services whenever Mayon Volcano erupts. And in this times when local government struggles, it is noteworthy that cooperative relationship between the government and community-based organizations rises from occasion to fully address the needs of the under-served people simultaneous to long-term and sustainable programs for the recovery of the affected communities. However, informants expressed the needs to increase effort particularly the LGU and very optimistic for the development in the attempt to reduce the aftermath of the eruption. Hence, the study highly recommends that the local government must be fair in providing goods and services and always at the front line of emergency measures to ensure general welfare among its constituents.

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